Biennial activity report from Research Centre for Metrological Traceability in Laboratory Medicine (CIRME), University of Milan

Organization: Research Centre for Metrological Traceability in Laboratory Medicine (CIRME), University of Milan, Milan, Italy

JCTLM Member status: JCTLM Stakeholder Member

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Period covered: 2018 – 2019

Activities in support of standardization in laboratory medicine

The main activities of CIRME are:

• Characterization and certification of reference materials
• Evaluation of commutability of reference and calibration materials
• Value targeting of EQA materials
• Validation of traceability of commercial IVD systems

Major achievements in support of standardization in laboratory medicine

1. Activity as reference laboratory service for the following measurands: ALT, ALP, AST, CK, GGT, LDH, Glucose, HbA1c.

2. Activities related to the validation and verification of IVD measuring systems as described in the following papers published in peer-reviewed journals:


Promoting traceability in laboratory medicine
1. Organization of International CIRME Meetings:
   1. 12th International Scientific Meeting, 2018 - Standardization in Laboratory Medicine and Patient Safety
   2. 13th International Scientific Meeting, 2019 - The Internal Quality Control in the Traceability Era
3. Publications of critical reviews in the field:
difference in bias between a reference material and clinical samples. Clin Chem 2018;64:455–64

4. Presentations on traceability at the following international and national conferences or congresses:
   1. Importance of measurement uncertainty estimate in medical laboratories. Accurate Results for Patient Care Workshop 2019. A JCTLM Members’ and Stakeholders’ meeting (Paris, France, December 2, 2019) – F Braga
   3. Redesigning analytical quality control to meet metrological criteria. 13th International Scientific Meeting “The internal quality control in the traceability era” (Milan, Italy, November 28, 2019) – M Panteghini
   6. Why measurement uncertainty matters in laboratory medicine. 20th Congress of Clinical Chemistry and Laboratory Sciences (Santiago, Chile, October 24, 2019) – M Panteghini
   7. The role of EQA in the verification of in vitro medical diagnostics in the traceability era. 1st Focus Forum on Laboratory Medicine (Beijing, China, March 29, 2019) – M Panteghini
   8. Serum folate test in European countries. 5th Serbian Biomarker Symposium – SERBIS (Belgrade, Serbia, March 27, 2019) – M Panteghini
   9. Standardization: a bumpy but necessary path. 12th International Scientific Meeting “Standardization in Laboratory Medicine and patient safety” (Milan, Italy, November 29, 2018) – M Panteghini
10. Roles and responsibilities in traceability implementation. 12th International Scientific Meeting “Standardization in Laboratory Medicine and patient safety” (Milan, Italy, November 29, 2018) – F Braga
11. Top class EQAS: dream or reality? 12th International Scientific Meeting “Standardization in Laboratory Medicine and patient safety” (Milan, Italy, November 29, 2018) – A Mosca


15. Standardization and harmonization in Laboratory Medicine: a matter of patient safety. Labquality Days (Helsinki, Finland, February 8, 2018) – M Panteghini

Collaborations focusing on developing/implementing reference measurement systems

Participation as member in:
1. ISO/TC 212 WG2
2. JCTLM WG-DB and related RTs (Enzymes and Proteins)
3. JCTLM Task Force on Reference Measurement System Implementation
4. IFCC Committee on Traceability in Laboratory Medicine
5. IFCC WG on Commutability
6. IFCC WG on Standardization of Troponin I
7. IFCC WG on Standardization of HbA2
8. IFCC WG on Standardization of Albumin Assay in Urine
9. IFCC WG on Pancreatic Enzymes
10. EFLM WG on Biological Variability and Task Group on Biological Variability Database