Educational HLA Typing/Crossmatching/Antibody Scheme

Guidance for Participants

General Information

UK NEQAS for H&I have supplied one blood sample and three serum samples for the educational HLA typing/antibody detection/crossmatching scheme.

Please note that the three serum samples are not linked and do not represent one patient. Instead treat them as three different 'patient' serum samples with 1 'donor' sample. For the purposes of the exercise and interpretation of results, assume the supplied 'patient' and 'donor' samples are for live unrelated donor kidney transplantation. Assume that the 'patient' and 'donor' samples are ABO compatible.

EQA/EPT material is limited, therefore if enough material is not provided to perform all the routine tests your laboratory would usually perform, select and report the tests that will be most informative/relevant for the samples provided.

Please contact UK NEQAS for H&I if you have any queries about the testing or reporting results for this new scheme ukneqashandi@wales.nhs.uk. As with all UK NEQAS for H&I Educational Schemes the results are not assessed but summaries will be provided to laboratories that participate.

HLA Typing

Please perform HLA typing of the supplied blood sample as you would routinely perform for a potential live organ transplant donor. Results should be reported for the loci and resolution relevant for this case and as you would routinely perform for a clinical case.

Results may be reported at the serological (e.g. A2), first field (A*02), second field (A*02:01) or at a higher resolution as appropriate to the testing performed. Presence/absence reporting of DRB3/4/5 is acceptable.

HLA Antibody Detection/Specification

Please perform HLA antibody detection/definition on the 3 supplied serum samples as you would routinely perform for a solid organ transplant patient.

Result forms are provided for IgG HLA antibody detection (pos/neg) results, and Class I/Class II specificity analysis. Please report all detected specificities in the samples on these forms. Any detected HLA specific IgM antibodies can also be reported, if tested by your laboratory.

Crossmatching

Please perform crossmatching of the 3 supplied serum samples and blood sample as you would routinely perform for a live kidney transplant patient/donor. Labs are asked to test using the methodology routinely used for a live transplant clinical case (e.g. CDC only/flow cytometry only/CDC & flow cytometry, PBL/T-cell/B-cell, with/without DTT).

Result forms are provided to report the CDC/flow cytometry results as applicable.

Result Interpretation

Participants are requested to list any donor specific antibodies detected for the 3 ‘patient’ serum samples towards the ‘donor’ blood unit. If Luminex Single Antigen testing was performed please indicate the MFI of each donor specific antibody (according to local protocols for reporting MFI values).

Please answer the questions for each ‘patient’ and ‘donor’ combination. For the purposes of the questions assume that any other serum dates tested for the patient give similar results and that the test results for these samples represent the latest available.