

# **Academy of Medical Laboratory Science & Irish External Quality Assurance Scheme**

## **Update and Position Paper on Pathology Harmony in Haematology**

Date: 27<sup>th</sup> March 2013

### **Introduction and background**

Reporting units used in haematology currently vary around the world, from country to country and also between laboratories. In the United Kingdom, the Department of Health established a Pathology Harmony Project in 2007 led by the Clinical Director of Pathology, driven by a perceived danger that variation in test names, units and reference intervals can cause confusion among service users that poses a risk to patients. They also considered it desirable that clinicians can directly compare pathology results from various service providers. The relevant UK professional bodies were engaged in the project that aims at standardisation of reporting units and reference intervals in pathology testing.

In haematology, the reporting units used for the extended Full Blood Count (FBC) and differential have been the initial focus of the UK harmonisation group, who have formally agreed with the professional bodies to introduce standard reporting units by 31<sup>st</sup> March 2013. The most significant changes in practice agreed are the adoption of SI units to report Haemoglobin and mean cell haemoglobin concentration (MCHC) (i.e., as g/L instead of as g/dL). In addition they propose that the differential white cell count, reticulocyte count and nucleated red blood cells (NRBCs) should be reported as absolute numbers ( $\times 10^9/L$ ) rather than as percentages, as or numbers per 100 white cells, respectively.

The desirability and possibility of standardisation of haematology reporting units worldwide are currently being proposed, primarily by UK participants, for consideration by the International Committee for Standardisation in Haematology (ICSH). However, these discussions are ongoing and no conclusions have been reached or recommendations made as yet.

### **Current position in the Republic of Ireland**

- Republic of Ireland laboratories are not bound by the UK deadline for harmonisation of reporting units in haematology and are under no obligation currently to implement any changes, other than to report FBC results in the required units in their returns to United Kingdom EQA schemes.
- No decision has been made yet as to the desirability or otherwise, possible cost and logistics that would be involved in implementing such harmonisation of reporting units in the Republic of Ireland, however it is under active consideration.

- A survey of Republic of Ireland laboratories was carried out by the Academy and IEQAS in the last quarter of 2012. In summary, this revealed that two laboratories currently report Hb and MCHC as g/L, the others as g/dL. There is much greater variability in the reporting units used to report white cell differential, reticulocyte numbers and nucleated RBC numbers.
- A meeting has been arranged between representatives of the relevant Irish professional bodies, the Academy of Medical Laboratory Science, IEQAS, the Programme Director of the HSE National Clinical Programme in Pathology, the Irish Haematology Society, the Faculty of Pathology of the Royal College of Physicians of Ireland and the Irish College of General Practitioners, on 11<sup>th</sup> April 2013 to consider the issue of pathology harmony in haematology further.
- A national change in reporting units, if such should be considered necessary and agreed, would include in addition to all laboratory reporting, point-of-care devices and hospital and national IT systems. Such a change would therefore require careful planning, organisation, publicity to inform all service users and may have cost implications.
- An update will be provided at the Academy of Medical Laboratory Science's annual conference, LabCon on 26<sup>th</sup> April 2013.
- The possibility of international harmonisation of reporting units in haematology is on the agenda for discussion at the ICSH annual meeting on 9<sup>th</sup> May 2013. The chair of the Academy's Haematology Advisory Body has been invited to join the committee and will provide feedback to the Irish professional bodies and Irish laboratories through the Academy.

Richard McCafferty  
Chair, Haematology Advisory Body,  
Academy of Medical Laboratory Science