

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 301/2017

DESPATCHED ON 24TH JANUARY 2017

| HLA specificity for assessment |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
|--------------------------------|------|------|-----------|-------|------|-----|------|------|-----|------|------|-----|------|------|-----|------|------|-----|------|------|-----|------|------|-----|------|------|-----|------|------|-----|-----|--|--|
| Lab no.                        | DR1  |      |           | DR103 |      |     | DR15 |      |     | DR16 |      |     | DR17 |      |     | DR18 |      |     | DR4  |      |     | DR13 |      |     | DR14 |      |     | DR7  |      |     | DR9 |  |  |
|                                | spec | tech | MFI       | spec  | tech | MFI | spec | tech | MFI | spec | tech | MFI | spec | tech | MFI | spec | tech | MFI | spec | tech | MFI | spec | tech | MFI | spec | tech | MFI | spec | tech | MFI |     |  |  |
| 9                              |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 11                             |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 12                             | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 14                             |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 15                             |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 19                             |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 20                             |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 23                             |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 24                             | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 25                             |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 26                             |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 28                             | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 34                             |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 35                             |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 38                             | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 39                             |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 41                             |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 42                             | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 45                             |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 48                             |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 51                             | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 54                             | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 58                             | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 62                             | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 100                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 112                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 114                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 116                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 117                            | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 119                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 120                            | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 133                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 136                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 142                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 143                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 145                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 147                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 149                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 157                            | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 160                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 162                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 164                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 165                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 169                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 181                            | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 185                            | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 195                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 197                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 204                            | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 206                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 209                            | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 214                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 216                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 218                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 222                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 227                            | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 232                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 239                            | DR1  | L    | 2000-5000 |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 242                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 252                            | DR1  | L    | 2000-5000 |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 267                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 268                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 273                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 277                            | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 284                            | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 293                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 302                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 303                            | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 309                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 351                            | DR1  | L    | < 2000    |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |
| 381                            |      |      |           |       |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |      |      |     |     |  |  |

Technique: C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 23 | < 2000    | 2  | < 2000    | 4  | < 2000    | 4  | < 2000    | 3  | < 2000    | 2  | < 2000    | 71 | < 2000    | 2  | < 2000    | 5  | < 2000    | 71 | < 2000    | 59 | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 21        | 71 | 0         | 71 | 1         | 71 | 2         | 71 | 1         | 71 | 0         | 71 | 0         | 71 | 1         | 71 | 5         | 71 | 0         | 71 | 37        |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 0         |    | 0         |    | 1         |    | 0         |    | 1         |    | 0         |    | 69        |    | 0         |    | 0         |    | 0         |    | 4         |

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CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 301/2017

DESPATCHED ON 24TH JANUARY 2017

| HLA specificity for assessment |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
|--------------------------------|-------------------------|------|-----------|------------------|------|-----------|------------------|------|--------|------------------------|------|-----|-----------------|------|-----|-------------------|------|-----|------------------------|------|-----|------------------------|------|-----|------------------------|------|-----|------------------------|------|-----|
| Lab no.                        | DR51 Not Assessed 21.1% |      |           | DR52 Absent 2.8% |      |           | DR53 Absent 2.8% |      |        | DQ5 Not Assessed 67.6% |      |     | DQ6 Absent 1.4% |      |     | DQ2 Present 98.6% |      |     | DQ7 Not Assessed 16.9% |      |     | DQ8 Not Assessed 23.9% |      |     | DQ9 Not Assessed 22.5% |      |     | DQ4 Not Assessed 19.7% |      |     |
|                                | spec                    | tech | MFI       | spec             | tech | MFI       | spec             | tech | MFI    | spec                   | tech | MFI | spec            | tech | MFI | spec              | tech | MFI | spec                   | tech | MFI | spec                   | tech | MFI | spec                   | tech | MFI | spec                   | tech | MFI |
| 9                              |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 11                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 12                             |                         |      |           | DR51             | L    | < 2000    |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 14                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 15                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 19                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 20                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 23                             |                         |      |           | DR51             | L    | < 2000    |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 24                             |                         |      |           | DR51             | L    | < 2000    |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 25                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 26                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 28                             |                         |      |           | DR51             | L    | < 2000    |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 34                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 35                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 38                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 39                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 41                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 42                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 45                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 48                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 51                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 54                             |                         |      |           | DR51             | L    | < 2000    |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 58                             |                         |      |           | DR51             | L    | < 2000    |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 62                             |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 100                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 112                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 114                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 116                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 117                            |                         |      |           | DR51             | L    | < 2000    |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 119                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 120                            |                         |      |           | DR51             | L    | < 2000    |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 133                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 136                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 142                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 143                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 145                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 147                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 149                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 157                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 160                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 162                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 164                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 165                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 169                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 181                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 185                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 195                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 197                            |                         |      |           | DR51             | L    | 2000-5000 |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 204                            |                         |      |           | DR51             | L    | < 2000    |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 206                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 209                            |                         |      |           | DR51             | L    | < 2000    | DR52             | L    | < 2000 |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 214                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 216                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 218                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 222                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 227                            | DR10                    | F    |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 232                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 239                            | DR10                    | L    | < 2000    | DR51             | L    | 2000-5000 |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 242                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 252                            | DR10                    | L    | 2000-5000 |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 267                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 268                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 273                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 277                            |                         |      |           | DR51             | L    | < 2000    |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 284                            |                         |      |           | DR51             | L    | < 2000    |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 293                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 302                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 303                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 309                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 351                            |                         |      |           | DR51             | L    | < 2000    | DR52             | L    | < 2000 |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |
| 381                            |                         |      |           |                  |      |           |                  |      |        |                        |      |     |                 |      |     |                   |      |     |                        |      |     |                        |      |     |                        |      |     |                        |      |     |

Technique: C = CDC; E = ELISA; F = Flow cytometry; L = Luminesx; O = Other

| No. Reporting Spec | 3  | < 2000    | 15 | < 2000    | 2  | < 2000    | 2 | < 2000    | 48 | < 2000    | 1 | < 2000    | 70 | < 2000    | 12 | < 2000    | 17 | < 2000    | 16 | < 2000    | 14 | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|---|-----------|----|-----------|---|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 1         | 71 | 13        | 71 | 2         | 0 | 71        | 71 | 10        | 1 | 71        | 71 | 71        | 10 | 71        | 4  | 71        | 4  | 71        | 4  | 71        |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |   | 2000-5000 |    | 2000-5000 |   | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |   | > 5000    |    | > 5000    |   | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 0         |    | 0         |    | 0         |   | 2         |    | 2         |   | 0         |    | 64        |    | 0         |    | 4         |    | 3         |    | 3         |

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 30/1/2017

DESPATCHED ON 24TH JANUARY 2017

| DQA1* Antibodies - NOT ASSESSED |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
|---------------------------------|-------------------|------|-----------|-------------------|------|-----|-------------------|------|-----|-------------------|------|-------|--------------------------|--------|-------|--------------------------|---------------|-------|--------------------------|-----------|-------|-------------------|-----------|-------|--------------------------|--------|-------|-------------------------|--------|-----|--------------------------|------|-----|-------------------|------|-----|------|------|
| Lab no.                         | 01:01 Absent 4.2% |      |           | 01:02 Absent 1.4% |      |     | 01:03 Absent 1.4% |      |     | 02:01 Absent 4.2% |      |       | 03:01 Not Assessed 60.6% |        |       | 03:02 Not Assessed 67.6% |               |       | 03:03 Not Assessed 64.8% |           |       | 04:01 Absent 2.8% |           |       | 05:01 Not Assessed 19.7% |        |       | 05:03 Not Assessed 9.9% |        |     | 05:05 Not Assessed 11.3% |      |     | 06:01 Absent 1.4% |      |     |      |      |
|                                 | spec              | tech | MFI       | spec              | tech | MFI | spec              | tech | MFI | spec              | tech | MFI   | spec                     | tech   | MFI   | spec                     | tech          | MFI   | spec                     | tech      | MFI   | spec              | tech      | MFI   | spec                     | tech   | MFI   | spec                    | tech   | MFI | spec                     | tech | MFI | spec              | tech | MFI | spec | tech |
| 9                               |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 11                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 12                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 14                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 15                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 19                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 20                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 23                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 24                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 25                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 26                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 28                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 34                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 35                              | 01:01             | L    | <2000     |                   |      |     |                   |      |     |                   |      | 02:01 | L                        | > 5000 | 03:01 | L                        | <2000, > 5000 | 03:02 | L                        | <2000     | 03:03 | L                 | <2000     | 04:01 | L                        | > 5000 | 05:01 | L                       | > 5000 |     |                          |      |     |                   |      |     |      |      |
| 38                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 39                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 41                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 42                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 45                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 48                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 51                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 54                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 58                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 62                              |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 100                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 112                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 114                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 116                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 117                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 119                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 120                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 133                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 136                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 142                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 143                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 145                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 147                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 148                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 157                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 160                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 162                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 164                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 165                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 169                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 181                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 185                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 195                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 197                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 204                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 206                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 209                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 214                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 216                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 218                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 222                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 227                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 232                             | 01:01             | L    | 2000-5000 |                   |      |     |                   |      |     |                   |      | 02:01 | L                        | <2000  | 03:01 | L                        | 2000-5000     | 03:02 | L                        | 2000-5000 | 03:03 | L                 | 2000-5000 |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 239                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 242                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 252                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 267                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 268                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 273                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 277                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 284                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 293                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 302                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 303                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 309                             |                   |      |           |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |
| 351                             | 01:01             | L    | 2000-5000 |                   |      |     |                   |      |     |                   |      |       |                          |        |       |                          |               |       |                          |           |       |                   |           |       |                          |        |       |                         |        |     |                          |      |     |                   |      |     |      |      |





**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 301/2017

DESPATCHED ON 24TH JANUARY 2017

| DPA1* Antibodies - NOT ASSESSED |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
|---------------------------------|-------------------------|------|--------|-------------------------|------|--------|-------------------------|------|--------|-------------------------------|------|-----------|--------------------------------|-------|--------|--------------------------------|-------|--------|-------------------------|-------|--------|---------|--------|
| Consensus<br>% reported         | 01:03<br>Absent<br>4.2% |      |        | 01:04<br>Absent<br>1.4% |      |        | 01:05<br>Absent<br>4.2% |      |        | 02:01<br>Not Assessed<br>9.9% |      |           | 02:02<br>Not Assessed<br>15.3% |       |        | 03:01<br>Not Assessed<br>18.3% |       |        | 04:01<br>Absent<br>1.4% |       |        |         |        |
|                                 | Lab no.                 | spec | tech   | MFI                     | spec | tech   | MFI                     | spec | tech   | MFI                           | spec | tech      | MFI                            | spec  | tech   | MFI                            | spec  | tech   | MFI                     | spec  | tech   | MFI     |        |
| 9                               |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 11                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 12                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 14                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 15                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                | 02:02 | L      | > 5000                         | 03:01 | L      | > 5000                  |       |        |         |        |
| 19                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                | 02:02 | L      | > 5000                         | 03:01 | L      | > 5000                  |       |        |         |        |
| 20                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 23                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 24                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 25                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 26                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                | 03:01 | L      | > 5000                  |       |        |         |        |
| 28                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 34                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 35                              | 01:03                   | L    | > 5000 |                         |      |        | 01:05                   | L    | > 5000 | 02:01                         | L    | > 5000    | 02:02                          | L     | > 5000 | 03:01                          | L     | > 5000 |                         |       |        |         |        |
| 38                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 39                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 41                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 42                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 45                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 48                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 51                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 54                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 58                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 62                              |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 100                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 112                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 114                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                | 02:02 | L      | > 5000                         | 03:01 | L      | > 5000                  |       |        |         |        |
| 116                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 117                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                | 03:01 | L      | > 5000                  |       |        |         |        |
| 119                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 120                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 133                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 136                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                | 02:01 | L      | > 5000                         | 02:02 | L      | > 5000                  | 03:01 | L      | > 5000  |        |
| 142                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 143                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 145                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 147                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 149                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 157                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 160                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                | 02:01 | L      | > 5000                         | 02:02 | L      | > 5000                  | 03:01 | L      | > 5000  |        |
| 162                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 164                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 165                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 169                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 181                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 185                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 195                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 197                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 204                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 206                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 209                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 214                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 216                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 218                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 222                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 227                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 232                             | 01:03                   | L    | > 5000 |                         |      |        | 01:05                   | L    | > 5000 | 02:01                         | L    | > 5000    | 02:02                          | L     | > 5000 | 03:01                          | L     | > 5000 |                         |       |        |         |        |
| 239                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 242                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 252                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 267                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 268                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 273                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 277                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 284                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 293                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 302                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 303                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 309                             | 01:03                   | L    | > 5000 | 01:04                   | L    | < 2000 | 01:05                   | L    | > 5000 | 02:01                         | L    | 3000-5000 | 02:01                          | L     | > 5000 | 02:02                          | L     | > 5000 | 03:01                   | L     | > 5000 | 04:01 L | < 2000 |
| 351                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |
| 361                             |                         |      |        |                         |      |        |                         |      |        |                               |      |           |                                |       |        |                                |       |        |                         |       |        |         |        |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 3  | < 2000    | 1  | < 2000    | 3  | < 2000    | 7  | < 2000    | 11 | < 2000    | 13 | < 2000    | 1  | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 0         | 71 | 1         | 71 | 0         | 71 | 0         | 71 | 0         | 71 | 0         | 71 | 1         |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 3         |    | 0         |    | 3         |    | 6         |    | 11        |    | 13        |    | 0         |

UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 30/12/2017

DESPATCHED ON 24TH JANUARY 2017

| Lab no. | Techniques used | Sample Treatment        | High Background | Neg control serum batch | Allele Specific Antibodies   | Luminex kit (lot) | Cut-off value | Control bead MFI Positive | Control bead MFI Negative | Luminex kit (lot) | Cut-off value | Control bead MFI Positive | Control bead MFI Negative | Luminex kit (lot) | Cut-off value | Control bead MFI Positive | Control bead MFI Negative | Luminex kit (lot) | Cut-off value | Control bead MFI Positive | Control bead MFI Negative |
|---------|-----------------|-------------------------|-----------------|-------------------------|--|-------------------|---------------|---------------------------|---------------------------|-------------------|---------------|---------------------------|---------------------------|-------------------|---------------|---------------------------|---------------------------|-------------------|---------------|---------------------------|---------------------------|
| 9       | L               | None                    | No              |                         |  | LS2A01            | 500           | 9300                      | 70.1                      |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 11      | L               | EDTA                    | No              |                         |  | LS2A01            | 1000          | 8915                      | 85                        | LSM12             | 2.5           | 6201                      | 71                        |                   |               |                           |                           |                   |               |                           |                           |
| 12      | L               | EDTA                    | No              | 16                      | DRB5*02:02, DOB1*04:01   | LS2A01            | 1000          | 13258                     | 148                       | LSM12             |               | 11892                     | 838                       |                   |               |                           |                           |                   |               |                           |                           |
| 14      | L               | Heat inactivation, EDTA | No              | 16                      | DOB1*05:01, DRB1*09:02   | LS2A01            | 1500          | 16147                     | 29                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 15      | L               | EDTA                    | No              | 16                      | DRB1*09:02, DOB1*05:01   | LS2A01            | 1000          | 11085                     | 46                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 19      | L               | None                    | No              | 0LN5                    | DRB1*09:02, DOB1*05:01   | LS2A01            | 1000          | 11483                     | 65                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
|         | C/L             | EDTA/Beads              | No              |                         | DOB1*04:01, DOA1*03:03, DOB1*03:02, DOB1*03:03   | LS2A01            | 1000          | 12196.03                  | 95.97                     |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 20      |                 | EDTA                    | No              | 16                      | DOB1*03:03, DRB5*02:02, DOB1*05:01   | LS2A01            | 1000          | 12927                     | 44.59                     |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 23      | L               | EDTA                    | No              | 16                      | DOB1*05:01, DRB1*09:02, DRB5*02:02   | LS2A01            | 1000          | 15193                     | 69                        | LSM12             | 4.5           | 10497                     | 217                       |                   |               |                           |                           |                   |               |                           |                           |
| 24      | L               | EDTA                    | No              | 16                      | DOB1*05:01, DOA1*01:01, DOA1*03:01   | LS2A01            | 1000          | 12672                     | 65                        | LSM12             | 6             | 10823                     | 147                       | LS2PRA            | 1000          | 11269                     | 781                       | LSAI              | 1500          | 18566                     | 634                       |
| 25      | L               | EDTA                    | No              | 16                      | DOB1*05:01, DRB1*09:02, DRB5*02:02, DOB1*05:01   | LS2A01            | 500           | 8967                      | 40                        | LSM12             |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 26      | L               | None                    | No              | 16                      | DOA1*03:01, DOB1*03:01, DOA1*03:01, DOB1*03:02, DOA1*03:01, DOB1*03:03, DOA1*03:01, DOB1*03:03   | LS2A01            | 500           | 8967                      | 40                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 28      | L               | EDTA                    | No              | 16                      | DOB1*05:01, DRB1*09:02   | LS2A01            | 1327          | 12486                     | 16                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 34      | L               | EDTA                    | No              | 11                      | DOB1*05:01, DRB1*09:02   | LS2A01            | 1000          | 9767                      | 32                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 35      | L               | EDTA                    | No              | 16                      |  | LS2A01            | 1076          | 12186                     | 36                        | LSAI              | 15546         | 131                       |                           |                   |               |                           |                           |                   |               |                           |                           |
| 38      | L               | EDTA                    | No              | LS-NC215                | DOB1*05:01   | LS2A01            | 1400          | 11107                     | 104                       |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 41      | L               | None                    | No              | 15                      | DOB1*05:01   | LS2A01            | 2000          | 9847                      | 53                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 42      | L               | EDTA                    | No              | 16                      | DRB1*4:02, DOB1*05:01  | LS2A01            | 500           | 8423                      | 60                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 45      | L               | EDTA/Beads              | No              |                         | DOB1*05:01   | LS2A01            | 1500          | 12000                     | 50                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 48      | L               | Heat inactivation       | No              | 22                      | DOB1*05:01   | LS2A01            | 1000          | 9767                      | 67                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 51      | L               | EDTA                    | No              | 16                      | DRB1*14:02, DRB5*02:02   | LS2A01            | 770           | 11139                     | 104                       |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 54      | L               | EDTA                    | No              | 15                      |  | LS2A01            | 1000          | 12796                     | 41                        | LSM12             | 3             | 10957                     | 28                        |                   |               |                           |                           |                   |               |                           |                           |
| 58      | L               | EDTA                    | No              | 16                      | DRB1*09:02, DOB1*05:01   | LS2A01            | 1000          | 12471                     | 50.43                     |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 62      | L               | None                    | No              | 110984                  | DRB1*16:02   | LSAI              | 1191          | 16563                     | 271                       |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 100     | L               | None                    | No              | 08256C                  |  | LSAI              | 500           | 19742                     | 504                       |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 112     | L               | EDTA                    | No              |                         | DOB1*05:01   | LS2A01            | 1000          | 5019                      | 59                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 114     | L               | EDTA                    | No              | 16                      | DOB1*05:01, DRB1*09:02   | LS2A01            | 1000          | 9987                      | 32                        | LSM12             |               | 7478                      | 106                       |                   |               |                           |                           |                   |               |                           |                           |
| 116     | C/L             | EDTA                    | No              | 16                      | DOB1*05:01, DRB1*09:02   | LS2A01            | 500           | 8518                      | 38                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 117     | L               | EDTA/Beads              | No              | 16                      | DOB1*05:01, DRB1*09:02   | LS2A01            | >1000         | 7730                      | 27                        | LSM12             | RATIO >1.5    | 11359                     | 327                       |                   |               |                           |                           |                   |               |                           |                           |
| 119     | L               | EDTA                    | No              |                         | DOB1*05:01, DRB5*02:02   | LS2A01            | 500           | 6060                      | 48                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 120     | L               | Heat inactivation       | No              |                         | DRB1*09:02   | LSAI              | 500           | 15886                     | 197                       |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 133     | L               | None                    | No              | 16                      |  | LS2A01            | 1000          | 11650                     | 67                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 136     | L               | EDTA                    | No              |                         | DRB1*09:02   | LS2A01            | 1000          | 10515                     | 32                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 142     | L               | EDTA                    | No              | 16                      |  | LS2A01            | 1000          | 13422                     | 83                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 145     | L               | None                    | No              | NC15                    | DRB1*09:02   | LS2A01            | 1000          | 11933                     | 121                       |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 146     | L               | None                    | No              | 16                      | DRB1*09:02 displays MFI at threshold of positivity but is not retained due to low frequency.   | LS2A01            | >1500         | 9124                      | 97                        | LSM12             | RATIO >5      | 8664                      | 91                        |                   |               |                           |                           |                   |               |                           |                           |
| 147     | L               | None                    | No              |                         | DRB1*09:02   | LSAI              | 16908         | 480                       |                           |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 149     | L               | None                    | No              |                         | DRB1*09:02   | LSAI              | 12466         | 27                        |                           |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 157     | L               | EDTA                    | No              | 16                      | DOB1*05:01, DRB1*09:02   | LS2A01            | 1000          | 7116                      | 38                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 160     | L               | Beads                   | No              | LOT14                   |  | LS2A01            | 1000          | 14659                     | 18                        | LSM12             | 3             | 9109.6                    | 33.83                     |                   |               |                           |                           |                   |               |                           |                           |
| 162     | L               | EDTA                    | No              | 16                      | DRB1*09:02, DOB1*05:01   | LS2A01            | 1000          | 8401                      | 113                       |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 164     | L               | EDTA                    | No              |                         | DOB1*05:01   | LS2A01            | 239           | 12253                     | 51                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 165     | F/L             | DILUTION                | No              | 22:1                    |  | LS2A01            | 1554          | 7                         |                           |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 168     | L               | None                    | No              | IN HOUSE                |  | LS2A01            | 500           | 8831                      | 45                        | LSM12             | 2.5           | 11200                     | 93                        |                   |               |                           |                           |                   |               |                           |                           |
| 181     | L               | None                    | No              | 98264                   |  | LSAI              | 21971         | 619                       | 256                       | LM2               |               | 22141                     |                           |                   |               |                           |                           |                   |               |                           |                           |
| 185     | L               | EDTA                    | No              |                         | DQ05:01, DOB1*02:02, DOB1*03:02, DQ4 - DQA03:03, DQ7 - DQA03:03  | LSM12             | 2000          | 9644                      | 51                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 195     | L               | None                    | No              | LSNC                    | DOB1*05:01, DRB5*02:02   | LS2A01            | 1000          | 11771                     | 34                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 197     | L               | EDTA                    | No              |                         | DOB1*05:01, DRB1*04:04   | LS2A01            | 1000          | 11160                     | 54                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 206     | L               | EDTA                    | No              |                         | DOB1*05:01, DRB1*04:05   | LS2A01            | 500           | 15685                     | 40                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 209     | L               | EDTA/Beads              | No              |                         | DRB1*14:02, DRB5*01:01   | LSAI              | 500           | 15727                     | 542                       |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 214     | L               | None                    | Yes             | 3003644                 | DRB1*04:01, DRB1*04:02, DRB1*04:03, DRB1*04:05   | LM2               | 1500          | 15115                     | 340                       | LMX               |               | 16565                     |                           |                   |               |                           |                           |                   |               |                           |                           |
| 216     | L               | Heat                    | No              |                         | DOB1*02:02, DOB1*02:02, DRB1*04:01, DRB1*04:04, DRB1*04:03, DRB1*04:05, DRB1*01:01, DRB1*03:01, DRB1*05:01, DRB1*13:01, DRB1*14:01, DRB1*17:01, DRB1*01:01, DRB1*04:01, DRB1*04:02, DRB1*04:05, DRB1*07:01, DRB1*09:01, DRB1*10:01, DRB1*13:01, DRB1*13:02, DRB1*15:01, DRB1*15:02, DRB1*15:03, DRB1*16:01, DRB1*16:02, DRB1*13:01, DRB1*13:02, DOB1*02:01, DOB1*02:02, DOB1*03:02 | LSAI              | 18049         |                           |                           |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 218     | L               | None                    | No              |                         | DOB1*05:01, DRB1*09:02, DRB5*02:02, DRB1*14:02, DOB1*05:01, DRB5*02:02   | LS2A01            | 1000          | 15079                     | 69                        | LS2PRA            | 500           | 8910                      | 10                        |                   |               |                           |                           |                   |               |                           |                           |
| 222     | F               | EDTA/Dilution           | No              |                         |  | LSAI              | 500           | 15174                     | 218                       |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 227     | L               | None                    | No              | NC16                    |  | LS2A01            | 1200          | 8183                      | 33                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 232     | L               | None                    | No              |                         |  | LM2               | 1000          | 19578                     | 294                       |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 238     | L               | None                    | No              |                         |  | LS2A01            | 17915         | 29.23                     |                           |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 242     | L               | Absorption Beads        | No              |                         |  | LM2               | 2             | 16228                     | 296                       |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 252     | L               | None                    | No              |                         |  | LSAI              | 1500/45       | 15489                     | 388                       | LM2               | 1000          | 19402                     | 97                        |                   |               |                           |                           |                   |               |                           |                           |
| 257     | L               | EDTA                    | No              |                         |  | LSAI              | 14975         | 375                       |                           |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 268     | C/L             | None                    | No              |                         |  | LSAI              | 1500/45       | 15489                     | 388                       | LM2               | 1000          | 19402                     | 97                        |                   |               |                           |                           |                   |               |                           |                           |
| 273     | L               | None                    | No              |                         | DOB1*05:01, DRB1*09:02   | LS2A01            | 1500          | 9419                      | 17                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 277     | L               | EDTA                    | No              | 16                      | DRB5*02:02, DRB1*14:02   | LS2A01            | 500           | 8784                      | 27                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 284     | L               | EDTA                    | No              |                         | DOB1*05:01, DRB5*02:02   | LS2A01            | 1000          | 15079                     | 69                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 293     | L               | None                    | No              |                         |  | LS2A01            | 500           | 8910                      | 10                        | LS2PRA            | 500           | 8910                      | 10                        |                   |               |                           |                           |                   |               |                           |                           |
| 302     | L               | None                    | No              |                         |  | LSAI              | 1000          | 9031                      | 86                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 303     | L               | EDTA                    | No              | 16                      | DOB1*05:01   | LS2A01            | 1000          | 10900                     | 300                       |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 309     | L               | None                    | No              |                         |  | LSAI              | 1500          | 8566                      | 94                        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 351     | L               | EDTA                    | No              | 16                      |  | LSAI              | 500           | 15174                     | 218                       |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 361     | L               | None                    | No              | 06070B                  |  | LSAI              | 500           | 15174                     | 218                       |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |

Technique : C = CDC, E = ELISA, F = Flow cytometry, L = Luminex, O = Other

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 302/2017

DESPATCHED ON 24TH JANUARY 2017

| HLA specificity for assessment |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
|--------------------------------|-----------------|------|--------|-------------------|------|--------|------------------|------|--------|------------------|------|--------|-------------------------|------|--------|------------------------|------|--------|-----------------|------|--------|------------------|------|--------|------------------|------|--------|-------------------------|------|--------|
| Lab no.                        | DR1 Absent 1.4% |      |        | DR103 Absent 1.4% |      |        | DR15 Absent 1.4% |      |        | DR16 Absent 1.4% |      |        | DR17 Not Assessed 16.9% |      |        | DR18 Not Assessed 8.5% |      |        | DR4 Absent 2.8% |      |        | DR11 Absent 2.8% |      |        | DR12 Absent 2.8% |      |        | DR13 Not Assessed 11.3% |      |        |
|                                | spec            | tech | MFI    | spec              | tech | MFI    | spec             | tech | MFI    | spec             | tech | MFI    | spec                    | tech | MFI    | spec                   | tech | MFI    | spec            | tech | MFI    | spec             | tech | MFI    | spec             | tech | MFI    | spec                    | tech | MFI    |
| 9                              |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 11                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 12                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 14                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 15                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 19                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 20                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 23                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 24                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 25                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 26                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 28                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 29                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 34                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 35                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 38                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 39                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 41                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 42                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 45                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 48                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 51                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 54                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 58                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 62                             |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 100                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 112                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 114                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 116                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 117                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 119                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 120                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 133                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 136                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 142                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 143                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 145                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 147                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 149                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 157                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 160                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 162                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 164                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 165                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 169                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 181                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 185                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 195                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 197                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 204                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 206                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 209                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 214                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 216                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 218                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 222                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 227                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 232                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 239                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 242                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 252                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 267                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 268                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 273                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 277                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 284                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 293                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 302                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 303                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 309                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |
| 351                            | DR1             | L    | < 2000 | DR103             | L    | < 2000 | DR15             | L    | < 2000 | DR16             | L    | < 2000 | DR17                    | L    | < 2000 | DR18                   | L    | < 2000 | DR4             | L    | < 2000 | DR11             | L    | < 2000 | DR12             | L    | < 2000 | DR13                    | L    | < 2000 |
| 361                            |                 |      |        |                   |      |        |                  |      |        |                  |      |        |                         |      |        |                        |      |        |                 |      |        |                  |      |        |                  |      |        |                         |      |        |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 1  | < 2000    | 1  | < 2000    | 1  | < 2000    | 1  | < 2000    | 12 | < 2000    | 6  | < 2000    | 2  | < 2000    | 2  | < 2000    | 2  | < 2000    | 2  | < 2000    | 8  | < 2000    |    |
|--------------------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|
| Total Participants | 71 | 1         | 71 | 1         | 71 | 1         | 71 | 1         | 71 | 12        | 71 | 6         | 71 | 2         | 71 | 2         | 71 | 2         | 71 | 2         | 71 | 8         | 71 |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    |
|                    |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 1         |    | 0         |    | 0         |    | 0         |    | 0         |    |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    |
|                    |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    |



**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 302/2017

DESPATCHED ON 24TH JANUARY 2017

| HLA specificity for assessment |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
|--------------------------------|----------------------|--------------|--------|--------------|-----|-----------|--------------|-----|--------|--------------|-----|--------|--------------|-----|--------|--------------|-----|--------|--------------|-----|--------|--------------|--------|--------|
| Lab no.                        | DR14                 |              |        | DR1404       |     |           | DR7          |     |        | DR8          |     |        | DR9          |     |        | DR10         |     |        | DR51         |     |        | DR52         |        |        |
|                                | Consensus % reported | Not Assessed | MFI    | Not Assessed | MFI | tech      | Not Assessed | MFI | tech   | Not Assessed | MFI | tech   | Not Assessed | MFI | tech   | Not Assessed | MFI | tech   | Not Assessed | MFI | tech   | Not Assessed | MFI    |        |
| 9                              |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 11                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 12                             | DR14                 | L            | < 2000 |              |     |           |              |     |        | DR8          | L   | < 2000 |              |     |        |              |     |        |              |     |        |              |        |        |
| 14                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 15                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 19                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 20                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 23                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 24                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 25                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 26                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 28                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 29                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 34                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 35                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 38                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 39                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 41                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 42                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 45                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 48                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 51                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 54                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 58                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 62                             |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 100                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 112                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 114                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 116                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 117                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 119                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 120                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 133                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 136                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 142                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 143                            | DR14                 | L            | < 2000 |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 145                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 147                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 149                            | DR14                 | L            | < 2000 |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     | DR52   | L            | < 2000 |        |
| 157                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 160                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 162                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 164                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 165                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 169                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 181                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 185                            | DR14                 | L            | < 2000 | DR1404       | L   | < 2000    |              |     |        | DR8          | L   | < 2000 |              |     |        |              |     |        |              |     | DR52   | L            | < 2000 |        |
| 195                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 197                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 204                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 206                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 209                            | DR14                 | L            | < 2000 |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 214                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 216                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 218                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 222                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 227                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 232                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 239                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 242                            | DR14                 | L            | < 2000 |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 252                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 267                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 268                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 273                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 277                            | DR14                 | L            | < 2000 |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 284                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 293                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 302                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 303                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 309                            |                      |              |        |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 351                            | DR14                 | L            | < 2000 |              |     |           |              |     |        |              |     |        |              |     |        |              |     |        |              |     |        |              |        |        |
| 361                            |                      |              |        | DR1404       | L   | 1000-5000 | DR7          | L   | < 2000 | DR8          | L   | < 2000 | DR9          | L   | < 2000 | DR10         | L   | < 2000 | DR51         | L   | < 2000 | DR52         | L      | < 2000 |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 8  | < 2000    | 2  | < 2000    | 1  | < 2000    | 5  | < 2000    | 1  | < 2000    | 1  | < 2000    | 1  | < 2000    | 5  | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 8         | 71 | 1         | 71 | 1         | 71 | 4         | 71 | 1         | 71 | 1         | 71 | 1         | 71 | 5         |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | 0         |    | 1         |    | 0         |    | 1         |    | 0         |    | 0         |    | 0         |    | 0         |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 302/2017

DESPATCHED ON 24TH JANUARY 2017

| HLA specificity for assessment |                    |      |           |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
|--------------------------------|--------------------|------|-----------|-----------------|------|--------|-----------------|------|--------|-----------------------|------|--------|-----------------|------|--------|-----------------------|------|--------|-----------------------|------|--------|-----------------|------|--------|-----|
| Consensus % reported           | DR53 Present 87.3% |      |           | DQ5 Absent 1.4% |      |        | DQ6 Absent 1.4% |      |        | DQ2 Not Assessed 5.6% |      |        | DQ7 Absent 1.4% |      |        | DQ8 Not Assessed 7.9% |      |        | DQ9 Not Assessed 5.6% |      |        | DQ4 Absent 1.4% |      |        |     |
|                                | Lab no.            | spec | tech      | MFI             | spec | tech   | MFI             | spec | tech   | MFI                   | spec | tech   | MFI             | spec | tech   | MFI                   | spec | tech   | MFI                   | spec | tech   | MFI             | spec | tech   | MFI |
| 9                              | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 11                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 12                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 14                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 15                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 19                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 20                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        | DQ2                   | L    | < 2000 |                 |      |        | DQ8                   | L    | < 2000 | DQ9                   | L    |        | 2000-5000       |      |        |     |
| 23                             | DR53               | L    | 2000-5000 |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 24                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 25                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 26                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 28                             | DR53               | L    | 2000-5000 |                 |      |        |                 |      |        | DQ2                   | L    | < 2000 |                 |      |        | DQ8                   | L    | < 2000 | DQ9                   | L    |        | < 2000          |      |        |     |
| 34                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 35                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 38                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 39                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 41                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 42                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 45                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 48                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 51                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 54                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 58                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 62                             | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 100                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 112                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 114                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 116                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 117                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 119                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 120                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 133                            |                    |      |           |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 136                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 142                            | DR53               | L    | 2000-5000 |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 143                            | DR53               | L    | 2000-5000 |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 145                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 147                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 149                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 157                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 160                            | DR53               | L    | 2000-5000 |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 162                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 164                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 165                            | DR53               | F/L  | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 169                            | DR53               | L    | 2000-5000 |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 181                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 185                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 195                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 197                            |                    |      |           |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 204                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 206                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 209                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 214                            |                    |      |           |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 216                            |                    |      |           |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       | DQ8  | L      | < 2000                |      |        |                 |      |        |     |
| 218                            | DR53               | L    | 2000-5000 |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 222                            |                    |      |           |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 227                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 232                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        | DQ9                   | L    |        | < 2000          |      |        |     |
| 239                            |                    |      |           |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 242                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        | DQ2                   | L    | < 2000 |                 |      |        | DQ8                   | L    | < 2000 | DQ9                   | L    |        | < 2000          |      |        |     |
| 252                            |                    |      |           |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 267                            | DR53               | L    | 2000-5000 |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 268                            |                    |      |           |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 273                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 277                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 284                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 293                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 302                            |                    |      |           |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 303                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 309                            | DR53               | L    | > 5000    |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |
| 351                            | DR53               | L    | > 5000    | DQ5             | L    | < 2000 | DQ6             | L    | < 2000 | DQ2                   | L    | < 2000 | DQ7             | L    | < 2000 | DQ8                   | L    | < 2000 | DQ9                   | L    | < 2000 | DQ4             | L    | < 2000 |     |
| 361                            | DR53               | L    | 2000-5000 |                 |      |        |                 |      |        |                       |      |        |                 |      |        |                       |      |        |                       |      |        |                 |      |        |     |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 62 | < 2000    | 1  | < 2000    | 1  | < 2000    | 4  | < 2000    | 1  | < 2000    | 5  | < 2000    | 4  | < 2000    | 1  | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 0         | 71 | 1         | 71 | 1         | 71 | 4         | 71 | 1         | 71 | 5         | 71 | 3         | 71 | 1         |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | 9         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 1         |    | 0         |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 53        |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |

UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 302/2017

DESPATCHED ON 24TH JANUARY 2017

| DQA1* Antibodies - NOT ASSESSED    |                               |      |                  |                                |      |                  |                         |      |           |
|------------------------------------|-------------------------------|------|------------------|--------------------------------|------|------------------|-------------------------|------|-----------|
| Consensus<br>% reported<br>Lab no. | 03:01<br>Not Assessed<br>5.6% |      |                  | 03:02<br>Not Assessed<br>11.3% |      |                  | 03:03<br>Absent<br>4.2% |      |           |
|                                    | spec                          | tech | MFI              | spec                           | tech | MFI              | spec                    | tech | MFI       |
| 9                                  |                               |      |                  |                                |      |                  |                         |      |           |
| 11                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 12                                 | 03:01                         | L    | <2000, 2000-5000 | 03:02                          | L    | <2000, 2000-5000 | 03:03                   | L    | <2000     |
| 14                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 15                                 |                               |      |                  | 03:02                          | L    | <2000            |                         |      |           |
| 19                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 20                                 | 03:01                         | L    | <2000            | 03:02                          | L    | 2000-5000        |                         |      |           |
| 23                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 24                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 25                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 26                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 28                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 34                                 |                               |      |                  | 03:02                          | L    | <2000            |                         |      |           |
| 35                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 38                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 39                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 41                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 42                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 45                                 | 03:01                         | L    | <2000            | 03:02                          | L    | <2000            | 03:03                   | L    | <2000     |
| 48                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 51                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 54                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 58                                 |                               |      |                  |                                |      |                  |                         |      |           |
| 62                                 | 03:01                         | L    | 2000-5000        | 03:02                          | L    | 2000-5000        | 03:03                   | L    | 2000-5000 |
| 100                                |                               |      |                  |                                |      |                  |                         |      |           |
| 112                                |                               |      |                  |                                |      |                  |                         |      |           |
| 114                                |                               |      |                  |                                |      |                  |                         |      |           |
| 116                                |                               |      |                  |                                |      |                  |                         |      |           |
| 117                                |                               |      |                  |                                |      |                  |                         |      |           |
| 119                                |                               |      |                  |                                |      |                  |                         |      |           |
| 120                                |                               |      |                  |                                |      |                  |                         |      |           |
| 133                                |                               |      |                  |                                |      |                  |                         |      |           |
| 136                                |                               |      |                  |                                |      |                  |                         |      |           |
| 142                                |                               |      |                  |                                |      |                  |                         |      |           |
| 143                                |                               |      |                  |                                |      |                  |                         |      |           |
| 145                                |                               |      |                  |                                |      |                  |                         |      |           |
| 147                                |                               |      |                  |                                |      |                  |                         |      |           |
| 149                                |                               |      |                  |                                |      |                  |                         |      |           |
| 157                                |                               |      |                  |                                |      |                  |                         |      |           |
| 160                                |                               |      |                  |                                |      |                  |                         |      |           |
| 162                                |                               |      |                  |                                |      |                  |                         |      |           |
| 164                                |                               |      |                  |                                |      |                  |                         |      |           |
| 165                                |                               |      |                  |                                |      |                  |                         |      |           |
| 169                                |                               |      |                  |                                |      |                  |                         |      |           |
| 181                                |                               |      |                  |                                |      |                  |                         |      |           |
| 185                                |                               |      |                  |                                |      |                  |                         |      |           |
| 195                                |                               |      |                  |                                |      |                  |                         |      |           |
| 197                                |                               |      |                  |                                |      |                  |                         |      |           |
| 204                                |                               |      |                  |                                |      |                  |                         |      |           |
| 206                                |                               |      |                  |                                |      |                  |                         |      |           |
| 209                                |                               |      |                  | 03:02                          | L    | <2000            |                         |      |           |
| 214                                |                               |      |                  |                                |      |                  |                         |      |           |
| 216                                |                               |      |                  |                                |      |                  |                         |      |           |
| 218                                |                               |      |                  |                                |      |                  |                         |      |           |
| 222                                |                               |      |                  |                                |      |                  |                         |      |           |
| 227                                |                               |      |                  |                                |      |                  |                         |      |           |
| 232                                |                               |      |                  | 03:02                          | L    | <2000            |                         |      |           |
| 239                                |                               |      |                  |                                |      |                  |                         |      |           |
| 242                                |                               |      |                  |                                |      |                  |                         |      |           |
| 252                                |                               |      |                  |                                |      |                  |                         |      |           |
| 267                                |                               |      |                  |                                |      |                  |                         |      |           |
| 268                                |                               |      |                  |                                |      |                  |                         |      |           |
| 273                                |                               |      |                  |                                |      |                  |                         |      |           |
| 277                                |                               |      |                  |                                |      |                  |                         |      |           |
| 284                                |                               |      |                  |                                |      |                  |                         |      |           |
| 293                                |                               |      |                  |                                |      |                  |                         |      |           |
| 302                                |                               |      |                  |                                |      |                  |                         |      |           |
| 303                                |                               |      |                  |                                |      |                  |                         |      |           |
| 309                                |                               |      |                  |                                |      |                  |                         |      |           |
| 351                                |                               |      |                  |                                |      |                  |                         |      |           |
| 361                                |                               |      |                  |                                |      |                  |                         |      |           |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 4  | < 2000    | 8  | < 2000    | 3  | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 0         | 71 | 0         | 71 | 0         |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | 1         |    | 2         |    | 1         |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 0         |    | 0         |    | 0         |

UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 302/2017

DESPATCHED ON 24TH JANUARY 2017

DPB1\* Antibodies - NOT ASSESSED

| Lab no. | 28:01                |                    | MFI       |
|---------|----------------------|--------------------|-----------|
|         | Consensus % reported | Not Assessed 14.1% |           |
|         | spec                 | tech               |           |
| 9       |                      |                    |           |
| 11      |                      |                    |           |
| 12      |                      |                    |           |
| 14      |                      |                    |           |
| 15      |                      |                    |           |
| 19      |                      |                    |           |
| 20      |                      |                    |           |
| 23      |                      |                    |           |
| 24      |                      |                    |           |
| 25      | 28:01                | L                  | 2000-5000 |
| 26      |                      |                    |           |
| 28      |                      |                    |           |
| 34      |                      |                    |           |
| 35      |                      |                    |           |
| 38      |                      |                    |           |
| 39      |                      |                    |           |
| 41      |                      |                    |           |
| 42      |                      |                    |           |
| 45      |                      |                    |           |
| 48      |                      |                    |           |
| 51      |                      |                    |           |
| 54      |                      |                    |           |
| 58      |                      |                    |           |
| 62      |                      |                    |           |
| 100     | 28:01                | L                  | > 5000    |
| 112     |                      |                    |           |
| 114     |                      |                    |           |
| 116     | 28:01                | L                  | > 5000    |
| 117     |                      |                    |           |
| 119     |                      |                    |           |
| 120     |                      |                    |           |
| 133     |                      |                    |           |
| 136     |                      |                    |           |
| 142     |                      |                    |           |
| 143     |                      |                    |           |
| 145     |                      |                    |           |
| 147     |                      |                    |           |
| 149     | 28:01                | L                  | > 5000    |
| 157     |                      |                    |           |
| 160     |                      |                    |           |
| 162     |                      |                    |           |
| 164     |                      |                    |           |
| 165     |                      |                    |           |
| 169     |                      |                    |           |
| 181     |                      |                    |           |
| 185     | 28:01                | L                  | 2000-5000 |
| 195     |                      |                    |           |
| 197     |                      |                    |           |
| 204     |                      |                    |           |
| 206     |                      |                    |           |
| 209     |                      |                    |           |
| 214     |                      |                    |           |
| 216     |                      |                    |           |
| 218     | 28:01                | L                  | 2000-5000 |
| 222     |                      |                    |           |
| 227     |                      |                    |           |
| 232     |                      |                    |           |
| 239     |                      |                    |           |
| 242     |                      |                    |           |
| 252     |                      |                    |           |
| 267     | 28:01                | L                  | 2000-5000 |
| 268     | 28:01                | L                  | 2000-5000 |
| 273     |                      |                    |           |
| 277     |                      |                    |           |
| 284     |                      |                    |           |
| 293     |                      |                    |           |
| 302     |                      |                    |           |
| 303     |                      |                    |           |
| 309     | 28:01                | L                  | > 5000    |
| 351     |                      |                    |           |
| 361     | 28:01                | L                  | 2000-5000 |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

|                    |    |           |
|--------------------|----|-----------|
| No. Reporting Spec | 10 | < 2000    |
| Total Participants | 71 | 0         |
|                    |    | 2000-5000 |
|                    |    | 6         |
|                    |    | > 5000    |
|                    |    | 4         |

UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 302/2017

DESPATCHED ON 24TH JANUARY 2017

**DPA1\*** Antibodies - NOT ASSESSED

| Consensus<br>% reported | 02:02<br>Absent<br>1.4% |      |        |  |
|-------------------------|-------------------------|------|--------|--|
| Lab no.                 | spec                    | tech | MFI    |  |
| 9                       |                         |      |        |  |
| 11                      |                         |      |        |  |
| 12                      |                         |      |        |  |
| 14                      |                         |      |        |  |
| 15                      |                         |      |        |  |
| 19                      |                         |      |        |  |
| 20                      |                         |      |        |  |
| 23                      |                         |      |        |  |
| 24                      |                         |      |        |  |
| 25                      |                         |      |        |  |
| 26                      |                         |      |        |  |
| 28                      |                         |      |        |  |
| 34                      |                         |      |        |  |
| 35                      |                         |      |        |  |
| 38                      |                         |      |        |  |
| 39                      |                         |      |        |  |
| 41                      |                         |      |        |  |
| 42                      |                         |      |        |  |
| 45                      |                         |      |        |  |
| 48                      |                         |      |        |  |
| 51                      |                         |      |        |  |
| 54                      |                         |      |        |  |
| 58                      |                         |      |        |  |
| 62                      |                         |      |        |  |
| 100                     |                         |      |        |  |
| 112                     |                         |      |        |  |
| 114                     |                         |      |        |  |
| 116                     |                         |      |        |  |
| 117                     |                         |      |        |  |
| 119                     |                         |      |        |  |
| 120                     |                         |      |        |  |
| 133                     |                         |      |        |  |
| 136                     |                         |      |        |  |
| 142                     |                         |      |        |  |
| 143                     |                         |      |        |  |
| 145                     |                         |      |        |  |
| 147                     |                         |      |        |  |
| 149                     |                         |      |        |  |
| 157                     |                         |      |        |  |
| 160                     |                         |      |        |  |
| 162                     |                         |      |        |  |
| 164                     |                         |      |        |  |
| 165                     |                         |      |        |  |
| 169                     |                         |      |        |  |
| 181                     |                         |      |        |  |
| 185                     |                         |      |        |  |
| 195                     |                         |      |        |  |
| 197                     |                         |      |        |  |
| 204                     |                         |      |        |  |
| 206                     |                         |      |        |  |
| 209                     |                         |      |        |  |
| 214                     |                         |      |        |  |
| 216                     |                         |      |        |  |
| 218                     |                         |      |        |  |
| 222                     |                         |      |        |  |
| 227                     |                         |      |        |  |
| 232                     |                         |      |        |  |
| 239                     |                         |      |        |  |
| 242                     |                         |      |        |  |
| 252                     |                         |      |        |  |
| 267                     |                         |      |        |  |
| 268                     |                         |      |        |  |
| 273                     |                         |      |        |  |
| 277                     |                         |      |        |  |
| 284                     |                         |      |        |  |
| 293                     |                         |      |        |  |
| 302                     |                         |      |        |  |
| 303                     |                         |      |        |  |
| 309                     | 02:02                   | L    | < 2000 |  |
| 351                     |                         |      |        |  |
| 361                     |                         |      |        |  |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

|                    |    |           |
|--------------------|----|-----------|
| No. Reporting Spec | 1  | < 2000    |
| Total Participants | 71 | 1         |
|                    |    | 2000-5000 |
|                    |    | 0         |
|                    |    | > 5000    |
|                    |    | 0         |

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 302/2017

DESPATCHED ON 24TH JANUARY 2017

| Lab no. | Techniques used IgG | Sample Treatment IgG | High Background | Neg control serum batch | Allele Specific Antibodies   |  |  |        | Luminex kit (lot) | Cut-off value | Control bead MFI Positive | Control bead MFI Negative | Luminex kit (lot) | Cut-off value | Control bead MFI Positive | Control bead MFI Negative | Luminex kit (lot) | Cut-off value | Control bead MFI Positive | Control bead MFI Negative |
|---------|---------------------|----------------------|-----------------|-------------------------|--|--|--|--------|-------------------|---------------|---------------------------|---------------------------|-------------------|---------------|---------------------------|---------------------------|-------------------|---------------|---------------------------|---------------------------|
|         |                     |                      |                 |                         | IgG  |  |  |        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 9       | L                   | None                 | No              |                         |  |  |  | LS2A01 | 500               | 7600          | 58.8                      |                           |                   |               |                           |                           |                   |               |                           |                           |
| 11      | L                   | EDTA                 | No              |                         |  |  |  | LS2A01 | 1000              | 6057          | 16                        | LSM12                     | 2.5               | 5627          | 17                        |                           |                   |               |                           |                           |
| 12      | L                   | EDTA                 | No              | 16                      |  |  |  | LS2A01 | 500               | 12292         | 300                       | LSM12                     | 3                 | 10990         | 585                       |                           |                   |               |                           |                           |
|         |                     | Heat Inactivation,   | No              | 16                      |  |  |  | LS2A01 | 1500              | 13729         | 31                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 14      | L                   | EDTA                 | No              |                         |  |  |  | LS2A01 | 1000              | 15597         | 17                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 15      | L                   | EDTA                 | No              | 16                      |  |  |  | LS2A01 | 1000              | 10036         | 36                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 19      | L                   | None                 | No              | OL1M                    |  |  |  | LS2A01 | 1000              | 9733          | 48                        |                           |                   |               |                           |                           |                   |               |                           |                           |
|         |                     | EDTA                 | No              |                         | DQA1*03:02 DQB1*03:03 DQA1*03:01 DQB1*02:01 DQA1*03:02 DQB1*03:02 DRB1*13:01 |  |  |        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 20      | C/L                 |                      |                 |                         |  |  |  |        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 23      | L                   | EDTA                 | No              | 16                      |  |  |  | LS2A01 | 1000              | 11026         | 14.51                     |                           |                   |               |                           |                           |                   |               |                           |                           |
| 24      | L                   | EDTA                 | Yes             | 16                      |  |  |  | LS2A01 | 1000              | 12315         | 14                        | LSM12                     | 4.5               | 9064          | 245                       | LSPRA                     | 1000              | 10112         | 1049                      |                           |
| 25      | L                   | EDTA                 | No              | 16                      |  |  |  | LS2A01 | 1000              | 10362         | 39                        | LSM12                     | 6                 | 9333          | 122                       | LSAII                     | 1500              | 15554         | 178                       |                           |
| 26      | L                   | EDTA                 | No              | 16                      |  |  |  | LS2A01 | 500               | 7440          | 26                        |                           |                   |               |                           |                           |                   |               |                           |                           |
|         |                     | None                 | No              | 16                      | DQB1*03:03, DQA1*03:02 DQB1*03:02, DQA1*03:01 DQB1*02:01, DQA1*03:01         |  |  |        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 28      | L                   |                      |                 |                         |  |  |  |        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 34      | L                   | EDTA                 | No              | 11                      |  |  |  | LS2A01 | 996               | 11793         | 9                         |                           |                   |               |                           |                           |                   |               |                           |                           |
| 35      | L                   | EDTA                 | No              | 16                      |  |  |  | LS2A01 | 1000              | 10211         | 18                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 38      | L                   | EDTA                 | No              | 16                      |  |  |  | LS2A01 | 9800              | 10868         | 8                         | LSAII                     | 8062              | 16628         | 149                       |                           |                   |               |                           |                           |
| 39      | L                   | EDTA                 | No              | LS-NC015                |  |  |  | LS2A01 | 1300              | 9673          | 45                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 41      | L                   | None                 | No              | 15                      |  |  |  | LS2A01 | 2000              | 8372          | 42                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 42      | L                   | EDTA                 | No              | 16                      |  |  |  | LS2A01 | 500               | 8566          | 19                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 45      | L                   | EDTA/Beads           | No              |                         |  |  |  | LS2A01 | 1500              | 11000         | 20                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 48      | L                   | Heat Inactivation    | No              | 22                      |  |  |  |        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 51      | L                   | EDTA                 | No              |                         |  |  |  | LS2A01 | 2000              | 8250          | 38                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 54      | L                   | EDTA                 | No              | 16                      |  |  |  | LS2A01 | 750               | 6004          | 38                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 58      | L                   | EDTA                 | No              | 15                      |  |  |  | LS2A01 | 1000              | 10708         | 58                        | LSM12                     | 3                 | 9672          | 203                       |                           |                   |               |                           |                           |
| 62      | L                   | None                 | No              | 16                      |  |  |  | LS2A01 | 1500              | 11284         | 28.9                      |                           |                   |               |                           |                           |                   |               |                           |                           |
| 100     | L                   | None                 | No              | 11086D                  |  |  |  | LSAII  | 5025              | 18198         | 245                       |                           |                   |               |                           |                           |                   |               |                           |                           |
| 112     | L                   | None                 | No              | 08256C                  |  |  |  | LSAII  | 500               | 19639         | 236                       |                           |                   |               |                           |                           |                   |               |                           |                           |
| 114     | L                   | EDTA                 | No              |                         |  |  |  | LS2A01 | 1000              | 5673          | 23                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 116     | C/L                 | EDTA                 | No              | 16                      |  |  |  | LS2A01 | 1000              | 8665          | 21                        | LSM12                     |                   | 9678          | 34                        |                           |                   |               |                           |                           |
| 117     | E/L                 | None                 | No              | 16                      |  |  |  | LS2A01 | 500               | 7449          | 37                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 119     | L                   | EDTA/Beads           | No              |                         |  |  |  | LS2A01 | >1000             | 9744          | 9                         | LSM12                     | RATIO >1.5        | 8815          | 22                        |                           |                   |               |                           |                           |
| 120     | L                   | EDTA                 | No              |                         |  |  |  | LS2A01 | 500               | 7368          | 34                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 133     | L                   |                      |                 |                         |  |  |  | LSAII  | 500               | 16562         | 165                       |                           |                   |               |                           |                           |                   |               |                           |                           |
| 136     | L                   | None                 | No              |                         |  |  |  | LS2A01 | 1000              | 9941          | 121                       |                           |                   |               |                           |                           |                   |               |                           |                           |
| 142     | L                   | EDTA                 | No              |                         |  |  |  | LS2A01 | 1000              | 8468          | 5                         |                           |                   |               |                           |                           |                   |               |                           |                           |
| 143     | L                   | None                 | No              | 16                      |  |  |  | LS2A01 | 1000              | 12246         | 59                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 145     | L                   | None                 | No              | NC15                    |  |  |  | LS2A01 | 1000              | 12884         | 48                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 147     | L                   | None                 | No              |                         |  |  |  | LS2A01 | >1500             | 9553          | 23                        | LSM12                     | >5                | 3326          | 81                        |                           |                   |               |                           |                           |
| 149     | L                   | None                 | No              |                         |  |  |  | LSAII  | 20481             | 4002          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 157     | L                   | EDTA                 | No              | 16                      |  |  |  | LS2A01 | 1000              | 11590         | 18                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 160     | L                   | Beads                | No              | LOT14                   |  |  |  | LS2A01 | 1000              | 6400          | 6.5                       |                           |                   |               |                           |                           |                   |               |                           |                           |
| 162     | L                   | EDTA                 | No              | 16                      |  |  |  | LS2A01 | 1000              | 14550         | 52                        | LSM12                     | 3                 | 8722          | 6.5                       |                           |                   |               |                           |                           |
| 164     |                     |                      |                 |                         |  |  |  | LS2A01 | 1500              | 8918          | 43                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 165     | F/E/L               | Dilution             | No              | 22.1                    |  |  |  | LS2A01 | 449               | 12270         | 27                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 169     | L                   | None                 | No              | IN HOUSE                |  |  |  | LS2A01 | 500               | 1650          | 7                         |                           |                   |               |                           |                           |                   |               |                           |                           |
| 181     | L                   | None                 | No              | 98264                   |  |  |  | LS2A01 | 500               | 6857          | 36                        | LSM12                     | 2.5               | 7114          | 58                        |                           |                   |               |                           |                           |
|         |                     | EDTA                 | No              |                         | DQA1*02 and DQB1*02:01 weak positive   |  |  | LSAII  |                   | 19751         | 180                       | LM2                       |                   | 18428         | 110                       |                           |                   |               |                           |                           |
| 185     | L                   |                      |                 |                         |  |  |  |        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 195     | L                   | None                 | No              |                         |  |  |  | LSM12  | 2000              | 9673          | 23                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 197     | L                   | None                 | No              |                         |  |  |  |        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 204     | L                   | EDTA                 | No              |                         |  |  |  | LS2A01 | 1000              | 9594          | 16                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 206     | L                   | EDTA                 | No              |                         |  |  |  | LS2A01 | 1000              | 9000          | 40                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 209     | C/L                 | EDTA/Beads           | No              |                         |  |  |  | LS2A01 | 500               | 12731         | 23                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 214     | L                   | None                 | Yes             |                         |  |  |  |        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 216     | L                   | None                 | No              | 3003644                 |  |  |  | LM2    | 1000              | 15583         | 168                       | LMX                       |                   | 11085         |                           |                           |                   |               |                           |                           |
| 218     | L                   | Heat                 | No              |                         |  |  |  | LSAII  |                   | 17614         |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 222     | L                   |                      |                 |                         |  |  |  |        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 227     | L                   | EDTA/Dilution        | No              |                         |  |  |  |        |                   |               |                           |                           |                   |               |                           |                           |                   |               |                           |                           |
| 232     | L                   | None                 | No              | NC16                    |  |  |  | LS2A01 | 1200              | 7020          | 106                       |                           |                   |               |                           |                           |                   |               |                           |                           |
| 239     | L                   | None                 | No              |                         |  |  |  | LM2    | 900               | 17689         | 100                       |                           |                   |               |                           |                           |                   |               |                           |                           |
| 242     | L                   |                      |                 |                         |  |  |  | LS2A01 |                   | 16520         | 29.03                     |                           |                   |               |                           |                           |                   |               |                           |                           |
| 252     | L                   | None                 | No              |                         |  |  |  | LM2    | 2                 | 17150         | 80                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 267     | L                   | EDTA                 | No              |                         |  |  |  | LSAII  | 1500/4/5          | 14357         | 113                       |                           |                   |               |                           |                           |                   |               |                           |                           |
| 268     | C/L                 | None                 | No              |                         |  |  |  | LSAII  | 1500/4/5          | 15595         | 125                       | LM2                       | 1000              | 19350         | 110                       |                           |                   |               |                           |                           |
| 273     | L                   | None                 | No              |                         |  |  |  | LS2A01 | 1500              | 8409          | 62                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 277     | L                   | EDTA                 | No              | 16                      |  |  |  | LS2A01 | 500               | 9696          | 21                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 284     | L                   | EDTA                 | No              |                         |  |  |  | LS2A01 | 1000              | 10842         | 138                       |                           |                   |               |                           |                           |                   |               |                           |                           |
| 293     | L                   | None                 | No              |                         |  |  |  | LS2A01 | 500               | 8072          | 8                         | LS2PRA                    | 500               | 8072          | 8                         |                           |                   |               |                           |                           |
| 302     | L                   | EDTA                 | No              | 16                      |  |  |  | LS2A01 | 1000              | 8205          | 13                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 309     | L                   | None                 | No              |                         |  |  |  | LSAII  | 1000              | 19000         | 300                       |                           |                   |               |                           |                           |                   |               |                           |                           |
| 351     | L                   | EDTA                 | No              | 16                      |  |  |  | LS2A01 | 1500              | 8531          | 26                        |                           |                   |               |                           |                           |                   |               |                           |                           |
| 361     | L                   | None                 | No              | 06076B                  |  |  |  | LSAII  | 500               | 16927         | 161                       |                           |                   |               |                           |                           |                   |               |                           |                           |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 303/2017

DESPATCHED ON 24TH JANUARY 2017

| HLA specificity for assessment |                 |      |                   |     |                    |      |                    |      |                   |      |                         |           |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
|--------------------------------|-----------------|------|-------------------|-----|--------------------|------|--------------------|------|-------------------|------|-------------------------|-----------|-----------------|------|------------------|------|------------------|-----------|------------------|------|------------------|-----|-----------------|------|-----|------|------|-----|------|------|-----|--|--|--|
| Consensus % reported           | DR1 Absent 2.8% |      | DR103 Absent 1.4% |     | DR15 Present 95.2% |      | DR16 Present 93.0% |      | DR17 Absent 2.8%  |      | DR18 Not Assessed 18.3% |           | DR4 Absent 1.4% |      | DR11 Absent 1.4% |      | DR12 Absent 1.4% |           | DR13 Absent 2.8% |      | DR14 Absent 1.4% |     | DR7 Absent 2.8% |      |     |      |      |     |      |      |     |  |  |  |
|                                | Lab no.         | spec | tech              | MFI | spec               | tech | MFI                | spec | tech              | MFI  | spec                    | tech      | MFI             | spec | tech             | MFI  | spec             | tech      | MFI              | spec | tech             | MFI | spec            | tech | MFI | spec | tech | MFI | spec | tech | MFI |  |  |  |
| 9                              |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 11                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | < 2000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 12                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 | DR17            | L    | < 2000           | DR18 | L                | < 2000    |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 14                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  | DR18 | L                | < 2000    |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 15                             |                 |      |                   |     |                    |      | DR15               | L    | < 2000            | DR16 | L                       | < 2000    |                 |      |                  | DR18 | L                | < 2000    |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 19                             |                 |      |                   |     |                    |      | DR15               | L    | < 2000            | DR16 | L                       | < 2000    |                 |      |                  | DR18 | L                | < 2000    |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 20                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  | DR18 | L                | < 2000    |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 23                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 24                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 25                             |                 |      |                   |     |                    |      | DR15               | L    | < 2000            | DR16 | L                       | < 2000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 26                             |                 |      |                   |     |                    |      | DR15               | L    | < 2000            | DR16 | L                       | < 2000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 28                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 34                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  | DR18 | L                | 2000-5000 |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 35                             |                 |      |                   |     |                    |      | DR15               | L    | < 2000, 2000-5000 | DR16 | L                       | < 2000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 38                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 39                             |                 |      |                   |     |                    |      | DR15               | L    | < 2000            | DR16 | L                       | < 2000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 41                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 42                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | < 2000    |                 |      |                  | DR18 | L                | < 2000    |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 45                             |                 |      |                   |     |                    |      | DR15               | L    | < 2000            | DR16 | L                       | < 2000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 48                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 51                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | < 2000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 54                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | < 2000    |                 |      |                  | DR18 | L                | < 2000    |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 58                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  | DR18 | L                | < 2000    |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 62                             |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 100                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 112                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 114                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 116                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 117                            |                 |      |                   |     |                    |      | DR15               | L    | < 2000            | DR16 | L                       | < 2000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 119                            |                 |      |                   |     |                    |      | DR15               | L    | < 2000/2000-5000  | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 120                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  | DR18 | L                | < 2000    |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 133                            |                 |      |                   |     |                    |      | DR15               | L    | < 2000            | DR16 | L                       | < 2000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 136                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 142                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 143                            |                 |      |                   |     |                    |      | DR15               | L    | > 5000            | DR16 | L                       | > 5000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 145                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 147                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 149                            |                 |      |                   |     |                    |      | DR15               | L    | > 5000            | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 157                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 160                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 162                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 164                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 165                            |                 |      |                   |     |                    |      | DR15               | F/L  | > 5000            | DR16 | F/E/L                   | > 5000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 169                            |                 |      |                   |     |                    |      |                    |      |                   |      |                         |           |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 181                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 185                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 195                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 197                            |                 |      |                   |     |                    |      |                    |      |                   |      |                         |           |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 204                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  | DR18 | L                | < 2000    |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 206                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 209                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  | DR18 | L                | < 2000    |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 214                            |                 |      |                   |     |                    |      | DR15               | L    | < 2000            | DR16 | L                       | < 2000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 216                            |                 |      |                   |     |                    |      | DR15               | L    | < 2000            | DR16 | L                       | < 2000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 218                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 222                            | DR1             | F    |                   |     |                    |      | DR15               | F    |                   |      |                         |           |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     | DR13 | F    |     |      |      |     |  |  |  |
| 227                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 232                            |                 |      |                   |     |                    |      | DR15               | L    | < 2000            | DR16 | L                       | < 2000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 239                            |                 |      |                   |     |                    |      | DR15               | L    | < 2000            | DR16 | L                       | < 2000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 242                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 252                            |                 |      |                   |     |                    |      |                    |      |                   |      |                         |           |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 267                            |                 |      |                   |     |                    |      | DR15               | L    | < 2000            | DR16 | L                       | < 2000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 268                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | < 2000    |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 273                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 277                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  | DR18 | L                | < 2000    |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 284                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 |                 |      |                  | DR18 | L                | < 2000    |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |
| 293                            |                 |      |                   |     |                    |      | DR15               | L    | 2000-5000         | DR16 | L                       | 2000-5000 | </              |      |                  |      |                  |           |                  |      |                  |     |                 |      |     |      |      |     |      |      |     |  |  |  |

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 303/2017

DESPATCHED ON 24TH JANUARY 2017

| HLA specificity for assessment |         | DR9 Absent 1.4% |      | DR10 Present 38.2% |      | DR51 Absent 4.2% |           | DR52 Absent 1.4% |      | DR53 Present 88.2% |      | DQ5 Present 100.0% |           | DQ6 Present 100.0% |        | DQ2 Absent 2.8% |      | DQ7 Absent 2.8% |           | DQ8 Absent 1.4% |      | DQ9 Absent 2.8% |      | DQ4 Present 95.8% |        |        |                   |                   |
|--------------------------------|---------|-----------------|------|--------------------|------|------------------|-----------|------------------|------|--------------------|------|--------------------|-----------|--------------------|--------|-----------------|------|-----------------|-----------|-----------------|------|-----------------|------|-------------------|--------|--------|-------------------|-------------------|
| Consensus % reported           | Lab no. | spec            | tech | MFI                | spec | tech             | MFI       | spec             | tech | MFI                | spec | tech               | MFI       | spec               | tech   | MFI             | spec | tech            | MFI       | spec            | tech | MFI             | spec | tech              | MFI    | spec   | tech              | MFI               |
| 9                              |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 11                             |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 12                             |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    | DQ2             | L    | < 2000          | DQ7  | L                 | < 2000 | DQ4    | L                 | 2000-5000, > 5000 |
| 14                             |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 15                             |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | < 2000    | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 19                             |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | < 2000    | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 20                             |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000, > 5000 |                   |
| 23                             |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 24                             |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 25                             |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | < 2000    | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 26                             |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | < 2000    | DQ5                | L      | 2000-5000       | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 28                             |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 34                             |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 35                             |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | < 2000    | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 38                             |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 39                             |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | < 2000    | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 41                             |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 42                             |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 45                             |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | < 2000    | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 48                             |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 51                             |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 54                             |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 58                             |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 62                             |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 100                            |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 112                            |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 114                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 116                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 117                            |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | E/L    | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 119                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000, > 5000 |                   |
| 120                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 133                            |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | 2000-5000       | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 136                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 142                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 143                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | > 5000    | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 145                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000, > 5000 |                   |
| 147                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | < 2000    | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 149                            |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 157                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 160                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 162                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 164                            |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | > 5000    | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 165                            |         |                 |      |                    | DR10 | F/L              | > 5000    |                  |      |                    | DR53 | F/E/L              | 2000-5000 | DQ5                | F/E/L  | > 5000          | DQ6  | F/E/L           | > 5000    |                 |      |                 |      |                   | DQ4    | F/E/L  | 2000-5000         |                   |
| 169                            |         |                 |      |                    | DR10 | L                | < 2000    |                  |      |                    | DR53 | L                  | < 2000    | DQ5                | L      | 2000-5000       | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | < 2000            |                   |
| 181                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 185                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 195                            |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 197                            |         |                 |      |                    |      |                  |           | DR51             | L    | 2000-5000          |      |                    | DQ5       | L                  | > 5000 | DQ6             | L    | > 5000          |           |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 204                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 206                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 209                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 214                            |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | < 2000    | DQ5                | L      | 2000-5000       | DQ6  | L               | 2000-5000 |                 |      |                 |      |                   | DQ4    | L      | < 2000            |                   |
| 216                            |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    |      |                    | DQ5       | L                  | < 2000 | DQ6             | L    | 2000-5000       |           |                 |      | DQ9             | L    | < 2000            | DQ4    | L      | < 2000            |                   |
| 218                            |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | 2000-5000       | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 222                            |         |                 |      |                    | DR10 | F                | > 5000    |                  |      |                    |      |                    | DQ5       | F                  | > 5000 | DQ6             | F    | > 5000          |           |                 |      |                 |      | DQ4               | L      | > 5000 |                   |                   |
| 227                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 232                            |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | 2000-5000         |                   |
| 239                            |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | 2000-5000       | DQ6  | L               | 2000-5000 |                 |      |                 |      |                   | DQ4    | L      | < 2000            |                   |
| 242                            |         |                 |      |                    | DR10 | L                | > 5000    |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | > 5000          | DQ6  | L               | > 5000    |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 252                            |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR51 | L                  | 2000-5000 | DQ5                | L      | 2000-5000       | DQ6  | L               | 2000-5000 |                 |      |                 |      |                   | DQ4    | L      | > 5000            |                   |
| 267                            |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | < 2000    | DQ5                | L      | 2000-5000       | DQ6  | L               | 2000-5000 |                 |      |                 |      |                   | DQ4    | L      | < 2000            |                   |
| 268                            |         |                 |      |                    | DR10 | L                | 2000-5000 |                  |      |                    | DR53 | L                  | 2000-5000 | DQ5                | L      | 2000-5000       | DQ6  | L               | 2000-5000 |                 |      |                 |      |                   | DQ4    | L      | < 2000            |                   |
| 273                            |         |                 | </   |                    |      |                  |           |                  |      |                    |      |                    |           |                    |        |                 |      |                 |           |                 |      |                 |      |                   |        |        |                   |                   |



**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 303/2017

DESPATCHED ON 24TH JANUARY 2017

**DQA1\* Antibodies - NOT ASSESSED**

| Lab no. | 01:01<br>Not Assessed<br>29.6% |      |           | 01:02<br>Not Assessed<br>29.6% |      |           | 01:03<br>Not Assessed<br>29.6% |      |           | 01:04<br>Not Assessed<br>11.3% |      |           | 02:01<br>Absent<br>2.8% |      |           | 03:01<br>Absent<br>1.4% |      |       | 03:03<br>Not Assessed<br>16.9% |        |           | 04:01<br>Absent<br>4.2% |       |           | 06:01<br>Absent<br>1.4% |       |     |
|---------|--------------------------------|------|-----------|--------------------------------|------|-----------|--------------------------------|------|-----------|--------------------------------|------|-----------|-------------------------|------|-----------|-------------------------|------|-------|--------------------------------|--------|-----------|-------------------------|-------|-----------|-------------------------|-------|-----|
|         | spec                           | tech | MFI       | spec                           | tech | MFI       | spec                           | tech | MFI       | spec                           | tech | MFI       | spec                    | tech | MFI       | spec                    | tech | MFI   | spec                           | tech   | MFI       | spec                    | tech  | MFI       | spec                    | tech  | MFI |
| 9       |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 11      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 12      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 14      | 01:01                          | L    | > 5000    | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    |                                |      |           |                         |      |           |                         |      | 03:03 | L                              | > 5000 | 04:01     | L                       | <2000 | 06:01     | L                       | <2000 |     |
| 15      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 19      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 20      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 23      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 24      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 25      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 26      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 28      | 01:01                          | L    | > 5000    | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 34      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 35      | 01:01                          | L    | > 5000    | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    |                                |      |           | 02:01                   | L    | 2000-5000 |                         |      |       | 03:03                          | L      | 2000-5000 | 04:01                   | L     | 2000-5000 |                         |       |     |
| 38      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 39      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 41      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 42      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 45      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 48      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 51      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 54      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 58      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 62      |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 100     | 01:01                          | L    | 2000-5000 | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    | 01:04                          | L    | > 5000    |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 112     | 01:01                          | L    | 2000-5000 | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    | 01:04                          | L    | 2000-5000 |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 114     | 01:01                          | L    | > 5000    | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    |                                |      |           |                         |      |           |                         |      |       | 03:03                          | L      | > 5000    |                         |       |           |                         |       |     |
| 116     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 117     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 119     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 120     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 133     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 136     | 01:01                          | L    | > 5000    | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    |                                |      |           |                         |      |           |                         |      |       | 03:03                          | L      | > 5000    |                         |       |           |                         |       |     |
| 142     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 143     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 145     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 147     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 149     | 01:01                          | L    | 2000-5000 | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    | 01:04                          | L    | 2000-5000 |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 157     | 01:01                          | L    | > 5000    | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    |                                |      |           |                         |      |           |                         |      |       | 03:03                          | L      | > 5000    |                         |       |           |                         |       |     |
| 160     | 01:01                          | L    | > 5000    | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    |                                |      |           |                         |      |           |                         |      |       | 03:03                          | L      | > 5000    |                         |       |           |                         |       |     |
| 162     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 164     | 01:01                          | L    | > 5000    | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    |                                |      |           |                         |      |           |                         |      |       | 03:03                          | L      | > 5000    |                         |       |           |                         |       |     |
| 165     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 169     | 01:01                          | L    | 2000-5000 | 01:02                          | L    | 2000-5000 | 01:03                          | L    | > 5000    |                                |      |           |                         |      |           |                         |      |       | 03:03                          | L      | <2000     |                         |       |           |                         |       |     |
| 181     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 185     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       | 03:01                          | L      | <2000     |                         |       |           |                         |       |     |
| 185     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 195     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 197     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 204     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 206     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 209     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 214     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 216     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 218     | 01:01                          | L    | 2000-5000 | 01:02                          | L    | > 5000    | 01:03                          | L    | 2000-5000 | 01:04                          | L    | 2000-5000 |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 222     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 227     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 232     | 01:01                          | L    | > 5000    | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    |                                |      |           | 02:01                   | L    | 2000-5000 |                         |      |       | 03:03                          | L      | 2000-5000 | 04:01                   | L     | 2000-5000 |                         |       |     |
| 239     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 242     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 252     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 267     | 01:01                          | L    | 2000-5000 | 01:02                          | L    | 2000-5000 | 01:03                          | L    | 2000-5000 | 01:04                          | L    | 2000-5000 |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 268     | 01:01                          | L    | 2000-5000 | 01:02                          | L    | 2000-5000 | 01:03                          | L    | 2000-5000 | 01:04                          | L    | 2000-5000 |                         |      |           |                         |      |       | 03:03                          | L      | > 5000    |                         |       |           |                         |       |     |
| 273     | 01:01                          | L    | > 5000    | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    |                                |      |           |                         |      |           |                         |      |       | 03:03                          | L      | > 5000    |                         |       |           |                         |       |     |
| 277     | 01:01                          | L    | > 5000    | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    |                                |      |           |                         |      |           |                         |      |       | 03:03                          | L      | > 5000    |                         |       |           |                         |       |     |
| 284     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 293     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 302     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 303     | 01:01                          | L    | > 5000    | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    |                                |      |           |                         |      |           |                         |      |       | 03:03                          | L      | > 5000    |                         |       |           |                         |       |     |
| 309     | 01:01                          | L    | > 5000    | 01:02                          | L    | > 5000    | 01:03                          | L    | > 5000    | 01:04                          | L    | > 5000    |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 351     |                                |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |
| 361     | 01:01                          | L    | 2000-5000 | 01:02                          | L    | 2000-5000 | 01:03                          | L    | 2000-5000 | 01:04                          | L    | 2000-5000 |                         |      |           |                         |      |       |                                |        |           |                         |       |           |                         |       |     |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 21 | < 2000 | 21 | < 2000 | 21 | < 2000 | 8  | < 2000 | 2  | < 2000 | 1  | < 2000 | 12 | < 2000 | 3  | < 2000 | 1  | < 2000 |
|--------------------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|
| Total Participants | 71 | 0      | 71 | 0      | 71 | 0      | 71 | 0      | 71 | 0      | 71 | 0      | 71 | 0      | 71 | 0      | 71 | 0      |
| 2000-5000          | 8  | 4      | 4  | 6      | 2  | 0      | 2  | 2      | 0  | 0      | 2  | 2      | 9  | 0      | 0  | 2      | 0  | 0      |
| > 5000             | 13 | 17     | 17 | 2      | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      |

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 303/2017

DESPATCHED ON 24TH JANUARY 2017

**DPB1\* Antibodies - NOT ASSESSED**

| Consensus<br>% reported<br>Lab no. | 01:01<br>Not Assessed<br>21.1% |      |                   | 03:01<br>Absent<br>1.4% |      |        | 05:01<br>Not Assessed<br>14.1% |      |                   | 06:01<br>Not Assessed<br>11.3% |      |                   |
|------------------------------------|--------------------------------|------|-------------------|-------------------------|------|--------|--------------------------------|------|-------------------|--------------------------------|------|-------------------|
|                                    | spec                           | tech | MFI               | spec                    | tech | MFI    | spec                           | tech | MFI               | spec                           | tech | MFI               |
| 9                                  | 01:01                          | L    | < 2000            |                         |      |        | 05:01                          | L    | < 2000            |                                |      |                   |
| 11                                 |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 12                                 | 01:01                          | L    | < 2000, 2000-5000 |                         |      |        | 05:01                          | L    | < 2000, 2000-5000 | 06:01                          | L    | < 2000, 2000-5000 |
| 14                                 |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 15                                 |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 19                                 |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 20                                 | 01:01                          | L    | < 2000            | 03:01                   | L    | < 2000 | 05:01                          | L    | < 2000            | 06:01                          | L    | 2000-5000         |
| 23                                 |                                |      |                   |                         |      |        | 05:01                          | L    | < 2000            |                                |      |                   |
| 24                                 |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 25                                 |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 26                                 |                                |      |                   |                         |      |        |                                |      |                   | 06:01                          | L    | < 2000            |
| 28                                 | 01:01                          | L    | < 2000            |                         |      |        | 05:01                          | L    | < 2000            |                                |      |                   |
| 34                                 | 01:01                          | L    | < 2000            |                         |      |        |                                |      |                   | 06:01                          | L    | 2000-5000         |
| 35                                 |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 38                                 |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 39                                 |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 41                                 |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 42                                 |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 45                                 |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 48                                 |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 51                                 |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 54                                 | 01:01                          | L    | < 2000            |                         |      |        | 05:01                          | L    | < 2000            | 06:01                          | L    | < 2000            |
| 58                                 | 01:01                          | L    | < 2000            |                         |      |        | 05:01                          | L    | < 2000            | 06:01                          | L    | < 2000            |
| 62                                 |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 100                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 112                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 114                                | 01:01                          | L    | < 2000            |                         |      |        | 05:01                          | L    | < 2000            | 06:01                          | L    | < 2000            |
| 116                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 117                                | 01:01                          | L    | < 2000            |                         |      |        |                                |      |                   |                                |      |                   |
| 119                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 120                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 133                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 136                                | 01:01                          | L    | < 2000            |                         |      |        | 05:01                          | L    | < 2000            |                                |      |                   |
| 142                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 143                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 145                                | 01:01                          | L    | < 2000            |                         |      |        |                                |      |                   |                                |      |                   |
| 147                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 149                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 157                                | 01:01                          | L    | < 2000            |                         |      |        | 05:01                          | L    | < 2000            | 06:01                          | L    | < 2000            |
| 160                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 162                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 164                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 165                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 169                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 181                                | 01:01                          | L    | < 2000            |                         |      |        |                                |      |                   |                                |      |                   |
| 185                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 195                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 197                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 204                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 206                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 209                                | 01:01                          | L    | < 2000            |                         |      |        |                                |      |                   |                                |      |                   |
| 214                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 216                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 218                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 222                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 227                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 232                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 239                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 242                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 252                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 267                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 268                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 273                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 277                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 284                                | 01:01                          | L    | < 2000            |                         |      |        |                                |      |                   |                                |      |                   |
| 293                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 302                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 303                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 309                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 351                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |
| 361                                |                                |      |                   |                         |      |        |                                |      |                   |                                |      |                   |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 15 | < 2000    | 1  | < 2000    | 10 | < 2000    | 8  | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 14        | 71 | 1         | 71 | 9         | 71 | 5         |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | 0         |    | 0         |    | 0         |    | 2         |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 0         |    | 0         |    | 0         |    | 0         |

UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 303/2017

DESPATCHED ON 24TH JANUARY 2017

| DPA1* Antibodies - NOT ASSESSED    |                         |      |                   |                         |      |        |                         |      |           |     |
|------------------------------------|-------------------------|------|-------------------|-------------------------|------|--------|-------------------------|------|-----------|-----|
| Consensus<br>% reported<br>Lab no. | 01:03<br>Absent<br>4.2% |      |                   | 02:01<br>Absent<br>1.4% |      |        | 02:02<br>Absent<br>1.4% |      |           | MFI |
|                                    | spec                    | tech | MFI               | spec                    | tech | MFI    | spec                    | tech | MFI       |     |
| 9                                  |                         |      |                   |                         |      |        |                         |      |           |     |
| 11                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 12                                 | 01:03                   | L    | < 2000            | 02:01                   | L    | < 2000 |                         |      |           |     |
| 14                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 15                                 | 01:03                   | L    | < 2000            |                         |      |        |                         |      |           |     |
| 19                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 20                                 | 01:03                   | L    | < 2000, 2000-5000 |                         |      |        | 02:02                   | L    | 2000-5000 |     |
| 23                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 24                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 25                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 26                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 28                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 34                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 35                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 38                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 39                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 41                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 42                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 45                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 48                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 51                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 54                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 58                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 62                                 |                         |      |                   |                         |      |        |                         |      |           |     |
| 100                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 112                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 114                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 116                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 117                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 119                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 120                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 133                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 136                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 142                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 143                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 145                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 147                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 149                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 157                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 160                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 162                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 164                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 165                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 169                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 181                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 185                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 195                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 197                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 204                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 206                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 209                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 214                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 216                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 218                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 222                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 227                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 232                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 239                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 242                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 252                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 267                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 268                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 273                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 277                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 284                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 293                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 302                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 303                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 309                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 351                                |                         |      |                   |                         |      |        |                         |      |           |     |
| 361                                |                         |      |                   |                         |      |        |                         |      |           |     |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 3  | < 2000    | 1  | < 2000    | 1  | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 2         | 71 | 1         | 71 | 0         |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | 0         |    | 0         |    | 1         |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 0         |    | 0         |    | 0         |

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 303/2017

DESPATCHED ON 24TH JANUARY 2017

| Lab no. | Techniques used IgG | Sample Treatment IgG | High Background | Neg control serum batch | Allele Specific Antibodies  |          |               |                           | Luminex kit (lot)         |        |            |               | Luminex kit (lot)         |                           |      |       |               |                           |                           |
|---------|---------------------|----------------------|-----------------|-------------------------|---|----------|---------------|---------------------------|---------------------------|--------|------------|---------------|---------------------------|---------------------------|------|-------|---------------|---------------------------|---------------------------|
|         |                     |                      |                 |                         | IgG   | IgG      | Cut-off value | Control bead MFI Positive | Control bead MFI Negative | IgG    | IgG        | Cut-off value | Control bead MFI Positive | Control bead MFI Negative | IgG  | IgG   | Cut-off value | Control bead MFI Positive | Control bead MFI Negative |
| 9       | L                   | EDTA                 | No              |                         |   | LS2A01   | 500           | 11200                     | 60.04                     |        |            |               |                           |                           |      |       |               |                           |                           |
| 11      | L                   | EDTA                 | Yes             | 16                      |   | LS2A01   | 1000          | 7519                      | 30                        | LSM12  | 2.5        | 7193          | 33                        |                           |      |       |               |                           |                           |
| 12      | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 500           | 16916                     | 69                        | LSM12  | Ratio 3    | 16136         | 306                       |                           |      |       |               |                           |                           |
| 14      | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 1500          | 15167                     | 18                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 15      | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 1000          | 14002                     | 37                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 19      | L                   | None                 | No              | OL1N5                   |   | LS2A01   | 1000          | 11620                     | 63                        |        |            |               |                           |                           |      |       |               |                           |                           |
|         |                     | EDTA                 | No              | 16                      | DPB1*01:03 DPB1*06:01 DPA1*01:03 DPB1*01:01 DPA1*02:02 DPB1*05:01 DPA1*01:03 DPB1*03:01   | LS2A01   | >1000         | 13741.88                  | 45.74                     |        |            |               |                           |                           |      |       |               |                           |                           |
| 20      | C/L                 |                      |                 |                         |   |          |               |                           |                           |        |            |               |                           |                           |      |       |               |                           |                           |
| 23      | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 1000          | 12732                     | 23.94                     |        |            |               |                           |                           |      |       |               |                           |                           |
| 24      | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 1000          | 12707                     | 29                        | LSM12  | 4.5        | 13398         | 54                        | LS2PRA                    | 1000 | 11493 | 75            | LSAII                     | 1500                      |
| 25      | L                   | EDTA                 | No              | 16                      | DPB1*06:01 DPA1*01:03   | LS2A01   | 1000          | 12978                     | 32                        | LSM12  | 6          | 11608         | 87                        |                           |      |       |               |                           |                           |
| 26      | L                   | EDTA                 | No              | 16                      |   | LS2A01   |               |                           |                           | LSM12  |            |               |                           |                           |      |       |               |                           |                           |
| 28      | L                   | None                 | No              | 16                      | DPB1*06:01, DPA1*02:02  | LS2A01   | 500           | 11355                     | 40                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 34      | L                   | EDTA                 | No              | 11                      |   | LS2A01   | 1780          | 14143                     | 15                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 35      | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 1000          | 9979                      | 13                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 38      | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 2853          | 11326                     | 19                        | LSAII  | 2425       | 15928         | 140                       |                           |      |       |               |                           |                           |
|         |                     | EDTA                 | No              | LS-NC015                | Possible DPA/DPB HETERODIMER BD078 DPA1*01:03, DPB1*06:01   | LS2A01   | 1321          | 10955                     | 112                       |        |            |               |                           |                           |      |       |               |                           |                           |
| 39      | L                   |                      |                 |                         |   |          |               |                           |                           |        |            |               |                           |                           |      |       |               |                           |                           |
| 41      | L                   | None                 | No              | 15                      |   | LS2A01   | 2000          | 10265                     | 39                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 42      | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 500           | 10830                     | 49                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 45      | L                   | EDTA/Beads           | No              | 22                      |   | LS2A01   | 1500          | 11000                     | 20                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 48      | L                   | Heat inactivation    | No              | 22                      |   |          |               |                           |                           |        |            |               |                           |                           |      |       |               |                           |                           |
| 51      | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 1500          | 10550                     | 44                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 54      | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 750           | 5360                      | 44                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 58      | L                   | EDTA                 | No              | 15                      |   | LS2A01   | 1000          | 15753                     | 23                        | LSM12  | 12297      | 21            |                           |                           |      |       |               |                           |                           |
| 62      | L                   | None                 | No              | 16                      |   | LS2A01   | 1500          | 11656                     | 38.04                     |        |            |               |                           |                           |      |       |               |                           |                           |
| 100     | L                   | None                 | No              | 11068D                  |   | LSAII    | 1342          | 17534                     | 257                       |        |            |               |                           |                           |      |       |               |                           |                           |
| 112     | L                   | None                 | No              | 08256C                  |   | LSAII    | 500           | 19656                     | 207                       |        |            |               |                           |                           |      |       |               |                           |                           |
| 114     | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 1000          | 8347                      | 33                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 116     | C/L                 | EDTA                 | No              | 16                      |   | LS2A01   | 1000          | 10590                     | 52                        | LSM12  |            | 11039         | 63                        |                           |      |       |               |                           |                           |
| 117     | F/L                 | None                 | No              | 16                      |   | LS2A01   | 500           | 9692                      | 21                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 119     | L                   | EDTA                 | No              | 16                      |   | LS2A01   | >1000         | 8243                      | 26                        | LSM12  | RATIO >1.5 | 11007         | 35                        |                           |      |       |               |                           |                           |
| 120     | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 500           |                           |                           |        |            |               |                           |                           |      |       |               |                           |                           |
| 133     | L                   | Heat inactivation    | No              | 16                      |   | LSAII    | 500           | 17648                     | 131                       |        |            |               |                           |                           |      |       |               |                           |                           |
| 136     | L                   | None                 | No              | 16                      |   | LS2A01   | 1000          | 13700                     | 38                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 142     | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 1000          | 10900                     | 24                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 143     | L                   | None                 | No              | 16                      |   | LS2A01   | 1000          | 15177                     | 34                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 145     | L                   | None                 | No              | NC15                    |   | LS2A01   | 1000          | 13763                     | 27                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 147     | L                   | None                 | No              | 16                      |   | LS2A01   | >1500         | 8991                      | 33                        | LSM12  | RATIO >5   | 8814          | 41                        |                           |      |       |               |                           |                           |
| 149     | L                   | None                 | No              | 16                      |   | LSAII    | 16965         | 125                       |                           |        |            |               |                           |                           |      |       |               |                           |                           |
| 157     | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 1000          | 13540                     | 27                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 160     | L                   | Beads                | No              | LOT 14                  |   | LS2A01   | 1000          | 6500                      | 13                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 162     | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 1000          | 13129                     | 2145                      | LSM12  | 3          | 11828         | 17.4                      |                           |      |       |               |                           |                           |
| 164     | F/E/L               | Dilution             | No              | 22.1                    |   | LS2A01   | 356           | 12612                     | 35                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 165     | L                   | None                 | No              | IN HOUSE                |   | LS2A01   |               | 4311                      | 13                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 169     | L                   | None                 | No              | 98264                   |   | LS2A01   | 500           | 9394                      | 30                        | LSM12  | 2.5        | 11438         | 68                        |                           |      |       |               |                           |                           |
| 181     | L                   | EDTA                 | No              | 16                      | DRB4*01:01, DQA1*01, DQA1*01 Combined DQ1*01 AND DQB1*05 or DQB1* positive  | LSAII    |               | 20439                     | 178                       | LM2    |            | 20843         | 171                       |                           |      |       |               |                           |                           |
| 185     | L                   |                      |                 |                         |   |          |               |                           |                           |        |            |               |                           |                           |      |       |               |                           |                           |
| 195     | L                   | None                 | No              |                         |   | LSM12    | 2000          | 8752                      | 46                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 197     | L                   | None                 | No              |                         |   |          |               |                           |                           |        |            |               |                           |                           |      |       |               |                           |                           |
| 204     | L                   | EDTA                 | No              | LSNC                    |   | LS2A01   | 1000          | 12906                     | 29                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 206     | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 1000          | 10885                     | 39                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 209     | C/L                 | EDTA/Beads           | Yes             |                         |   | LSAII    | 500           | 13329                     | 34                        |        |            |               |                           |                           |      |       |               |                           |                           |
|         |                     | None                 | No              |                         | DOB1*04:01, DOB1*04:02, DOB1*05:01, DOB1*05:03, DOB1*06:01, DOB1*06:02, DOB1*06:03, DOB1*06:04, DRB1*15:01, DRB1*15:02, DRB1*16:01, DRB1*16:02  | LSAII    | 500           | 15398                     | 161                       |        |            |               |                           |                           |      |       |               |                           |                           |
| 214     | L                   |                      |                 |                         |   |          |               |                           |                           |        |            |               |                           |                           |      |       |               |                           |                           |
| 216     | L                   | None                 | No              | 3003644                 |   | LM2      | 1000          | 17546                     | 143                       | LMX    | 11542      |               |                           |                           |      |       |               |                           |                           |
|         |                     | Heat inactivation    | No              |                         | DOB1*04:01 DOB1*04:02 DOB1*05:01 DOB1*05:03 DOB1*06:01 DOB1*06:02 DOB1*06:03 DOB1*06:04 DRB1*10:01 DRB1*15:01 DRB1*15:02 DRB1*16:01 DRB1*16:02 DRB1*01:01DRS3 DQA1*01:01 DQA1*01:02 DQA1*01:03 DQA1*01:04 | LSAII    |               | 16527                     |                           |        |            |               |                           |                           |      |       |               |                           |                           |
| 218     | L                   |                      |                 |                         |   |          |               |                           |                           |        |            |               |                           |                           |      |       |               |                           |                           |
|         |                     |                      |                 |                         | D01*01 DRB1*01:02 DRB1*01:03 DRB1*10:01 DRB1*13:01 DRB1*13:02 DRB1*13:03 DRB1*15:01 DRB1*15:02 DRB1*15:03 DOB1*05:01 DOB1*05:02 DOB1*05:03 DOB1*06:02 DOB1*06:03 DOB1*06:04 DOB1*06:09                    |          |               |                           |                           |        |            |               |                           |                           |      |       |               |                           |                           |
| 222     | F                   |                      |                 |                         |   |          |               |                           |                           |        |            |               |                           |                           |      |       |               |                           |                           |
| 227     | L                   | EDTA/Dilution        | No              |                         |   |          |               |                           |                           |        |            |               |                           |                           |      |       |               |                           |                           |
| 232     | L                   | None                 | No              | NC16                    |   | LS2A01   | 1200          | 7475                      | 21                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 238     | L                   |                      |                 |                         |   | LM2      | 1000          | 18034                     | 119                       |        |            |               |                           |                           |      |       |               |                           |                           |
| 242     | L                   | Adsorption Beads     | No              |                         |   | LS2A01   |               | 19781                     | 43.71                     |        |            |               |                           |                           |      |       |               |                           |                           |
| 252     | L                   | None                 | No              |                         |   | LM2      | 2             | 18111                     | 134                       |        |            |               |                           |                           |      |       |               |                           |                           |
| 267     | L                   | EDTA                 | No              |                         |   | LSAII    | BCM >700      | 13577                     | 116                       |        |            |               |                           |                           |      |       |               |                           |                           |
| 268     | C/L                 | EDTA                 | No              |                         |   | LSAII    | 1500/45       | 15384                     | 131                       |        |            |               |                           |                           |      |       |               |                           |                           |
| 273     | L                   | None                 | No              |                         |   | LS2A01   | 1500          | 10010                     | 34                        | LM2    | 1000       | 18693         | 85                        |                           |      |       |               |                           |                           |
| 277     | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 500           | 11217                     | 19                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 284     | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 1000          | 11557                     | 41                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 293     | L                   | None                 | No              |                         |   | LS2A01   | 500           | 9694                      | 10                        | LS2PRA | 500        | 9694          | 10                        |                           |      |       |               |                           |                           |
| 302     | L                   | None                 | No              |                         |   |          |               |                           |                           |        |            |               |                           |                           |      |       |               |                           |                           |
| 303     | L                   | EDTA                 | No              | 16                      |   | LS2A01   | 1000          | 9525                      | 53                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 309     | L                   | None                 | No              |                         |   | LSAII    | 1000          | 19000                     | 250                       |        |            |               |                           |                           |      |       |               |                           |                           |
| 381     | L                   | EDTA                 | No              | 16                      |   | LSAIIA04 | 1500          | 13701                     | 43                        |        |            |               |                           |                           |      |       |               |                           |                           |
| 361     | L                   | None                 | No              | 06076B                  |   | LSAII    | 500           | 16185                     | 226                       |        |            |               |                           |                           |      |       |               |                           |                           |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 304/2017

DESPATCHED ON 24TH JANUARY 2017

| HLA specificity for assessment |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
|--------------------------------|------------------------------|------|-----------|-------------------------|------|--------|-------------------------------|------|-----------|-------------------------------|------|-----------|------------------------|------|--------|------------------------|------|--------|-------------------------|------|--------|-------------------------------|------|--------|------------------------|------|--------|
| Lab no.                        | DR1<br>Not Assessed<br>28.2% |      |           | DR103<br>Absent<br>4.2% |      |        | DR15<br>Not Assessed<br>11.3% |      |           | DR16<br>Not Assessed<br>29.8% |      |           | DR17<br>Absent<br>2.8% |      |        | DR18<br>Absent<br>4.2% |      |        | DR4<br>Present<br>98.8% |      |        | DR11<br>Not Assessed<br>67.8% |      |        | DR12<br>Absent<br>1.4% |      |        |
|                                | spec                         | tech | MFI       | spec                    | tech | MFI    | spec                          | tech | MFI       | spec                          | tech | MFI       | spec                   | tech | MFI    | spec                   | tech | MFI    | spec                    | tech | MFI    | spec                          | tech | MFI    | spec                   | tech | MFI    |
| 9                              |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 11                             |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 12                             | DR1                          | L    | < 2000    | DR103                   | L    | < 2000 | DR15                          | L    | < 2000    | DR16                          | L    | < 2000    |                        |      |        |                        | DR18 | L      | < 2000                  | DR4  | L      | > 5000                        | DR11 | L      | < 2000                 |      |        |
| 14                             |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 15                             | DR1                          | L    | < 2000    |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 19                             |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 20                             | DR1                          | L    | < 2000    |                         |      |        | DR15                          | L    | < 2000    | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 23                             |                              |      |           |                         |      |        |                               |      |           | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 24                             | DR1                          | L    | < 2000    |                         |      |        |                               |      |           | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 25                             |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 26                             |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 28                             | DR1                          | L    | < 2000    |                         |      |        |                               |      |           | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 34                             |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 35                             |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 38                             | DR1                          | L    | < 2000    |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 39                             |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 41                             |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 42                             | DR1                          | L    | < 2000    |                         |      |        |                               |      |           | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 45                             |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 48                             | DR1                          | L    | < 2000    |                         |      |        | DR15                          | L    | < 2000    | DR16                          | L    | 2000-5000 |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 51                             |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 54                             | DR1                          | L    | 2000-5000 |                         |      |        | DR15                          | L    | 2000-5000 | DR16                          | L    | 2000-5000 |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 58                             |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 62                             |                              |      |           |                         |      |        |                               |      |           | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 100                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 112                            |                              |      |           |                         |      |        |                               |      |           | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 114                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 116                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 117                            | DR1                          | L    | < 2000    |                         |      |        |                               |      |           | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 119                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 120                            | DR1                          | L    | < 2000    |                         |      |        |                               |      |           | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 133                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 136                            |                              |      |           |                         |      |        |                               |      |           | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 142                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 143                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 145                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 147                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 149                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 157                            | DR1                          | L    | < 2000    |                         |      |        |                               |      |           | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 160                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 162                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 164                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 165                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 169                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 181                            | DR1                          | L    | < 2000    |                         |      |        |                               |      |           | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 185                            | DR1                          | L    | < 2000    |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 195                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 197                            | DR1                          | L    | < 2000    |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 204                            | DR1                          | L    | < 2000    |                         |      |        |                               |      |           | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 206                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 209                            | DR1                          | L    | < 2000    | DR103                   | L    | < 2000 | DR15                          | L    | < 2000    | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 214                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 216                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 218                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 222                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 227                            | DR1                          | L    | < 2000    |                         |      |        |                               |      |           | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 232                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 239                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 242                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 252                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 267                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 268                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 273                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 277                            | DR1                          | L    | < 2000    |                         |      |        | DR15                          | L    | < 2000    | DR16                          | L    | < 2000    |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 284                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 293                            |                              |      |           |                         |      |        | DR15                          | L    | > 5000    | DR16                          | L    | > 5000    | DR17                   | L    | > 5000 | DR18                   | L    | > 5000 | DR4                     | L    | > 5000 | DR11                          | L    | > 5000 |                        |      |        |
| 302                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 303                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 309                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |
| 351                            | DR1                          | L    | < 2000    | DR103                   | L    | < 2000 | DR15                          | L    | < 2000    | DR16                          | L    | < 2000    | DR17                   | L    | < 2000 | DR18                   | L    | < 2000 | DR4                     | L    | > 5000 | DR11                          | L    | < 2000 | DR12                   | L    | < 2000 |
| 361                            |                              |      |           |                         |      |        |                               |      |           |                               |      |           |                        |      |        |                        |      |        |                         |      |        |                               |      |        |                        |      |        |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 20 | < 2000    | 3  | < 2000    | 8  | < 2000    | 21 | < 2000    | 2  | < 2000    | 3  | < 2000    | 70 | < 2000    | 48 | < 2000    | 1  | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 19        | 71 | 3         | 71 | 6         | 71 | 18        | 71 | 1         | 71 | 2         | 71 | 0         | 71 | 38        | 71 | 1         |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |    | 24        |    | 8         |    | 0         |
|                    |    |           |    |           |    |           |    |           |    |           |    |           |    | 44        |    | 2         |    | 0         |

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 304/2017

DESPATCHED ON 24TH JANUARY 2017

| HLA specificity for assessment |                         |      |           |                  |      |        |                 |      |        |                   |       |           |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
|--------------------------------|-------------------------|------|-----------|------------------|------|--------|-----------------|------|--------|-------------------|-------|-----------|-----------------|------|--------|------------------|------|--------|------------------|------|--------|------------------|------|--------|------------------------|--------|--------|--------|--|
| Consensus % reported           | DR13 Not Assessed 26.8% |      |           | DR14 Absent 4.2% |      |        | DR7 Absent 1.4% |      |        | DR8 Present 85.9% |       |           | DR9 Absent 1.4% |      |        | DR10 Absent 1.4% |      |        | DR51 Absent 2.8% |      |        | DR52 Absent 2.8% |      |        | DR53 Not Assessed 9.9% |        |        |        |  |
|                                | Lab no.                 | spec | tech      | MFI              | spec | tech   | MFI             | spec | tech   | MFI               | spec  | tech      | MFI             | spec | tech   | MFI              | spec | tech   | MFI              | spec | tech   | MFI              | spec | tech   | MFI                    | spec   | tech   | MFI    |  |
| 9                              |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 11                             |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 12                             | DR13                    | L    | < 2000    |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  | DR53 | L      | < 2000                 |        |        |        |  |
| 14                             |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 15                             | DR13                    | L    | < 2000    |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 19                             |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 20                             | DR13                    | L    | < 2000    |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      | DR53   | L                      | < 2000 |        |        |  |
| 23                             |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 24                             | DR13                    | L    | < 2000    |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 25                             |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 26                             |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 28                             | DR13                    | L    | 2000-5000 |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      | DR53   | L                      | < 2000 |        |        |  |
| 29                             |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 34                             |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 35                             |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 38                             | DR13                    | L    | < 2000    |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 39                             |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 41                             |                         |      |           |                  |      |        |                 |      |        |                   |       |           |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 42                             | DR13                    | L    | < 2000    |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      | DR53   | L                      | < 2000 |        |        |  |
| 45                             |                         |      |           |                  |      |        |                 |      |        |                   |       |           |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 48                             | DR13                    | L    | 2000-5000 |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      | DR53   | L                      | < 2000 |        |        |  |
| 51                             |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 54                             | DR13                    | L    | 2000-5000 |                  |      |        |                 |      |        | DR8               | L     | > 5000    |                 |      |        |                  |      |        |                  |      |        |                  |      | DR53   | L                      | < 2000 |        |        |  |
| 58                             |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 62                             |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | > 5000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 100                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 112                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 114                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 116                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 117                            | DR13                    | L    | < 2000    |                  |      |        |                 |      |        | DR8               | E/L   | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 119                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 120                            | DR13                    | L    | < 2000    |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 133                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 136                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 142                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 143                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 145                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 147                            |                         |      |           |                  |      |        |                 |      |        |                   |       |           |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 149                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 157                            | DR13                    | L    | < 2000    |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 160                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 162                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 164                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 165                            |                         |      |           |                  |      |        |                 |      |        | DR8               | F/E/L | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 169                            |                         |      |           |                  |      |        |                 |      |        |                   |       |           |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 181                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 185                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 195                            |                         |      |           |                  |      |        |                 |      |        |                   |       |           |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 197                            |                         |      |           |                  |      |        |                 |      |        |                   |       |           |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 204                            | DR13                    | L    | < 2000    |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 206                            | DR13                    | L    | < 2000    |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 209                            | DR13                    | L    | < 2000    | DR14             | L    | < 2000 |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      | L      |                        | 1      |        |        |  |
| 214                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 216                            |                         |      |           |                  |      |        |                 |      |        |                   |       |           |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 218                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 222                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 227                            | DR13                    | L    | < 2000    |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 232                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 239                            |                         |      |           |                  |      |        |                 |      |        |                   |       |           |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 242                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 252                            |                         |      |           |                  |      |        |                 |      |        |                   |       |           |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 267                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 268                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 273                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 277                            | DR13                    | L    | < 2000    |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 284                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 293                            | DR13                    | L    | > 5000    | DR14             | L    | > 5000 |                 |      |        | DR8               | L     | > 5000    |                 |      |        |                  |      |        |                  |      |        |                  | DR51 | L      | 2000-5000              | DR52   | L      | > 5000 |  |
| 302                            |                         |      |           |                  |      |        |                 |      |        |                   |       |           |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 303                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 309                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | 2000-5000 |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |
| 351                            | DR13                    | L    | < 2000    | DR14             | L    | < 2000 | DR7             | L    | < 2000 | DR8               | L     | 2000-5000 | DR9             | L    | < 2000 | DR10             | L    | < 2000 | DR51             | L    | < 2000 | DR52             | L    | < 2000 | DR53                   | L      | < 2000 |        |  |
| 361                            |                         |      |           |                  |      |        |                 |      |        | DR8               | L     | < 2000    |                 |      |        |                  |      |        |                  |      |        |                  |      |        |                        |        |        |        |  |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 19 | < 2000    | 3  | < 2000    | 1  | < 2000    | 61 | < 2000    | 1  | < 2000    | 1  | < 2000    | 2  | < 2000    | 2  | < 2000    | 7  | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 15        | 71 | 2         | 71 | 1         | 71 | 35        | 71 | 1         | 71 | 1         | 71 | 1         | 71 | 1         | 71 | 7         |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | 3         |    | 0         |    | 0         |    | 23        |    | 0         |    | 0         |    | 1         |    | 0         |    | 0         |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 1         |    | 1         |    | 0         |    | 3         |    | 0         |    | 0         |    | 0         |    | 1         |    | 0         |

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 304/2017

DESPATCHED ON 24TH JANUARY 2017

| HLA specificity for assessment |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
|--------------------------------|-----------------|------|------|-----------------|------|------|-----------------|------|------|-------------------|------|------|-------------------|------|------|-------------------|------|------|-----------------------|------|------|-----|
| Consensus % reported           | DQ5 Absent 1.4% |      |      | DQ6 Absent 2.8% |      |      | DQ2 Absent 2.8% |      |      | DQ7 Present 95.8% |      |      | DQ8 Present 98.8% |      |      | DQ9 Present 95.8% |      |      | DQ4 Not Assessed 5.6% |      |      |     |
|                                | Lab no.         | spec | tech | MFI             | spec | tech | MFI             | spec | tech | MFI               | spec | tech | MFI               | spec | tech | MFI               | spec | tech | MFI                   | spec | tech | MFI |
| 9                              |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 11                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 12                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 14                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 15                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 19                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 20                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 23                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 24                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 25                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 26                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 28                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 34                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 35                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 38                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 39                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 41                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 42                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 45                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 48                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 51                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 54                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 58                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 62                             |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 100                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 112                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 114                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 116                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 117                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 119                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 120                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 133                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 136                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 142                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 143                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 145                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 147                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 149                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 157                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 160                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 162                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 164                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 165                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 169                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 181                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 185                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 195                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 197                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 204                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 206                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 209                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 214                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 216                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 218                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 222                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 227                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 232                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 239                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 242                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 252                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 267                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 268                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 273                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 277                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 284                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 293                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 302                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 303                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 309                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 351                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |
| 361                            |                 |      |      |                 |      |      |                 |      |      |                   |      |      |                   |      |      |                   |      |      |                       |      |      |     |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 1  | <2000     | 2  | <2000     | 2  | <2000     | 68 | <2000     | 70 | <2000     | 68 | <2000     | 4  | <2000     |
|--------------------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 1         | 71 | 1         | 71 | 2         | 71 | 13        | 71 | 13        | 71 | 17        | 71 | 3         |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | 0         |    | 0         |    | 0         |    | 36        |    | 43        |    | 35        |    | 1         |
|                    |    | >5000     |    | >5000     |    | >5000     |    | >5000     |    | >5000     |    | >5000     |    | >5000     |
|                    |    | 0         |    | 1         |    | 0         |    | 17        |    | 12        |    | 15        |    | 0         |

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 304/2017

DESPATCHED ON 24TH JANUARY 2017

**DQA1\* Antibodies - NOT ASSESSED**

| Lab no. | 02:01<br>Absent<br>4.2% |      |       | 03:01<br>Not Assessed<br>14.1% |      |                  | 03:02<br>Not Assessed<br>14.1% |      |           | 03:03<br>Absent<br>4.2% |       |       | 04:01<br>Absent<br>1.4% |      |       | 05:01<br>Not Assessed<br>5.6% |       |           | 05:03<br>Not Assessed<br>15.5% |           |           | 05:05<br>Not Assessed<br>15.5% |           |           | 06:01<br>Not Assessed<br>14.1% |           |           |           |
|---------|-------------------------|------|-------|--------------------------------|------|------------------|--------------------------------|------|-----------|-------------------------|-------|-------|-------------------------|------|-------|-------------------------------|-------|-----------|--------------------------------|-----------|-----------|--------------------------------|-----------|-----------|--------------------------------|-----------|-----------|-----------|
|         | spec                    | tech | MFI   | spec                           | tech | MFI              | spec                           | tech | MFI       | spec                    | tech  | MFI   | spec                    | tech | MFI   | spec                          | tech  | MFI       | spec                           | tech      | MFI       | spec                           | tech      | MFI       | spec                           | tech      | MFI       |           |
| 9       |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 11      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 12      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 14      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 15      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 19      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 20      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 23      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 24      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 25      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 26      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 28      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 29      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 34      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 35      | 02:01                   | L    | <2000 | 03:01                          | L    | <2000, 2000-5000 | 03:02                          | L    | 2000-5000 |                         |       |       |                         |      |       |                               |       | 05:03     | L                              | 2000-5000 | 05:05     | L                              | 2000-5000 | 06:01     | L                              | 2000-5000 |           |           |
| 38      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 39      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 41      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 42      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 45      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 48      |                         |      |       |                                |      |                  |                                |      |           |                         | 03:03 | L     | 2000-5000               |      |       |                               | 05:01 | L         | <2000                          |           |           |                                |           |           |                                |           |           |           |
| 51      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 54      |                         |      |       | 03:01                          | L    | <2000            |                                |      |           | 03:03                   | L     | <2000 |                         |      |       | 05:01                         | L     | <2000     |                                |           |           |                                |           |           |                                |           |           |           |
| 58      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 62      |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 100     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 112     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 114     |                         |      |       | 03:01                          | L    | 2000-5000        | 03:02                          | L    | > 5000    |                         |       |       |                         |      |       |                               |       | 05:03     | L                              | 2000-5000 | 05:05     | L                              | > 5000    | 06:01     | L                              | 2000-5000 |           |           |
| 116     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 117     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 119     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 120     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 133     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 136     |                         |      |       | 03:01                          | L    | 2000-5000        | 03:02                          | L    | 2000-5000 |                         |       |       |                         |      |       |                               |       |           | 05:03                          | L         | 2000-5000 | 05:05                          | L         | 2000-5000 | 06:01                          | L         | 2000-5000 |           |
| 142     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 143     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 145     |                         |      |       | 03:01                          | L    | <2000            |                                |      |           |                         |       |       | 04:01                   | L    | <2000 |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 147     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 149     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 157     |                         |      |       | 03:01                          | L    | 2000-5000        | 03:02                          | L    | > 5000    |                         |       |       |                         |      |       |                               |       |           | 05:03                          | L         | > 5000    | 05:05                          | L         | > 5000    | 06:01                          | L         | 2000-5000 |           |
| 160     |                         |      |       | 03:01                          | L    | <2000            | 03:02                          | L    | 2000-5000 |                         |       |       |                         |      |       |                               |       |           | 05:03                          | L         | 2000-5000 | 05:05                          | L         | 2000-5000 | 06:01                          | L         | 2000-5000 |           |
| 162     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 164     |                         |      |       |                                |      |                  | 03:02                          | L    | > 5000    |                         |       |       |                         |      |       |                               |       |           | 05:03                          | L         | > 5000    | 05:05                          | L         | > 5000    | 06:01                          | L         | > 5000    |           |
| 165     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 169     | 02:01                   | L    | <2000 | 03:01                          | L    | 2000-5000        |                                |      |           |                         |       |       |                         |      |       | 05:01                         | L     | 2000-5000 | 05:03                          | L         | 2000-5000 | 05:05                          | L         | <2000     |                                |           |           |           |
| 181     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 185     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 195     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 197     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 204     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 206     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 209     |                         |      |       |                                |      |                  |                                |      |           |                         | 03:03 | L     | <2000                   |      |       |                               |       | 05:01     | L                              | <2000     |           |                                |           |           |                                |           |           |           |
| 214     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 216     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 218     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 222     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 227     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 232     | 02:01                   | L    | <2000 | 03:01                          | L    | <2000            | 03:02                          | L    | 2000-5000 |                         |       |       |                         |      |       |                               |       |           |                                | 05:03     | L         | 2000-5000                      | 05:05     | L         | 2000-5000                      | 06:01     | L         | 2000-5000 |
| 239     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 242     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 252     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 267     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 268     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 273     |                         |      |       | 03:01                          | L    | 2000-5000        | 03:02                          | L    | > 5000    |                         |       |       |                         |      |       |                               |       |           |                                | 05:03     | L         | 2000-5000                      | 05:05     | L         | 2000-5000                      | 06:01     | L         | 2000-5000 |
| 277     |                         |      |       |                                |      |                  | 03:02                          | L    | 2000-5000 |                         |       |       |                         |      |       |                               |       |           |                                | 05:03     | L         | 2000-5000                      | 05:05     | L         | 2000-5000                      | 06:01     | L         | 2000-5000 |
| 284     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 293     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 302     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 303     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 309     |                         |      |       |                                |      |                  | 03:02                          | L    | 2000-5000 |                         |       |       |                         |      |       |                               |       |           |                                | 05:03     | L         | 2000-5000                      | 05:05     | L         | 2000-5000                      | 06:01     | L         | 2000-5000 |
| 351     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |
| 361     |                         |      |       |                                |      |                  |                                |      |           |                         |       |       |                         |      |       |                               |       |           |                                |           |           |                                |           |           |                                |           |           |           |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 3  | < 2000    | 10 | < 2000    | 10 | < 2000    | 3  | < 2000    | 1  | < 2000    | 4  | < 2000    | 11 | < 2000    | 11 | < 2000    | 10 | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 0         | 71 | 0         | 71 | 0         | 71 | 0         | 71 | 0         | 71 | 0         | 71 | 0         | 71 | 0         | 71 | 0         |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | 0         |    | 5         |    | 6         |    | 1         |    | 0         |    | 1         |    | 9         |    | 7         |    | 9         |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 0         |    | 0         |    | 4         |    | 0         |    | 0         |    | 0         |    | 2         |    | 3         |    | 1         |



**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 304/2017

DESPATCHED ON 24TH JANUARY 2017

**DPB1\* Antibodies - NOT ASSESSED**

| Consensus<br>% reported<br>Lab no. | 01:01<br>Not Assessed<br>52.0% |      |                  | 05:01<br>Not Assessed<br>38.0% |      |           | 13:01<br>Absent<br>1.4% |      |        | 19:01<br>Absent<br>1.4% |        |     |
|------------------------------------|--------------------------------|------|------------------|--------------------------------|------|-----------|-------------------------|------|--------|-------------------------|--------|-----|
|                                    | spec                           | tech | MFI              | spec                           | tech | MFI       | spec                    | tech | MFI    | spec                    | tech   | MFI |
| 9                                  | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 11                                 | 01:01                          | L    | 2000-5000        | 05:01                          | L    | < 2000    |                         |      |        |                         |        |     |
| 12                                 | 01:01                          | L    | > 5000           | 05:01                          | L    | 2000-5000 | 13:01                   | L    | < 2000 |                         |        |     |
| 14                                 | 01:01                          | L    | 2000-5000        |                                |      |           |                         |      |        |                         |        |     |
| 15                                 | 01:01                          | L    | 2000-5000        |                                |      |           |                         |      |        |                         |        |     |
| 19                                 | 01:01                          | L    | 2000-5000        |                                |      |           |                         |      |        |                         |        |     |
| 20                                 |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 23                                 | 01:01                          | L    | < 2000           | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 24                                 | 01:01                          | L    | 2000-5000        |                                |      |           |                         |      |        |                         |        |     |
| 25                                 | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 26                                 | 01:01                          | L    | > 5000           |                                |      |           |                         |      |        |                         |        |     |
| 28                                 | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 34                                 | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 35                                 | 01:01                          | L    | < 2000           | 05:01                          | L    | < 2000    |                         |      |        |                         |        |     |
| 38                                 | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 39                                 | 01:01                          | L    | 2000-5000        |                                |      |           |                         |      |        |                         |        |     |
| 41                                 | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 42                                 | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 45                                 | 01:01                          | L    | < 2000           |                                |      |           |                         |      |        |                         |        |     |
| 48                                 | 01:01                          | L    | < 2000           |                                |      |           |                         |      |        |                         |        |     |
| 51                                 | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 54                                 | 01:01                          | L    | > 5000           | 05:01                          | L    | > 5000    |                         |      |        |                         |        |     |
| 58                                 |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 62                                 | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 100                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 112                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 114                                | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 116                                | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 117                                | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 119                                | 01:01                          | L    | < 2000           |                                |      |           |                         |      |        |                         |        |     |
| 120                                | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 133                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 136                                | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 142                                | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 143                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 145                                | 01:01                          | L    | < 2000/2000-5000 |                                |      |           |                         |      |        |                         |        |     |
| 147                                | 01:01                          | L    | 2000-5000        |                                |      |           |                         |      |        |                         |        |     |
| 149                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 157                                | 01:01                          | L    | 2000-5000        |                                |      |           |                         |      |        |                         |        |     |
| 160                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 162                                | 01:01                          | L    | < 2000           |                                |      |           |                         |      |        |                         |        |     |
| 164                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 165                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 169                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 181                                | 01:01                          | L    | < 2000           | 05:01                          | L    | < 2000    |                         |      |        |                         |        |     |
| 185                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 195                                | 01:01                          | L    | 2000-5000        |                                |      |           |                         |      |        |                         |        |     |
| 197                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 204                                | 01:01                          | L    | 2000-5000        |                                |      |           |                         |      |        |                         |        |     |
| 206                                | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 209                                | 01:01                          | L    | > 5000           |                                |      |           |                         |      | 19:01  | L                       | < 2000 |     |
| 214                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 216                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 218                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 222                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 227                                | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 232                                | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 239                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 242                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 252                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 267                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 268                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 273                                | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 277                                | 01:01                          | L    | 2000-5000        |                                |      |           |                         |      |        |                         |        |     |
| 284                                | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 293                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 302                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 303                                | 01:01                          | L    | 2000-5000        | 05:01                          | L    | 2000-5000 |                         |      |        |                         |        |     |
| 309                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 351                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |
| 361                                |                                |      |                  |                                |      |           |                         |      |        |                         |        |     |

Technique: C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 44 | < 2000    | 27 | < 2000    | 1  | < 2000    | 1  | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 7         | 71 | 3         | 71 | 1         | 71 | 1         |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | 32        |    | 23        |    | 0         |    | 0         |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 4         |    | 1         |    | 0         |    | 0         |

UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 304/2017

DESPATCHED ON 24TH JANUARY 2017

| DPA1* Antibodies - NOT ASSESSED    |                         |      |           |                         |      |        |                         |      |           |
|------------------------------------|-------------------------|------|-----------|-------------------------|------|--------|-------------------------|------|-----------|
| Consensus<br>% reported<br>Lab no. | 01:03<br>Absent<br>2.8% |      |           | 02:01<br>Absent<br>1.4% |      |        | 02:02<br>Absent<br>2.8% |      |           |
|                                    | spec                    | tech | MFI       | spec                    | tech | MFI    | spec                    | tech | MFI       |
| 9                                  |                         |      |           |                         |      |        |                         |      |           |
| 11                                 |                         |      |           |                         |      |        |                         |      |           |
| 12                                 |                         |      |           |                         |      |        |                         |      |           |
| 14                                 |                         |      |           |                         |      |        |                         |      |           |
| 15                                 |                         |      |           |                         |      |        |                         |      |           |
| 19                                 |                         |      |           |                         |      |        |                         |      |           |
| 20                                 |                         |      |           |                         |      |        |                         |      |           |
| 23                                 |                         |      |           |                         |      |        |                         |      |           |
| 24                                 |                         |      |           |                         |      |        |                         |      |           |
| 25                                 |                         |      |           |                         |      |        |                         |      |           |
| 26                                 |                         |      |           |                         |      |        |                         |      |           |
| 28                                 |                         |      |           |                         |      |        |                         |      |           |
| 34                                 |                         |      |           |                         |      |        |                         |      |           |
| 35                                 | 01:03                   | L    | < 2000    |                         |      |        | 02:02                   | L    | < 2000    |
| 38                                 |                         |      |           |                         |      |        |                         |      |           |
| 39                                 |                         |      |           |                         |      |        |                         |      |           |
| 41                                 |                         |      |           |                         |      |        |                         |      |           |
| 42                                 |                         |      |           |                         |      |        |                         |      |           |
| 45                                 |                         |      |           |                         |      |        |                         |      |           |
| 48                                 |                         |      |           |                         |      |        |                         |      |           |
| 51                                 |                         |      |           |                         |      |        |                         |      |           |
| 54                                 |                         |      |           |                         |      |        |                         |      |           |
| 58                                 |                         |      |           |                         |      |        |                         |      |           |
| 62                                 |                         |      |           |                         |      |        |                         |      |           |
| 100                                |                         |      |           |                         |      |        |                         |      |           |
| 112                                |                         |      |           |                         |      |        |                         |      |           |
| 114                                |                         |      |           |                         |      |        |                         |      |           |
| 116                                |                         |      |           |                         |      |        |                         |      |           |
| 117                                |                         |      |           |                         |      |        |                         |      |           |
| 119                                |                         |      |           |                         |      |        |                         |      |           |
| 120                                |                         |      |           |                         |      |        |                         |      |           |
| 133                                |                         |      |           |                         |      |        |                         |      |           |
| 136                                |                         |      |           |                         |      |        |                         |      |           |
| 142                                |                         |      |           |                         |      |        |                         |      |           |
| 143                                |                         |      |           |                         |      |        |                         |      |           |
| 145                                |                         |      |           |                         |      |        |                         |      |           |
| 147                                |                         |      |           |                         |      |        |                         |      |           |
| 149                                |                         |      |           |                         |      |        |                         |      |           |
| 157                                |                         |      |           |                         |      |        |                         |      |           |
| 160                                |                         |      |           |                         |      |        |                         |      |           |
| 162                                |                         |      |           |                         |      |        |                         |      |           |
| 164                                |                         |      |           |                         |      |        |                         |      |           |
| 165                                |                         |      |           |                         |      |        |                         |      |           |
| 169                                |                         |      |           |                         |      |        |                         |      |           |
| 181                                |                         |      |           |                         |      |        |                         |      |           |
| 185                                |                         |      |           |                         |      |        |                         |      |           |
| 195                                |                         |      |           |                         |      |        |                         |      |           |
| 197                                |                         |      |           |                         |      |        |                         |      |           |
| 204                                |                         |      |           |                         |      |        |                         |      |           |
| 206                                |                         |      |           |                         |      |        |                         |      |           |
| 209                                |                         |      |           |                         |      |        |                         |      |           |
| 214                                |                         |      |           |                         |      |        |                         |      |           |
| 216                                |                         |      |           |                         |      |        |                         |      |           |
| 218                                |                         |      |           |                         |      |        |                         |      |           |
| 222                                |                         |      |           |                         |      |        |                         |      |           |
| 227                                |                         |      |           |                         |      |        |                         |      |           |
| 232                                | 01:03                   | L    | 2000-5000 | 02:01                   | L    | < 2000 | 02:02                   | L    | 2000-5000 |
| 239                                |                         |      |           |                         |      |        |                         |      |           |
| 242                                |                         |      |           |                         |      |        |                         |      |           |
| 252                                |                         |      |           |                         |      |        |                         |      |           |
| 267                                |                         |      |           |                         |      |        |                         |      |           |
| 268                                |                         |      |           |                         |      |        |                         |      |           |
| 273                                |                         |      |           |                         |      |        |                         |      |           |
| 277                                |                         |      |           |                         |      |        |                         |      |           |
| 284                                |                         |      |           |                         |      |        |                         |      |           |
| 293                                |                         |      |           |                         |      |        |                         |      |           |
| 302                                |                         |      |           |                         |      |        |                         |      |           |
| 303                                |                         |      |           |                         |      |        |                         |      |           |
| 309                                |                         |      |           |                         |      |        |                         |      |           |
| 351                                |                         |      |           |                         |      |        |                         |      |           |
| 361                                |                         |      |           |                         |      |        |                         |      |           |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 2  | < 2000    | 1  | < 2000    | 2  | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 1         | 71 | 1         | 71 | 1         |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | 1         |    | 0         |    | 1         |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 0         |    | 0         |    | 0         |

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 304/2017

DESPATCHED ON 24TH JANUARY 2017

| Lab no. | Techniques used<br>IgG | Sample Treatment<br>IgG | High Background | Neg control serum batch | Allele Specific Antibodies |   | Luminex kit (lot) |          | Cut-off value | Control bead MFI Positive | Control bead MFI Negative | Luminex kit (lot) |            | Cut-off value | Control bead MFI Positive | Control bead MFI Negative | Luminex kit (lot) |      | Cut-off value | Control bead MFI Positive | Control bead MFI Negative |      |       |     |  |
|---------|------------------------|-------------------------|-----------------|-------------------------|----------------------------|---|-------------------|----------|---------------|---------------------------|---------------------------|-------------------|------------|---------------|---------------------------|---------------------------|-------------------|------|---------------|---------------------------|---------------------------|------|-------|-----|--|
|         |                        |                         |                 |                         | IgG                        | IgG   | IgG               | IgG      |               |                           |                           | IgG               | IgG        |               |                           |                           | IgG               | IgG  |               |                           |                           |      |       |     |  |
| 9       | L                      | None                    | No              |                         |                            | LS2A01  | 1000              | 14400    | 28.7          |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 11      | L                      | EDTA                    | No              |                         |                            | LS2A01  | 1000              | 6809     | 48            |                           |                           | L5M12             | 2.5        | 8906          | 22                        |                           |                   |      |               |                           |                           |      |       |     |  |
| 12      | L                      | EDTA                    | No              | 16                      |                            | LS2A01  | 500               | 15267    | 53            |                           |                           | L5M12             | Ratio 3    | 14722         | 47                        |                           |                   |      |               |                           |                           |      |       |     |  |
|         |                        | Heat Inactivation, EDTA | No              | 16                      |                            | LS2A01  | 1500              | 17083    | 35            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
|         |                        |                         |                 |                         |                            | DPA1*02:02/DPB1*05:01 heterodimer but individual alleles negative   |                   |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 14      | L                      |                         |                 |                         |                            |   |                   |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 15      | L                      | EDTA                    | No              | 16                      |                            | LS2A01  | 1000              | 14427    | 47            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 19      | L                      | None                    | No              | OL1N5                   |                            | LS2A01  | 1000              | 14095    |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 20      | C/L                    | EDTA                    | No              |                         |                            | LS2A01  | 1000              | 15711.84 | 23.71         |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 23      | L                      | EDTA                    | No              | 16                      |                            | LS2A01  | 1000              | 12259    | 17.52         |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 24      | L                      | EDTA                    | No              | 16                      |                            | LS2A01  | 1000              | 14398    | 22            |                           |                           | L5M12             | 4.5        | 15613         | 24                        |                           |                   |      |               |                           |                           |      |       |     |  |
| 25      | L                      | EDTA                    | No              | 16                      |                            | LS2A01  | 1000              | 13370    | 20            |                           |                           | L5M12             | 6          | 11758         | 66                        |                           | L52PRA            | 1000 | 8326          | 19                        | L5AII                     | 1500 | 18459 | 251 |  |
| 26      | L                      | EDTA                    | No              | 16                      |                            | LS2A01  | 1000              | 14860    | 12            |                           |                           | L5M12             |            | 14990         |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 28      | L                      | None                    | No              | 16                      |                            | LS2A01  | 5                 | 10897    | 21            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 34      | L                      | EDTA                    | No              | 11                      |                            | LS2A01  | 1140              | 13712    | 9             |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 35      | L                      | EDTA                    | No              | 16                      |                            | LS2A01  | 1000              | 10999    | 13            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 38      | L                      | EDTA                    | No              | 16                      |                            | LS2A01  | 1089              | 14860    | 12            |                           |                           | L5AII             | 637        | 15728         | 132                       |                           |                   |      |               |                           |                           |      |       |     |  |
|         |                        | EDTA                    | No              | LS-NC015                |                            | LS2A01  | 1221              | 12352    | 74            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
|         |                        |                         |                 |                         |                            | DRB1*11:04, possible DPA/DPB heterodimer bd070 DPA1*02:02, DPB1*05:01   |                   |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 39      | L                      |                         |                 |                         |                            |   |                   |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 41      | L                      | None                    | No              | 15                      |                            | LS2A01  | 2000              | 12886    | 30            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 42      | L                      | EDTA                    | No              | 16                      |                            | LS2A01  | 500               | 11736    | 19            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 45      | L                      | EDTA/Beads              | No              |                         |                            | LS2A01  | 1500              | 12000    | 20            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 48      | L                      | Heat Inactivation       | No              | 22                      |                            | LS2A01  |                   |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 51      | L                      | EDTA                    | No              |                         |                            | LS2A01  | 1250              | 11821    | 38            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 54      | L                      | EDTA                    | No              | 16                      |                            | LS2A01  | 1400              | 17890    | 385           |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 58      | L                      | EDTA                    | No              | 15                      |                            | LS2A01  | 1000              | 13285    | 16            |                           |                           | L5M12             | 3          | 13215         | 11                        |                           |                   |      |               |                           |                           |      |       |     |  |
| 62      | L                      | None                    | No              | 16                      |                            | LS2A01  | 1000              | 16785    | 26.3          |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 100     | L                      | None                    | No              | 11086D                  |                            | LSAI  | 671               | 16707    | 259           |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 112     | L                      | None                    | No              | 08256C                  |                            | LSAI  | 500               | 19962    | 319           |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 114     | L                      | EDTA                    | No              |                         |                            | LS2A01  | 1000              | 8038     | 28            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 116     | C/L                    | EDTA                    | No              | 16                      |                            | LS2A01  | 1000              | 10551    | 55            |                           |                           | L5M12             |            | 10465         | 48                        |                           |                   |      |               |                           |                           |      |       |     |  |
| 117     | E/L                    | None                    | No              | 16                      |                            | LS2A01  | 500               | 11502    | 15            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 119     | L                      | EDTA                    | No              |                         |                            | LS2A01  | >1000             | 8769     | 12            |                           |                           | L5M12             | RATIO >1.5 | 11629         | 35                        |                           |                   |      |               |                           |                           |      |       |     |  |
| 120     | L                      | EDTA                    | No              |                         |                            | LS2A01  | 500               | 10809    | 16            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 133     | L                      |                         |                 |                         |                            | LSAI  | 500               | 17426    | 213           |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 136     | L                      | None                    | No              |                         |                            | LS2A01  | 1000              | 15260    | 28            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 142     | L                      | EDTA                    | No              | 16                      |                            | LS2A01  | 1000              | 12207    | 13            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 143     | L                      | None                    | No              | 16                      |                            | LS2A01  | 1000              | 17980    | 39            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 145     | L                      | None                    | No              | NC15                    |                            | LS2A01  | 1000              | 15631    | 49            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 147     | L                      | None                    | No              |                         |                            | LS2A01  | >1500             | 10534    | 24            |                           |                           | L5M12             | RATIO >5   | 11270         | 27                        |                           |                   |      |               |                           |                           |      |       |     |  |
| 149     | L                      | None                    | No              |                         |                            | LSAI  | 13808             | 13808    | 209           |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 157     | L                      | EDTA                    | No              | 16                      |                            | LS2A01  | 1000              | 14363    | 35            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 160     | L                      | Beads                   | No              | LOT 14                  |                            | LS2A01  | 1000              | 8600     | 31            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 162     | L                      | EDTA                    | No              | 16                      |                            | LS2A01  | 1000              | 13495    | 11            |                           |                           | L5M12             | 3          | 11815         | 23.43                     |                           |                   |      |               |                           |                           |      |       |     |  |
| 164     | L                      | EDTA                    | No              |                         |                            | LS2A01  | 1500              | 12702    | 73            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 165     | L                      |                         |                 |                         |                            |   |                   |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 169     | L                      | None/Heat               |                 | IN HOUSE                |                            | LS2A01  |                   | 4033     | 9             |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 181     | L                      | None                    | No              | 98264                   |                            | LS2A01  | 500               | 9674     | 17            |                           |                           | L5M12             | 2.5        | 13575         | 41                        |                           |                   |      |               |                           |                           |      |       |     |  |
| 185     | L                      | EDTA                    | No              |                         |                            | LSAI  |                   | 20211    | 292           |                           |                           | LM2               |            | 23712         | 168                       |                           |                   |      |               |                           |                           |      |       |     |  |
| 195     | L                      | None                    | No              |                         |                            | LSM12   | 2000              | 12775    | 22            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 197     | L                      | EDTA                    | No              |                         |                            |   |                   |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 204     | L                      | EDTA                    | No              | LSNC                    |                            | LS2A01  | 1000              | 13293    | 13            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 206     | L                      | EDTA                    | No              |                         |                            | LS2A01  | 1000              | 12830    | 24            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
|         |                        | EDTA                    | No              |                         |                            | LS2A01  | 500               | 16437    | 90            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
|         |                        |                         |                 |                         |                            | DRB1*13:03 DRB1*14:02 DRB5*02:02  |                   |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 209     | L                      | None                    | Yes             |                         |                            | LSAI/II   | 500               | 14656    | 332           |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
|         |                        |                         |                 |                         |                            | DRB1*04:01, DRB1*04:02, DRB1*04:03, DRB1*04:05, DRB1*11:01, DRB1*11:04  |                   |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 214     | L                      |                         |                 |                         |                            |   |                   |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 216     | L                      | None                    | No              | 3003644                 |                            | LM2   | 1000              | 18612    | 138           |                           |                           | LMX               |            | 13350         |                           |                           |                   |      |               |                           |                           |      |       |     |  |
|         |                        | Heat Inactivation       |                 |                         |                            | LSAI  |                   | 17101    |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
|         |                        |                         |                 |                         |                            | DOB1*03:01 DOB1*03:02 DOB1*03:03 DRB1*04:01 DRB1*04:02 DRB1*04:03 DRB1*04:05 DRB1*08:01 DRB1*11:01 DRB1*11:04 |                   |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 218     | L                      |                         |                 |                         |                            | DRB1*04:01 DRB1*04:02 DRB1*04:04 DRB1*04:05 DOB1*03:02  |                   |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 222     | F                      |                         |                 |                         |                            |   |                   |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 227     | L                      | EDTA/Dilution           |                 |                         |                            |   |                   |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 232     | L                      | NONE                    | No              | NC16                    |                            | LS2A01  | 1200              | 9308     | 8             |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 239     | L                      |                         |                 |                         |                            | LM2   | 1600              | 19247    | 396           |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 242     | L                      | Adsorption Beads        |                 |                         |                            | LS2A01  |                   | 23059    | 18.44         |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 252     | L                      | None                    | No              |                         |                            | LM2   | 2                 | 18746    | 184           |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 267     | L                      | EDTA                    | No              |                         |                            | LSAI  | BCM1 >700         | 14338    | 210           |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 268     | C/L                    | None                    | No              |                         |                            | LSAI  | 1500/4/5          | 15238    | 194           |                           |                           | LM2               | 1000       | 19276         | 164                       |                           |                   |      |               |                           |                           |      |       |     |  |
| 273     | L                      | None                    | No              |                         |                            | LS2A01  | 1500              | 12665    | 30            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 277     | L                      | EDTA                    | No              | 16                      |                            | LS2A01  | 500               | 13207    | 20            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 284     | L                      | EDTA                    | No              |                         |                            | LS2A01  | 1000              | 12200    | 21            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 293     | L                      | None                    | No              |                         |                            | LS2A01  | 500               | 9919     | 5             |                           |                           | L52PRA            | 500        | 9919          | 5                         |                           |                   |      |               |                           |                           |      |       |     |  |
| 302     | L                      | None                    | No              |                         |                            |   |                   |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 303     | L                      | EDTA                    | No              | 16                      |                            | LS2A01  | 1000              | 9519     | 40            |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |
| 309     | L                      | None                    | No              |                         |                            | LSAI  | 700               |          |               |                           |                           |                   |            |               |                           |                           |                   |      |               |                           |                           |      |       |     |  |



**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 305/2017

DESPATCHED ON 24TH JANUARY 2017

| HLA specificity for assessment |                    |       |           |                    |      |           |                           |        |        |                   |       |           |                       |      |      |                  |      |      |                    |      |      |                    |      |       |                  |      |      |                   |  |  |
|--------------------------------|--------------------|-------|-----------|--------------------|------|-----------|---------------------------|--------|--------|-------------------|-------|-----------|-----------------------|------|------|------------------|------|------|--------------------|------|------|--------------------|------|-------|------------------|------|------|-------------------|--|--|
| Consensus % reported           | DR14 Present 95.8% |       |           | DR1403 Absent 1.4% |      |           | DR1404 Not Assessed 14.1% |        |        | DR8 Present 97.2% |       |           | DR9 Not Assessed 7.0% |      |      | DR10 Absent 1.4% |      |      | DR51 Present 88.7% |      |      | DR52 Present 89.0% |      |       | DR53 Absent 2.8% |      |      | DO6 Present 97.2% |  |  |
|                                | Lab no.            | spec  | tech      | MFI                | spec | tech      | MFI                       | spec   | tech   | MFI               | spec  | tech      | MFI                   | spec | tech | MFI              | spec | tech | MFI                | spec | tech | MFI                | spec | tech  | MFI              | spec | tech | MFI               |  |  |
| 9                              | DR14               | L     | > 5000    |                    |      |           | DR1404                    | L      | > 5000 | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 11                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 12                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       | DR9  | L    | < 2000           |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 14                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 15                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 19                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 20                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 23                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 24                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 25                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 26                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 28                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 34                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 35                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 38                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 39                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 41                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 42                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 45                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 48                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 51                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | 2000-5000        | DO6  | L    | > 5000            |  |  |
| 54                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       | DR9  | L    | < 2000           |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 58                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 62                             | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | 2000-5000        | DO6  | L    | > 5000            |  |  |
| 100                            | DR14               | L     | > 5000    | DR1403             | L    | 2000-5000 |                           | DR1404 | L      | 2000-5000         | DR8   | L         | 2000-5000             |      |      |                  |      |      |                    | DR51 | L    | < 2000             | DR52 | L     | > 5000           | DO6  | L    | 2000-5000         |  |  |
| 112                            | DR14               | L     | > 5000    |                    |      |           |                           | DR1404 | L      | > 5000            | DR8   | L         | > 5000                |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 114                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 116                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 117                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | E/L   | > 5000    |                       |      |      |                  |      |      |                    | DR51 | E/L  | > 5000             | DR52 | E/L   | > 5000           | DO6  | L    | > 5000            |  |  |
| 119                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 120                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 133                            | DR14               | L     | > 5000    |                    |      |           |                           | DR1404 | L      | 2000-5000         | DR8   | L         | 2000-5000             |      |      |                  |      |      |                    | DR51 | L    | < 2000             | DR52 | L     | > 5000           | DO6  | L    | 2000-5000         |  |  |
| 136                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 142                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 143                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 145                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 147                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 149                            | DR14               | L     | > 5000    |                    |      |           |                           | DR1404 |        | > 5000            | DR8   | L         | > 5000                |      |      |                  |      |      |                    | DR51 | L    | < 2000             | DR52 | L     | > 5000           | DO6  | L    | 2000-5000         |  |  |
| 157                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 160                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 162                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 164                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 165                            | DR14               | F/E/L | > 5000    |                    |      |           |                           |        |        | DR8               | F/E/L | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | F/E/L | > 5000           | DO6  | F/L  | > 5000            |  |  |
| 169                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | < 2000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 181                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | < 2000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 185                            | DR14               | L     | > 5000    |                    |      |           |                           | DR1404 | L      | > 5000            | DR8   | L         | > 5000                |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 195                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 197                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DR53 | L    | > 5000            |  |  |
| 204                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 206                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 209                            | DR14               | L     | 2000-5000 |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       | DR9  | L    | < 2000           |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 214                            | DR14               | L     | > 5000    |                    |      |           |                           | DR1404 | L      | 2000-5000         | DR8   | L         | 2000-5000             |      |      |                  |      |      |                    | DR51 | L    | < 2000             | DR52 | L     | > 5000           | DO6  | L    | 2000-5000         |  |  |
| 216                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 218                            | DR14               | L     | > 5000    |                    |      |           |                           | DR1404 | L      | > 5000            | DR8   | L         | > 5000                |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 222                            | DR14               | F     | > 5000    |                    |      |           |                           |        |        | DR8               | F     | > 5000    |                       | DR9  | F    |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | F    | > 5000            |  |  |
| 227                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 232                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | 2000-5000 |                       |      |      |                  |      |      |                    | DR51 | L    | 2000-5000          | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 239                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 242                            | DR14               | L     | > 5000    |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 252                            |                    |       |           |                    |      |           |                           |        |        | DR8               | L     | > 5000    |                       |      |      |                  |      |      |                    | DR51 | L    | > 5000             | DR52 | L     | > 5000           | DO6  | L    | > 5000            |  |  |
| 267                            | DR14               | L     | 2000-5000 |                    |      |           |                           | DR1404 | L      | 2000-5000         | DR8   | L         | 2000-5000             |      |      |                  |      |      |                    |      |      |                    |      |       |                  |      |      |                   |  |  |

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 305/2017

DESPATCHED ON 24TH JANUARY 2017

| HLA specificity for assessment |                 |      |                   |      |                   |           |                   |       |                   |      |       |           |      |      |                   |
|--------------------------------|-----------------|------|-------------------|------|-------------------|-----------|-------------------|-------|-------------------|------|-------|-----------|------|------|-------------------|
| Consensus % reported           | DQ2 Absent 2.8% |      | DQ7 Present 98.8% |      | DQ8 Present 95.8% |           | DQ9 Present 95.2% |       | DQ4 Present 87.3% |      |       |           |      |      |                   |
|                                | spec            | tech | MFI               | spec | tech              | MFI       | spec              | tech  | MFI               | spec | tech  | MFI       | spec | tech | MFI               |
| 9                              |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 11                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 12                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 14                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 15                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000            |
| 19                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000            |
| 20                             |                 |      |                   | DQ7  | C/L               | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 23                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 24                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 25                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 26                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 28                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 34                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 35                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000, 2000-5000 |
| 38                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 39                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 41                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 42                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 45                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 48                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 51                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 54                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 58                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 62                             |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 100                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000            |
| 112                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 114                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 116                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 117                            |                 |      |                   | DQ7  | E/L               | > 5000    | DQ8               | E/L   | > 5000            | DQ9  | L     | > 5000    | DQ4  | E/L1 | > 5000            |
| 119                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000/> 5000     |
| 120                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 133                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000            |
| 136                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 142                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 143                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 145                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000/> 5000  |
| 147                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 149                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000            |
| 157                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 160                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000            |
| 162                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 164                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 165                            |                 |      |                   | DQ7  | F/E/L             | > 5000    | DQ8               | F/E/L | > 5000            | DQ9  | F/E/L | > 5000    | DQ4  | F/L  | > 5000            |
| 169                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 181                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000            |
| 185                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000            |
| 195                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 197                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 204                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 206                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 209                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 214                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 216                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000            |
| 218                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000            |
| 222                            |                 |      |                   | DQ7  | F                 | > 5000    | DQ8               | F     | > 5000            | DQ9  | F     | > 5000    | DQ4  | F    | > 5000            |
| 227                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 232                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 239                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 242                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 252                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | C    | > 5000            |
| 267                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000            |
| 268                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 273                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 277                            | DQ2             | L    | < 2000            | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | > 5000            |
| 284                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000            |
| 293                            |                 |      |                   | DQ7  | L                 | 1000-5000 | DQ8               | L     | 1000-5000         | DQ9  | L     | 1000-5000 | DQ4  | L    | > 5000            |
| 302                            |                 |      |                   |      |                   |           |                   |       |                   |      |       |           |      |      |                   |
| 303                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 309                            |                 |      |                   | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000            |
| 351                            | DQ2             | L    | < 2000            | DQ7  | L                 | > 5000    | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | 2000-5000         |
| 361                            |                 |      |                   | DQ7  | L                 | 1000-5000 | DQ8               | L     | > 5000            | DQ9  | L     | > 5000    | DQ4  | L    | < 2000            |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 2  | < 2000    | 70 | < 2000    | 69 | < 2000    | 68 | < 2000    | 62 | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 2         | 71 | 0         | 71 | 0         | 71 | 0         | 71 | 13        |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | 0         |    | 1         |    | 1         |    | 1         |    | 24        |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 0         |    | 67        |    | 66        |    | 66        |    | 22        |

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 305/2017

DESPATCHED ON 24TH JANUARY 2017

**DQA1\* Antibodies - NOT ASSESSED**

| Lab no. | 01:01<br>Not Assessed<br>5.6% |      |           | 01:02<br>Not Assessed<br>8.5% |      |        | 01:03<br>Not Assessed<br>22.5% |      |           | 01:04<br>Absent<br>2.8% |      |     | 02:01<br>Not Assessed<br>5.6% |      |               | 03:01<br>Not Assessed<br>16.9% |       |        | 03:02<br>Not Assessed<br>16.9% |       |        | 03:03<br>Not Assessed<br>21.1% |       |           |        |
|---------|-------------------------------|------|-----------|-------------------------------|------|--------|--------------------------------|------|-----------|-------------------------|------|-----|-------------------------------|------|---------------|--------------------------------|-------|--------|--------------------------------|-------|--------|--------------------------------|-------|-----------|--------|
|         | spec                          | tech | MFI       | spec                          | tech | MFI    | spec                           | tech | MFI       | spec                    | tech | MFI | spec                          | tech | MFI           | spec                           | tech  | MFI    | spec                           | tech  | MFI    | spec                           | tech  | MFI       |        |
| 9       |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 11      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 12      | 01:01                         | L    | 2000-5000 |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 14      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 15      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 19      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 20      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 23      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        | 03:03                          | L     | > 5000    |        |
| 24      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 25      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 26      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 28      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 29      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 34      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 35      | 01:01                         | L    | > 5000    | 01:02                         | L    | > 5000 | 01:03                          | L    | > 5000    |                         |      |     | 02:01                         | L    | <2000, > 5000 | 03:01                          | L     | > 5000 | 03:02                          | L     | > 5000 | 03:03                          | L     | 2000-5000 |        |
| 38      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 39      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 41      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 42      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 45      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 48      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 51      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 54      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 58      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                | 03:01 | L      | 2000-5000                      |       |        |                                |       |           |        |
| 62      |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 100     |                               |      |           |                               |      |        | 01:03                          | L    | 2000-5000 |                         |      |     | 01:04                         | L    | 2000-5000     |                                |       |        |                                |       |        |                                |       |           |        |
| 112     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 114     |                               |      |           |                               |      |        | 01:03                          | L    | > 5000    |                         |      |     |                               |      |               | 03:01                          | L     | > 5000 | 03:02                          | L     | > 5000 | 03:03                          | L     | > 5000    |        |
| 116     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 117     |                               |      |           |                               |      |        | 01:03                          | L    | > 5000    |                         |      |     |                               |      |               |                                |       |        | 03:02                          | L     | > 5000 |                                |       |           |        |
| 119     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 120     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 133     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 136     | 01:01                         | L    | > 5000    | 01:02                         | L    | > 5000 |                                |      |           |                         |      |     | 01:04                         | L    | > 5000        | 02:01                          | L     | > 5000 | 03:01                          | L     | > 5000 | 03:02                          | L     | > 5000    |        |
| 142     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 143     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 145     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 147     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 149     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                | 03:02 | L      | 2000-5000                      |       |           |        |
| 157     |                               |      |           |                               |      |        | 01:03                          | L    | 2000-5000 |                         |      |     |                               |      |               |                                |       |        |                                | 03:02 | L      | > 5000                         | 03:03 | L         | > 5000 |
| 160     |                               |      |           |                               |      |        | 01:03                          | L    | > 5000    |                         |      |     |                               |      |               | 02:01                          | L     | > 5000 | 03:01                          | L     | > 5000 | 03:02                          | L     | > 5000    |        |
| 162     |                               |      |           |                               |      |        | 01:02                          | L    | > 5000    |                         |      |     |                               |      |               |                                |       |        | 03:02                          | L     | > 5000 | 03:03                          | L     | 2000-5000 |        |
| 164     |                               |      |           |                               |      |        | 01:03                          | L    | > 5000    |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 165     |                               |      |           |                               |      |        | 01:03                          | L    | > 5000    |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 169     |                               |      |           |                               |      |        | 01:02                          | L    | > 5000    |                         |      |     |                               |      |               |                                |       |        | 03:01                          | L     | > 5000 | 03:02                          | L     | 2000-5000 |        |
| 181     |                               |      |           |                               |      |        | 01:03                          | L    | > 5000    |                         |      |     |                               |      |               |                                |       |        | 03:01                          | L     | > 5000 | 03:02                          | L     | 2000-5000 |        |
| 185     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        | 03:01                          | L     | <2000  |                                |       |           |        |
| 195     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 197     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 204     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 206     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 209     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 214     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 216     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 218     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 222     |                               |      |           |                               |      |        | 01:03                          | L    | 2000-5000 |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 227     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 232     | 01:01                         | L    | > 5000    | 01:02                         | L    | > 5000 | 01:03                          | L    | > 5000    |                         |      |     |                               |      |               | 02:01                          | L     | > 5000 | 03:01                          | L     | > 5000 | 03:02                          | L     | > 5000    |        |
| 239     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 242     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 252     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 267     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 268     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 273     |                               |      |           |                               |      |        | 01:02                          | L    | > 5000    |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 277     |                               |      |           |                               |      |        | 01:03                          | L    | > 5000    |                         |      |     |                               |      |               |                                |       |        | 03:01                          | L     | > 5000 | 03:02                          | L     | > 5000    |        |
| 284     |                               |      |           |                               |      |        | 01:03                          | L    | > 5000    |                         |      |     |                               |      |               |                                |       |        | 03:01                          | L     | > 5000 | 03:02                          | L     | > 5000    |        |
| 293     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 302     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 303     |                               |      |           |                               |      |        | 01:03                          | L    | > 5000    |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 309     |                               |      |           |                               |      |        | 01:03                          | L    | 2000-5000 |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 351     |                               |      |           |                               |      |        |                                |      |           |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |
| 361     |                               |      |           |                               |      |        | 01:03                          | L    | 2000-5000 |                         |      |     |                               |      |               |                                |       |        |                                |       |        |                                |       |           |        |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 4  | < 2000    | 6  | < 2000    | 16 | < 2000    | 2  | < 2000    | 4  | < 2000    | 12 | < 2000    | 12 | < 2000    | 15 | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 0         | 71 | 0         | 71 | 0         | 71 | 0         | 71 | 0         | 71 | 0         | 71 | 0         | 71 | 0         |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | 1         |    | 0         |    | 5         |    | 1         |    | 0         |    | 1         |    | 2         |    | 6         |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 3         |    | 6         |    | 11        |    | 1         |    | 4         |    | 9         |    | 10        |    | 9         |

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 305/2017

DESPATCHED ON 24TH JANUARY 2017

| DQA1* Antibodies - NOT ASSESSED    |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
|------------------------------------|-------------------------------|------|-----------|-------------------------|------|--------|--------------------------------|------|-----------|--------------------------------|-------|-----|--------------------------------|-------|--------|-----------|
| Consensus<br>% reported<br>Lab no. | 04:01<br>Not Assessed<br>8.5% |      |           | 05:01<br>Absent<br>1.4% |      |        | 05:03<br>Not Assessed<br>14.1% |      |           | 05:05<br>Not Assessed<br>14.1% |       |     | 06:01<br>Not Assessed<br>19.7% |       |        |           |
|                                    | spec                          | tech | MFI       | spec                    | tech | MFI    | spec                           | tech | MFI       | spec                           | tech  | MFI | spec                           | tech  | MFI    |           |
| 9                                  |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 11                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 12                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 14                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 15                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 19                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 20                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 23                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 24                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 25                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 26                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 28                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 34                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 35                                 |                               |      |           |                         |      |        | 05:03                          | L    | > 5000    |                                | 05:05 | L   | > 5000                         |       |        |           |
| 38                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 39                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 41                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 42                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 45                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 48                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 51                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 54                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 58                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 62                                 |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 100                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     | 06:01                          | L     | > 5000 |           |
| 112                                |                               |      |           | 05:01                   | L    | > 5000 |                                |      |           |                                |       |     | 06:01                          | L     | > 5000 |           |
| 114                                |                               |      |           |                         |      |        | 05:03                          | L    | > 5000    |                                | 05:05 | L   | > 5000                         | 06:01 | L      | > 5000    |
| 116                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 117                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 119                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 120                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 133                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 136                                |                               |      |           |                         |      |        | 05:03                          | L    | > 5000    |                                | 05:05 | L   | > 5000                         | 06:01 | L      | > 5000    |
| 142                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 143                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 145                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 147                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 149                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 157                                |                               |      |           |                         |      |        | 05:03                          | L    | > 5000    |                                | 05:05 | L   | > 5000                         | 06:01 | L      | > 5000    |
| 160                                |                               |      |           |                         |      |        | 05:03                          | L    | > 5000    |                                | 05:05 | L   | 2000-5000                      | 06:01 | L      | > 5000    |
| 162                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 164                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 165                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 169                                |                               |      |           |                         |      |        | 05:03                          | L    | 2000-5000 |                                | 05:05 | L   | 2000-5000                      | 06:01 | L      | 2000-5000 |
| 181                                | 04:01                         | L    | <2000     |                         |      |        |                                |      |           |                                |       |     | 06:01                          | L     | <2000  |           |
| 185                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 195                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 197                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 204                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 206                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 209                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 214                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 216                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 218                                | 04:01                         | L    | > 5000    |                         |      |        |                                |      |           |                                |       |     | 06:01                          | L     | > 5000 |           |
| 222                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 227                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 232                                | 04:01                         | L    | <2000     |                         |      |        | 05:03                          | L    | > 5000    |                                | 05:05 | L   | > 5000                         | 06:01 | L      | > 5000    |
| 239                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 242                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 252                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 267                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 268                                | 04:01                         | L    | <2000     |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 273                                |                               |      |           |                         |      |        | 05:03                          | L    | > 5000    |                                | 05:05 | L   | > 5000                         | 06:01 | L      | > 5000    |
| 277                                |                               |      |           |                         |      |        | 05:03                          | L    | > 5000    |                                | 05:05 | L   | > 5000                         | 06:01 | L      | > 5000    |
| 284                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 293                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 302                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 303                                |                               |      |           |                         |      |        | 05:03                          | L    | > 5000    |                                | 05:05 | L   | > 5000                         | 06:01 | L      | > 5000    |
| 309                                | 04:01                         | L    | < 2000    |                         |      |        |                                |      |           |                                |       |     | 06:01                          | L     | > 5000 | 2000-5000 |
| 351                                |                               |      |           |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |
| 361                                | 04:01                         | L    | 3000-5000 |                         |      |        |                                |      |           |                                |       |     |                                |       |        |           |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 6  | < 2000    | 1  | < 2000    | 10 | < 2000    | 10 | < 2000    | 14 | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 1         | 71 | 0         | 71 | 0         | 71 | 0         | 71 | 0         |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | 1         |    | 0         |    | 1         |    | 2         |    | 2         |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 1         |    | 1         |    | 9         |    | 8         |    | 11        |





**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 305/2017

DESPATCHED ON 24TH JANUARY 2017

**DPB1\* Antibodies - NOT ASSESSED**

| Lab no. | 13:01<br>Not Assessed<br>31.0% |      |           | 14:01<br>Not Assessed<br>9.9% |      |           | 15:01<br>Not Assessed<br>47.9% |      |           | 17:01<br>Not Assessed<br>31.0% |      |           | 18:01<br>Not Assessed<br>35.2% |      |           | 19:01<br>Absent<br>4.2% |      |        | 20:01<br>Not Assessed<br>14.1% |       |           | 23:01<br>Not Assessed<br>9.9% |       |           | 28:01<br>Not Assessed<br>35.2% |       |        |        |
|---------|--------------------------------|------|-----------|-------------------------------|------|-----------|--------------------------------|------|-----------|--------------------------------|------|-----------|--------------------------------|------|-----------|-------------------------|------|--------|--------------------------------|-------|-----------|-------------------------------|-------|-----------|--------------------------------|-------|--------|--------|
|         | spec                           | tech | MFI       | spec                          | tech | MFI       | spec                           | tech | MFI       | spec                           | tech | MFI       | spec                           | tech | MFI       | spec                    | tech | MFI    | spec                           | tech  | MFI       | spec                          | tech  | MFI       | spec                           | tech  | MFI    |        |
| 9       | 13:01                          | L    | 2000-5000 |                               |      |           | 15:01                          | L    | 2000-5000 | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        | 20:01                          | L     | < 2000    |                               |       |           | 28:01                          | L     | < 2000 |        |
| 11      |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 12      | 13:01                          | L    | 2000-5000 | 14:01                         | L    | < 2000    | 15:01                          | L    | 2000-5000 | 17:01                          | L    | < 2000    | 18:01                          | L    | 2000-5000 | 19:01                   | L    | < 2000 | 20:01                          | L     | < 2000    | 23:01                         | L     | < 2000    | 28:01                          | L     | < 2000 |        |
| 14      |                                |      |           |                               |      |           | 15:01                          | L    | < 2000    |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 15      |                                |      |           |                               |      |           | 15:01                          | L    | 2000-5000 |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 19      |                                |      |           |                               |      |           | 15:01                          | L    | < 2000    |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 20      | 13:01                          | L    | > 5000    |                               |      |           | 15:01                          | L    | 2000-5000 | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           | 23:01                         | L     | < 2000    | 28:01                          | L     | < 2000 |        |
| 23      | 13:01                          | L    | < 2000    |                               |      |           | 15:01                          | L    | < 2000    |                                |      |           | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 24      |                                |      |           |                               |      |           | 15:01                          | L    | < 2000    |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 25      | 13:01                          | L    | 2000-5000 |                               |      |           | 15:01                          | L    | < 2000    | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 26      |                                |      |           |                               |      |           | 15:01                          | L    | < 2000    |                                |      |           |                                |      |           |                         |      |        |                                | 20:01 | L         | < 2000                        | 23:01 | L         | < 2000                         | 28:01 | L      | < 2000 |
| 28      | 13:01                          | L    | 2000-5000 |                               |      |           | 15:01                          | L    | 2000-5000 | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 34      | 13:01                          | L    | 2000-5000 |                               |      |           | 15:01                          | L    | 2000-5000 | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 35      |                                |      |           |                               |      |           | 15:01                          | L    | < 2000    |                                |      |           | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 38      |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 39      |                                |      |           |                               |      |           | 15:01                          | L    | 2000-5000 |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 41      | 13:01                          | L    | 2000-5000 |                               |      |           | 15:01                          | L    | < 2000    | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        | 20:01                          | L     | < 2000    |                               |       |           | 28:01                          | L     | < 2000 |        |
| 42      | 13:01                          | L    | 2000-5000 |                               |      |           | 15:01                          | L    | 2000-5000 | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 45      | 13:01                          | L    | 2000-5000 |                               |      |           | 15:01                          | L    | < 2000    | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 48      |                                |      |           |                               |      |           | 15:01                          | L    | 2000-5000 |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 51      | 13:01                          | L    | 2000-5000 | 14:01                         | L    | < 2000    | 15:01                          | L    | 2000-5000 | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        | 20:01                          | L     | < 2000    | 23:01                         | L     | < 2000    | 28:01                          | L     | < 2000 |        |
| 54      | 13:01                          | L    | > 5000    | 14:01                         | L    | 2000-5000 | 15:01                          | L    | > 5000    | 17:01                          | L    | 2000-5000 | 18:01                          | L    | > 5000    | 19:01                   | L    | < 2000 | 20:01                          | L     | 2000-5000 | 23:01                         | L     | 2000-5000 | 28:01                          | L     | > 5000 |        |
| 58      | 13:01                          | L    | > 5000    |                               |      |           | 15:01                          | L    | 2000-5000 | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 62      | 13:01                          | L    | 2000-5000 |                               |      |           | 15:01                          | L    | 2000-5000 |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 100     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 112     |                                |      |           |                               |      |           |                                |      |           |                                |      |           | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 114     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 116     | 13:01                          | L    | < 2000    |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 117     |                                |      |           |                               |      |           | 15:01                          | L    | < 2000    | 17:01                          | L    | < 2000    |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 119     |                                |      |           |                               |      |           | 15:01                          | L    | < 2000    | 17:01                          | L    | < 2000    |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 120     | 13:01                          | L    | 2000-5000 |                               |      |           | 15:01                          | L    | < 2000    | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        | 20:01                          | L     | < 2000    |                               |       |           | 28:01                          | L     | < 2000 |        |
| 133     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 136     |                                |      |           |                               |      |           | 15:01                          | L    | < 2000    |                                |      |           | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 142     | 13:01                          | L    | 2000-5000 |                               |      |           | 15:01                          | L    | < 2000    |                                |      |           | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 143     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 145     | 13:01                          | L    | 2000-5000 |                               |      |           | 15:01                          | L    | < 2000    | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 147     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 149     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 157     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 160     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 162     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 164     |                                |      |           |                               |      |           | 15:01                          | L    | < 2000    |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 165     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 169     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 181     | 13:01                          | L    | < 2000    | 14:01                         | L    | < 2000    | 15:01                          | L    | < 2000    | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        | 20:01                          | L     | < 2000    | 23:01                         | L     | < 2000    | 28:01                          | L     | < 2000 |        |
| 185     |                                |      |           | 14:01                         | L    | < 2000    |                                |      |           | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 195     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 197     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 204     |                                |      |           |                               |      |           | 15:01                          | L    | > 5000    | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 206     |                                |      |           |                               |      |           | 15:01                          | L    | 2000-5000 | 17:01                          | L    | < 2000    |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 209     |                                |      |           | 14:01                         | L    | < 2000    | 15:01                          | L    | 2000-5000 | 17:01                          | L    | < 2000    | 18:01                          | L    | 2000-5000 | 19:01                   | L    | < 2000 | 20:01                          | L     | < 2000    | 23:01                         | L     | < 2000    | 28:01                          | L     | < 2000 |        |
| 214     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 216     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 218     |                                |      |           |                               |      |           |                                |      |           |                                |      |           | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 222     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 227     | 13:01                          | L    | > 5000    |                               |      |           |                                |      |           | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 232     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 239     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 242     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 252     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 267     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 268     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 273     | 13:01                          | L    | 2000-5000 |                               |      |           | 15:01                          | L    | < 2000    |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 277     |                                |      |           | 14:01                         | L    | < 2000    | 15:01                          | L    | < 2000    | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        | 20:01                          | L     | < 2000    |                               |       |           | 28:01                          | L     | < 2000 |        |
| 284     | 13:01                          | L    | 2000-5000 |                               |      |           | 15:01                          | L    | 2000-5000 | 17:01                          | L    | < 2000    | 18:01                          | L    | < 2000    |                         |      |        |                                |       |           |                               |       |           | 28:01                          | L     | < 2000 |        |
| 293     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 302     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 303     |                                |      |           |                               |      |           | 15:01                          | L    | < 2000    |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 309     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 351     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |
| 361     |                                |      |           |                               |      |           |                                |      |           |                                |      |           |                                |      |           |                         |      |        |                                |       |           |                               |       |           |                                |       |        |        |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 22 | < 2000 | 7  | < 2000 | 34 | < 2000 | 22 | < 2000 | 25 | < 2000 | 3  | < 2000 | 10 | < 2000 | 7  | < 2000 | 25 | < 2000 |
|--------------------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|
| Total Participants | 71 | 3      | 71 | 6      | 71 | 16     | 71 | 21     | 71 | 22     | 71 | 3      | 71 | 9      | 71 | 6      | 71 |        |

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 305/2017

DESPATCHED ON 24TH JANUARY 2017

| DPA1* Antibodies - NOT ASSESSED    |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
|------------------------------------|-------------------------|------|--------|-------------------------|------|--------|-------------------------------|------|-----------|-------------------------|------|--------|-------------------------------|------|--------|
| Consensus<br>% reported<br>Lab no. | 01:03<br>Absent<br>2.8% |      |        | 01:04<br>Absent<br>1.4% |      |        | 02:01<br>Not Assessed<br>8.5% |      |           | 02:02<br>Absent<br>1.4% |      |        | 04:01<br>Not Assessed<br>9.9% |      |        |
|                                    | spec                    | tech | MFI    | spec                    | tech | MFI    | spec                          | tech | MFI       | spec                    | tech | MFI    | spec                          | tech | MFI    |
| 9                                  |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 11                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 12                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 14                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 15                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 19                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 20                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 23                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 24                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 25                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 26                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 28                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 34                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 35                                 | 01:03                   | L    | < 2000 |                         |      |        | 02:01                         | L    | < 2000    | 02:02                   | L    | < 2000 | 04:01                         | L    | < 2000 |
| 38                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        | 04:01                         | L    | < 2000 |
| 39                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 41                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 42                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 45                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 48                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 51                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 54                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 58                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 62                                 |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 100                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 112                                |                         |      |        |                         |      |        | 02:01                         | L    | < 2000    |                         |      |        |                               |      |        |
| 114                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 116                                |                         |      |        |                         |      |        | 02:01                         | L    | < 2000    |                         |      |        |                               |      |        |
| 117                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        | 04:01                         | L    | < 2000 |
| 119                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        | 04:01                         | L    | < 2000 |
| 120                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 133                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 136                                | 01:03                   | L    | < 2000 |                         |      |        | 02:01                         | L    | 2000-5000 |                         |      |        | 04:01                         | L    | < 2000 |
| 142                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 143                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 145                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 147                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 149                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 157                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 160                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 162                                |                         |      |        |                         |      |        | 02:01                         | L    | < 2000    |                         |      |        |                               |      |        |
| 164                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 165                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 169                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 181                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 185                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 195                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 197                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 204                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 206                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 209                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 214                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 216                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 218                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 222                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 227                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 232                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 239                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 242                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 252                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 267                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 268                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 273                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 277                                |                         |      |        | 01:04                   | L    | < 2000 |                               |      |           |                         |      |        | 04:01                         | L    | < 2000 |
| 284                                |                         |      |        |                         |      |        | 02:01                         | L    | < 2000    |                         |      |        |                               |      |        |
| 293                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 302                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 303                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        | 04:01                         | L    | < 2000 |
| 309                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 351                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |
| 361                                |                         |      |        |                         |      |        |                               |      |           |                         |      |        |                               |      |        |

Technique : C = CDC; E = ELISA; F = Flow cytometry; L = Luminex; O = Other

| No. Reporting Spec | 2  | < 2000    | 1  | < 2000    | 6  | < 2000    | 1  | < 2000    | 7  | < 2000    |
|--------------------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|
| Total Participants | 71 | 2         | 71 | 1         | 71 | 5         | 71 | 1         | 71 | 7         |
|                    |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |    | 2000-5000 |
|                    |    | 0         |    | 0         |    | 1         |    | 0         |    | 0         |
|                    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |    | > 5000    |
|                    |    | 0         |    | 0         |    | 0         |    | 0         |    | 0         |

**UK NEQAS for H&I - SCHEME 3 - HLA ANTIBODY SPECIFICITY ANALYSIS**

CLASS II HLA ANTIBODY SPECIFICITY ANALYSIS OF 305/2017

DESPATCHED ON 24TH JANUARY 2017

| Lab no.   | Techniques used IgG | Sample Treatment IgG               | High Background | Neg control serum batch | Allele Specific Antibodies  |        | Luminex kit (lot) | Cut-off value  | Control bead MFI Positive | Control bead MFI Negative | Luminex kit (lot) | Cut-off value | Control bead MFI Positive | Control bead MFI Negative | Luminex kit (lot) | Cut-off value | Control bead MFI Positive | Control bead MFI Negative |  |  |  |  |  |
|---|---------------------|------------------------------------|-----------------|-------------------------|---|--------|-------------------|----------------|---------------------------|---------------------------|-------------------|---------------|---------------------------|---------------------------|-------------------|---------------|---------------------------|---------------------------|--|--|--|--|--|
|   |                     |                                    |                 |                         | IgG   | IgG    |                   |                |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 9   | L                   | None                               | No              |                         | DRB5*02:02  | LS2A01 | 900               | 11000          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 11  | L                   | EDTA                               | No              |                         | DRB5*02:02  | LS2A01 | 1000              | 7489           |                           |                           | LSM12             | 2.5           | 7028                      |                           |                   | 43            |                           |                           |  |  |  |  |  |
| 12  | L                   | EDTA<br>Heat Inactivation,<br>EDTA | No<br>No        | 16<br>16                | DRB1*09:02<br>DRB5*02:02  | LS2A01 | 500<br>1500       | 13227<br>14525 |                           |                           | LSM12             | Ratio 3       | 98<br>17632               |                           |                   | 70            |                           |                           |  |  |  |  |  |
| DQA1*03:03/DQB1*04:01 heterodimer SEEN<br>DPA1*02:01/DPB1*01:01 heterodimer but individual alleles negative |                     |                                    |                 |                         |   |        |                   |                |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 14  | L                   |                                    | No              |                         | DRB1*02:02  | LS2A01 | 1000              | 13785          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 15  | L                   | EDTA                               | No              |                         | DRB5*02:02  | LS2A01 | 1000              | 11055          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 19  | L                   | EDTA                               | No              | 0LINS                   | DRB5*02:02 DPA1*02:01 DPB1*13:01 DPB1*18:01   | LS2A01 | 1000              | 9929           |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 20  | C/L                 |                                    | No              |                         | DRB5*02:02  | LS2A01 | 1000              | 11885          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 23  | L                   | EDTA                               | No              |                         | DRB5*02:02  | LS2A01 | 1000              | 12575          |                           |                           | LSM12             | 6             | 12837                     |                           | 110               | 1500          | 13838                     | 187                       |  |  |  |  |  |
| 24  | L                   | EDTA                               | No              |                         | DRB5*02:02 only, DPB1*06:01 with DPA1*02:01, DPB1*18:01 with DPA1*02:01   | LS2A01 | 1000              | 12575          |                           |                           | LSAII             |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 25  | L                   | EDTA                               | No              |                         | DRB5*02:02, DQB1*04:01 with DQA1*03:03 only   | LS2A01 |                   |                |                           |                           | LSM12             |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 26  | L                   | None                               | No              |                         | DRB5*02:02 DPB1*13:01, DPA1*02:01   | LS2A01 | 500               | 10804          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 28  | L                   |                                    | No              |                         | DRB5*02:02  | LS2A01 | 1051              | 14736          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 34  | L                   | EDTA                               | No              | 11                      | DRB1*12:02  | LS2A01 | 1000              | 11999          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 35  | L                   | EDTA                               | No              | 16                      |   | LS2A01 | 1000              | 11807          |                           |                           | LSAII             | 851           | 16413                     |                           |                   | 134           |                           |                           |  |  |  |  |  |
| 38  | L                   | EDTA                               | No              | 16                      | DRB5*02:02, DRB1*12:02 Possible DPA/DPB heterodimers to D68 AND 084 DPA1*02:01, DPB1*01:01 AND DPA1*02:01, DPB1*13:01   | LS2A01 | 1444              | 12027          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 39  | L                   |                                    | No              |                         |   | LS2A01 | 2000              | 10632          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 41  | L                   | None                               | No              | 15                      |   | LS2A01 | 500               | 10362          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 42  | L                   | EDTA                               | No              | 16                      | DRB1*12:02, DRB5*02:02  | LS2A01 | 500               | 10362          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 45  | L                   | EDTA/Beads                         | No              |                         | DRB5*02:02  | LS2A01 | 1500              | 12000          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 48  | L                   | Heat Inactivation                  | No              | 22                      | DRB5*02:02  | LS2A01 | 1132              | 6852           |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 51  | L                   | EDTA                               | No              |                         |   | LS2A01 | 750               | 16354          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 54  | L                   | EDTA                               | No              | 16                      |   | LS2A01 | 1000              | 14685          |                           |                           | LSM12             | 3             | 12570                     |                           |                   | 13            |                           |                           |  |  |  |  |  |
| 58  | L                   | EDTA                               | No              | 15                      |   | LS2A01 | 1500              | 11532          |                           |                           | LSAII             | 1000          |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 62  | L                   | None                               | No              |                         |   | LSAII  | 682               | 17236          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 100   | L                   | None                               | No              | 11086D                  |   | LSAII  | 500               | 22198          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 112   | L                   | None                               | No              | 08256C                  |   | LSAII  | 1000              | 6969           |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 114   | L                   | EDTA                               | No              |                         | DRB1*12:02 DRB5*02:02   | LS2A01 | 1000              | 10251          |                           |                           | LSM12             |               | 9855                      |                           |                   | 37            |                           |                           |  |  |  |  |  |
| 116   | C/L                 | EDTA                               | No              | 16                      |   | LS2A01 | 500               | 9543           |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 117   | L                   | None                               | No              | 16                      | DRB5*02:02  | LS2A01 | >1000             | 10745          |                           |                           | LSM12             | RATIO >1.5    | 11168                     |                           |                   | 24            |                           |                           |  |  |  |  |  |
| 119   | L                   | EDTA                               | No              |                         | DRB5*02:02 DRB1*12:02   | LSAII  | 500               | 18036          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 120   | L                   | EDTA                               | No              |                         | DRB5*02:02  | LSAII  | 1000              | 10840          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 133   | L                   | None                               | No              |                         | DRB5*02:02  | LS2A01 | 1000              | 14404          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 136   | L                   | EDTA                               | No              |                         | DRB5*02:02  | LS2A01 | 1000              | 13941          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 142   | L                   | EDTA                               | No              | 16                      |   | LS2A01 | >1500             | 10534          |                           |                           | LSM12             | RATIO >5      | 11270                     |                           |                   | 27            |                           |                           |  |  |  |  |  |
| 143   | L                   | None                               | No              |                         | DRB5*02:02  | LSAII  | 17067             | 199            |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 145   | L                   | None                               | No              | NC15                    | DRB5*02:02 DRB1*12:02   | LSAII  | 1000              | 6170           |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 147   | L                   | None                               | No              |                         | DRB5*02:02  | LS2A01 | 1000              | 11264          |                           |                           | LSM12             | 3             | 5383.8                    |                           |                   | 5.97          |                           |                           |  |  |  |  |  |
| 149   | L                   | None                               | No              |                         | DRB5*02:02  | LS2A01 | 1500              | 12764          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 157   | L                   | EDTA                               | No              | 16                      |   | LS2A01 | 788               | 12716          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 160   | L                   | Beads                              | No              | LOT 14                  |   | LS2A01 | 1000              | 3604           |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 162   | L                   | EDTA                               | No              | 16                      |   | LS2A01 | 500               | 9034           |                           |                           | LSM12             | 2.5           | 11219                     |                           |                   | 70            |                           |                           |  |  |  |  |  |
| 164   | L                   | EDTA                               | No              |                         | DRB5*02:02  | LSAII  | 21967             | 337            |                           |                           | LM2               |               | 21482                     |                           |                   | 189           |                           |                           |  |  |  |  |  |
| 165   | L                   | Dilution                           | No              | 22.1                    |   | LS2A01 | 1000              | 10728          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 169   | L                   | None                               | No              | IN HOUSE                |   | LS2A01 | 1000              | 12962          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 181   | L                   | None                               | No              | 98264                   |   | LSAII  | 500               | 14340          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 185   | L                   | EDTA                               | No              |                         | DQA1*01:03  | LSAII  | 500               | 14632          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 195   | L                   | None                               | No              |                         | DRB5*02:02  | LSM12  | 2000              | 10728          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 197   | L                   | None                               | No              |                         | DRB5*02:02  | LS2A01 | 1000              | 12962          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 204   | L                   | EDTA                               | No              | LSNC                    | DRB5*02:02  | LS2A01 | 1000              | 12935          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 206   | L                   | EDTA                               | No              |                         | DRB5*02:02  | LS2A01 | 500               | 14340          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 209   | C/L                 | EDTA/Beads                         | No              |                         | DRB5*02:02  | LSAII  | 500               | 14632          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 214   | L                   | None                               | Yes             |                         |   | LM2    | 1000              | 18334          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 216   | L                   | Heat Inactivation                  | No              | 3003644                 | DQB1*03:01 DQB1*03:02 DQB1*03:03 DQB1*04:01 DQB1*04:02 DQB1*06:01 DQB1*06:02 DQB1*06:03 DQB1*06:04 DRB1*01:01 DRB1*01:02 DRB1*03:01/DR17 DRB1*03:01/DRB1*03:02 DRB1*03:03/DR18 DRB1*04:01 DRB1*04:02 DRB1*04:03 DRB1*04:05 DRB1*08:01 DRB1*11:01 DRB1*11:04 DRB1*13:01 DRB1*13:03 DRB1*14:01 DRB1*14:04 DRB1*15:01 DRB1*15:02 DRB1*16:01 DRB1*16:02 DRB3*01:01/DR52 DRB3*02:02/DR52 DRB5*02:02/DR51 DQA1*01:03 DQA1*03:01 DQA1*04:01 DQA1*05:01 DPB1*02:01 DPB1*04:02 DPB1*18:01 DPB1*28:01 DPB1*03:01 D01:01 DRB1*04:01 DRB1*04:02 DRB1*04:04 DRB1*04:05 DRB1*08:01 DRB1*08:02 DRB1*09:01 DRB1*11:01 DRB1*11:04 DRB1*12:01 DRB1*12:02 DRB1*13:01 DRB1*13:02 DRB1*14:01 DRB1*14:02 DRB1*14:54 DRB1*15:01 DRB1*15:02 DRB1*15:03 DRB1*16:01 DRB1*16:02 DRB1*03:01 DRB1*03:02 DQB1*03:01 DQB1*03:02 DQB1*03:03 DQB1*04:02 DQB1*06:02 DQB1*06:03 DQB1*06:04 DQB1*06:09 DRB5*02:02 | LS2A01 | 1200              | 6754           | 8                         |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 222   | F                   | EDTA/Dilution                      | No              | NC16                    |   | LSM2   | 1000              | 19464          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 232   | L                   | None                               | No              |                         |   | LS2A01 | 1000              | 18832          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 239   | L                   | None                               | No              |                         |   | LSAII  | 2                 | 18212          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 242   | L                   | Adsorption Beads                   | No              |                         |   | LSAII  | 1500/4/5          | 15321          |                           |                           | LM2               | 1000          | 19168                     |                           |                   | 90            |                           |                           |  |  |  |  |  |
| 252   | L                   | EDTA                               | No              |                         | DRB5*02:02  | LS2A01 | 1500              | 10927          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 257   | L                   | EDTA                               | No              |                         | DRB5*02:02 DRB1*12:02   | LS2A01 | 500               | 10263          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 268   | C/L                 | None                               | No              |                         | DRB5*02:02  | LS2A01 | 1000              | 10815          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 273   | L                   | None                               | No              |                         |   | LS2A01 | 500               | 12042          |                           |                           | LS2PRA            | 500           | 12042                     |                           |                   | 7             |                           |                           |  |  |  |  |  |
| 277   | L                   | EDTA                               | No              | 16                      | DRB5*02:02 DRB1*12:02   | LS2A01 | 1000              | 9218           |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 284   | L                   | EDTA                               | No              |                         | DRB5*02:02, DRB1*12:02  | LSAII  | 700               | 19000          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 293   | L                   | None                               | No              |                         | DQB1*03:01, 03:02, 03:03  | LSAII  | 1500              | 11083          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 302   | L                   | None                               | No              |                         | DRB5*02:02, DRB1*12:02  | LSAII  | 500               | 15999          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 303   | L                   | EDTA                               | No              | 16                      |   | LSAII  | 500               | 15999          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 309   | L                   | None                               | No              |                         | DRB5*02:02  | LSAII  | 500               | 15999          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 351   | L                   | EDTA                               | No              | 16                      |   | LSAII  | 500               | 15999          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |
| 381   | L                   | None                               | No              | 06076B                  | DRB5*02:02  | LSAII  | 500               | 15999          |                           |                           |                   |               |                           |                           |                   |               |                           |                           |  |  |  |  |  |

Technique : C = CDC, E = ELISA, F = Flow cytometry, L = Luminex, O = Other