Report presented at the EFLM General Meeting
17th July 2020

Science Committee
Chair: Eric Kilpatrick
Science Committee of the EFLM

- Highlights some activities and plans of the Committee
- The place of the Science Committee
Reducing variation in the brain-to-brain loop

Plebani M.
Current WG and TGs/TFGs

- **WG: Biological Variation**
  - Task Group: Biological Variation Database
    - Task and Finish Group: Practical Approach to Measurement Uncertainty
- **WG: Guidelines**
  - Task Group: Cardiac Markers
  - Task and Finish Group: Urinalysis
  - Task and Finish Group: Autoimmunity testing
  - Task and Finish Group: Lab diagnostics and CKD
- **WG: Harmonisation**
- **WG: Patient Focused Laboratory Medicine**
- **WG: Postanalytical Phase**
- **WG: Preanalytical Phase**
  - Task and Finish Group: Hemolysis, Icterus and Lipemia (HIL) interference
- **WG: Test Evaluation**
  - Task Group: Performance Specifications Based on Outcome Studies
Reducing variation in the brain-to-brain loop

WG-Guidelines

Action

Patient's brain

Physician's brain

Interpretation

Laboratorian's brain

Ordering

Reporting

Analysis

Preparation

Identification

Collection

Transportation

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• Maintain an inventory of clinical guidelines relevant to laboratory medicine
National Guidelines from EFLM Member Societies

In this section, by clicking the linked topic, you can access the related page where National Guidelines from EFLM Member Societies are listed.

The below list of topics can be implemented. Please send to news@eflm.eu any further guidelines edited by your National Societies (English version or in original language with abstract in English).

Topics

- Accreditation and ISO/CEN standards
- Acute Coronary Syndrome
- Analytical Phase
- Appropriateness
- Best practice recommendations
- Blood Gas Testing
- Cerebro Spinal Fluid
- Chronic Kidney Disease
- Coagulation
- Cystic Fibrosis
- Diabetes
- Dyslipidemia
- External Quality Assurance
- Haematology
- Point of Care Testing
- Postanalytical Phase
- Preanalytical Phase
- Prenatal Screening
- Protein Diagnostic
- Sepsis
- Urinanalysis
• Maintain an inventory of clinical guidelines relevant to laboratory medicine
• Prioritising development of European Lab Medicine guidelines
• Collaborative guidelines with other European and international clinical societies EAS, IFCC, IAS
• Task Group: Cardiac Markers

• Task and Finish Group: Urinalysis

• Task and Finish Group: Autoimmunity

• Task and Finish Group: Laboratory diagnostics and CKD
Reducing variation in the brain-to-brain loop

WG-Guidelines

WG-Preanalytical Phase

Plebani M.
• Exact time of venous blood sample collection – an unresolved issue, on behalf of the European Federation for Clinical Chemistry and Laboratory Medicine (EFLM) Working Group for Preanalytical Phase (WG-PRE)

• PREDICT: a checklist for preventing preanalytical diagnostic errors in clinical trials

• European survey on preanalytical sample handling – Part 1: How do European laboratories monitor the preanalytical phase?
  On behalf of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Working Group for the Preanalytical Phase

• European survey on preanalytical sample handling – Part 2: Practices of European laboratories on monitoring and processing haemolytic, icteric and lipemic samples. On behalf of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)

• Preanalytical challenges – time for solutions
Specific aims include:
• assessing serum HIL indices
• reporting HIL indices
• conducting interference experiments
• Promoting the importance of the issues related to the HIL detection and management among laboratory professionals.
Reducing variation in the brain-to-brain loop

WG-Guidelines

WG-Preanalytical Phase

WG-Postanalytical Phase

WG-Harmonisation

Plebani M.
• Developing recommendations on the format of printed and electronic results
• Survey on how labs clinically advise users when confronted with different test results.
• Take initiatives to harmonise nomenclature, units and reference intervals on a European level.

• Promote and coordinate the diffusion of promising harmonisation initiatives among the EFLM member societies.
Reducing variation in the brain-to-brain loop

WG-Guidelines

WG-Preanalytical Phase

WG-Postanalytical Phase

WG-Test Evaluation

WG-Harmonisation

Plebani M.  
- Test Evaluation course (Belfast, 2020)

- Publication of ‘Setting clinical performance specifications to develop and evaluate biomarkers for clinical use’

- Recommendations regarding embedding of new IVDR requirements into the existing ISO 15189 QMS of medical labs
Reducing variation in the brain-to-brain loop

WG-Guidelines

WG-Preanalytical Phase

WG-Postanalytical Phase

WG-Test Evaluation

WG-Biological Variation

WG-Harmonisation

• The European Biological Variation Study (EuBIVAS) study. Numerous publications published or in process in the last year
• The Biological Variation Critical Appraisal Checklist (BIVAC)
Publications


• The European Biological Variation Study (EuBIVAS) study.
  Numerous publications published or in process in last year
• Launch of the EFLM Biological Variation Database
1. To develop a practical proposal how to implement the total measurement uncertainty (MU) 
2. To determine the major components of MU of common laboratory tests; 
3. To determine the procedure of data collection of MU components; 
4. To determine the acceptable MU-limits for a group of tests commonly performed in medical laboratories.
Reducing variation in the brain-to-brain loop

WG-Guidelines

 WG-Patient Focused Laboratory Medicine

 WG-Postanalytical Phase

 WG-Test Evaluation

 WG-Biological Variation

 WG-Harmonisation

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• Exploring patient attitudes to receiving Specialist in Laboratory Medicine support
• Best Practice in communicating with patients
  Survey on apps incorporating Lab Med data with aim of developing acceptability criteria
Overlapping activities

WG-Guidelines

WG-Preanalytical Phase
- Ordering
- Collection
- Identification
- Transportation

WG-Postanalytical Phase
- Action
- Patient’s brain
- Interpretation
- Laboratorian’s brain

WG-Test Evaluation
- Analysis
- Preparation

WG-Biological Variation

WG-Harmonisation

Plebani M.
The EFLM Science Committee is the National Societies’ Science Committee

• 7 Working Groups and 8 Task/Task and Finish Groups
• 144 members/corresponding members/experts
• 34 countries
• Young members in each WG
Summary

• EFLM Science Committee is working to reduce variations in practice throughout the full testing loop

• Ongoing co-operation with national, international bodies and industry is necessary put limited time to best use

• It is an example of international collaboration at its best