

THE CURRENT STATUS OF UK NATIONAL EXTERNAL QUALITY ASSESSMENT SERVICE FOR HISTOCOMPATIBILITY AND IMMUNOGENETICS



Welsh Blood Service
Gwasanaeth Gwaed Cymru

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for HISTOCOMPATIBILITY and IMMUNOGENETICS
UNITED KINGDOM EXTERNAL QUALITY ASSESSMENT SERVICE

WELSH TRANSPLANTATION AND IMMUNOGENETICS LABORATORY

Introduction

The UK National External Quality Assessment Service for Histocompatibility and Immunogenetics (UK NEQAS for H&I) have provided a range of EQA (proficiency testing) schemes for all relevant laboratories in the UK and overseas since 1975.

Participating clinical laboratories are sent samples on a regular basis, which they test as if they had come from patients. UK NEQAS provides a report that compares the participant's test performance with that of other laboratories.

This non-profit making service is accredited by Clinical Pathology Accreditation (UK) Ltd.

Scheme offered and laboratory participation

267 laboratories from 37 countries participated in 15 schemes in 2014.

The Schemes available and the number of laboratories taking part in each scheme during 2014 were:

1A - HLA Phenotyping – 42

1B - HLA-B*27 Typing – 107

2A - Cytotoxic Crossmatching – 77

2B - Crossmatching by Flow Cytometry – 71

3 - HLA Antibody Specificity Analysis – 78

4A1 - DNA HLA Typing at 1st Field Resolution – 97

4A2 - DNA HLA Typing to 2nd Field Resolution – 59

4B - ABO Grouping by DNA-based Methods – 10

5A - HFE Typing – 58

5B - Interpretive: HFE Genotyping and Hereditary Haemochromatosis – 20

6 - HLA Antibody Detection – 82

7 - HLA-B*57:01 Typing for Drug Hypersensitivity – 56

8 - HLA & Disease Typing for HLA-DR/DQ/DP only – 21

Educational and Interpretive Educational Schemes - 44 and 51, respectively

Scheme assessment

Most schemes are assessed on a 75% consensus basis, i.e. 75% of reports must agree on a result for it to be assessed. A 95% consensus level for antibody absence is used in Scheme 3.

Scheme 5B uses a penalty points system for its assessment.

The two Educational Schemes are not assessed.

Satisfactory performance

- May expect all results reported in a year to agree with the consensus findings (schemes involving specific typing), e.g. Scheme 1B.
- Allow a single sample error (full phenotyping/genotyping), e.g. Scheme 1A.
- Expect a percentage of results (75-85% depending on scheme) in agreement with the consensus findings (crossmatching, antibody specification and detection), i.e. Schemes 2A/B, 3, 6.

In 2014, for assessed schemes, there was an overall 88.5% satisfactory performance rate.

Further information

Full information on all UK NEQAS for H&I schemes is available at: www.neqashandi.org or contact the Scheme Manager - Deborah Pritchard
E-mail: ukneqashandi@wales.nhs.uk