

Organization: Weqas, UK



JCTLM Member status: Stake Holder

Author(s): David Ducroq

Author(s) email(s): david.ducroq@wales.nhs.uk

Period covered: 2015 – 2017

1. Major achievement(s) in support of standardization in laboratory medicine

- Cortisol Reference Measurement method transferred from ID-GCMS to Tandem LC-MS-MS. All Weqas endocrine programme samples now include Reference Measurement target values for cortisol. Method based on Hawley, JM et al Candidate Reference Measurement Procedure for the Quantification of Total Serum Cortisol with LC-MS/MS Clinical Chemistry 2016; v. 62, p.262-269 (modified using a bracketed standard curve and ¹³C internal standard).
- Production of CE marked Reference Measurement targeted serum cortisol standards for use in Tandem LC-MS-MS methods

2. Planned activity(ies) in support of standardization in laboratory medicine

- Transfer of testosterone Reference Measurement method from ID-GCMS to Tandem LC-MS-MS (currently ongoing)
- Transfer of progesterone Reference Measurement method from ID-GCMS to Tandem LC-MS-MS
- Development of Vitamin D Tandem LC-MS-MS Reference Measurement method
- Development of bilirubin Reference Measurement method (currently on hold due to unavailability of NIST 916a traceable calibrator)

3. Promoting traceability in laboratory medicine

- Traceability of Cortisol Assays – LC-MS/MS Reference Method value comparison, Ducroq DH, Thompson S, Thomas MA (poster Euromedlab, Athens 2017)
- Are Laboratory Creatinine Methods traceable? – Comparison with ID-GCMS Reference Method Ducroq DH, Thompson S, Thomas MA (presentation and poster Euromedlab, Athens 2017)
- Comparison of Total Bile Acid Assays in Serum to an Improved ID-GCMS method for Cholic Acid, Chenodeoxycholic Acid and Deoxycholic Acid, Ducroq DH, Thompson S, Davies G, Thomas MA (ACB Focus (UK) poster May 2017)
- Traceability of Glucose Assays in the UK – Comparison with JCTLM listed Reference Method Ducroq DH, Strevens C, Thomas MA (Eqalm meeting poster Barcelona Oct 2016)
- Traceability under ISO 15189 (D Ducroq, ACB Wales Audit Meeting presentation Sept 2016)
- Association for Clinical Biochemistry and Laboratory Medicine (ACB) Specialist Interest Group for LC-MS/MS Tandem Mass Spectrometry and UKAS accreditation, Short presentations on Key ISO Points for an MS lab: Uncertainty and traceability (David Ducroq presentation, February 2016)

4. Reference laboratory networks /collaborations focusing on developing /implementing reference measurement systems

- Member of JCTLM Working Group for Traceability, Education and Promotion:
Workstream 1: Definitions (David Ducroq)

Workstream 2: Presentations (Traceable and commutable calibrators, David Ducroq, JCTLM webinar 2017)

- JCTLM Review Team Leader for Electrolytes and Blood Gases (David Ducroq)
- JCTLM Review Team member for:
 - Metabolites (David Ducroq)
 - Non-peptide hormones (David Ducroq)
- Member of Association for Clinical Biochemistry and Laboratory Medicine (ACB) Scientific Committee Working Group on Traceability and Harmonisation of Calibration (David Ducroq)

5. Open questions and suggestions to be addressed by JCTLM

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