

2024

2025

EFLM

EUROPEAN FEDERATION OF CLINICAL CHEMISTRY
AND LABORATORY MEDICINE

EFLM ESSENTIALS

all you need to
know about EFLM

www.eflm.eu

EFLM provides European leadership in Clinical Chemistry and Laboratory Medicine to national professional societies, the diagnostic industry and to governmental and non-governmental organisations in order to serve the public interest in health care

TABLE OF CONTENTS



Chapter	Content
01	Preface from the EFLM President (2024-2025)
02	Organisation, Structure and Function
03	National Membership
04	Corporate Membership
05	International Organisations
06	Congresses and Conferences
07	Science Value Based Lab Med Division (D-S)
08	Education and Profession (D-EP)
09	Quality and Regulations Division (D-QR)
10	Communication Division (D-C)
11	Awards
12	Finances
13	EFLM Statutes and Organisational matters
14	EFLM Publications 2024-2025

EFLM
ESSENTIAL
2024-2025

EFLM ESSENTIAL 2024-2025

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Chapter 1: Preface from the EFLM President (2024-2025)

Serving as President of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) during the 2024-2025 biennium has been a privilege and a deeply enriching experience. These two years have been characterized by important initiatives aimed at strengthening the role, visibility, and impact of laboratory medicine within modern healthcare.

I would like to take this opportunity to reflect briefly on some of the achievements made possible through the dedication and collaboration of our entire community, and to express my sincere gratitude to all those who have contributed to the continued growth and vitality of our Federation. Throughout this period, I have been fortunate to rely on the support of an Executive Board composed not only of colleagues of outstanding professional competence, but also, and above all, of individuals of exceptional human quality and genuine friendship.

I would also like to acknowledge the invaluable contribution of the EFLM Secretariat. Under the highly professional leadership of Silvia Cattaneo, and with the dedicated support of Silvia Terragni and the recent addition of Alessia to the team, the Secretariat has provided an essential foundation for the Federation's activities. Their professionalism, commitment, and collaborative spirit have greatly facilitated the work of the Federation.

Growth and renewal of the Federation

During the 2024-2025 biennium, EFLM continued to expand its reach and influence, now encompassing 42 full members, 10 affiliate members, and 8 corporate members. This growth reflects the collective efforts of the Executive Board, National Societies, Corporate Members, Committees, and the many professionals who contribute daily to the advancement of Laboratory Medicine in Europe.

A particularly important achievement was the reorganization of the EFLM structure, implemented in January 2025. This restructuring was designed to reduce overlaps, strengthen efficiency, and provide a clearer strategic framework for the Federation's future. It also aligned EFLM's functional terminology with that of the IFCC, reinforcing coherence with the broader international community. Above all, the new structure strengthened the shared mission of EFLM's functional units: to promote value-based laboratory medicine and to enhance the visibility and recognition of our discipline as an essential and measurable contributor to healthcare.

Advancing value-based laboratory medicine

A significant initiative launched during this period was the establishment of the EFLM Committee Value-Score for Clinical Laboratories, which began its activities in January 2025 under my chairmanship. The Committee aims to develop a framework capable of objectively evaluating and benchmarking the quality of clinical laboratory services.

Its objectives include identifying the fundamental requirements that define laboratory quality, enabling objective assessment across the entire testing process, developing a value-based scoring system based on measurable and easily collectable data, and establishing benchmarking programmes among clinical laboratories.

This initiative represents an important step toward promoting value-based laboratory medicine, providing laboratories with practical tools to demonstrate their contribution to high-quality patient care and helping translate the concept of value-based laboratory medicine from theory into practice.

Education, sustainability and strategic development

Education remains one of the pillars of EFLM's mission. The EFLM Academy has continued to grow steadily and now includes more than 10,000 subscribers, among whom approximately 5,000 are registered EuSpLM professionals. This expansion reflects the strong commitment of our community to continuous professional development and lifelong learning.

At the same time, the EFLM Green & Sustainable Laboratories certification programme has gained increasing momentum. To date, 23 laboratories in 12 countries have achieved certification,

demonstrating a growing commitment within our community to environmental responsibility and sustainable innovation.

Another key area of progress has been the continued focus on harmonization throughout the total testing process. Ensuring the comparability and reliability of laboratory information requires harmonization not only of analytical procedures but also of pre-analytical and post-analytical phases, including the use of consistent measurement units.

Guiding these initiatives has been the EFLM Strategic Plan 2024-2025, which defined priorities centred on innovation, education, scientific advancement, and cooperation within the EFLM community. Building on this foundation, preparations for the Strategic Plan 2026-2027 are already underway in collaboration with the incoming leadership, ensuring continuity and a long-term vision for the Federation.

International recognition and collaboration

The 2024-2025 biennium also brought moments of significant personal and professional recognition, which I regard not only as individual honours but also as reflections of the growing international visibility of EFLM and its values. Among these were the Honorary Doctorate awarded by the University of Buenos Aires in 2024 and the Roman Lecture Award from the Australasian Association for Clinical Biochemistry and Laboratory Medicine in 2025. I was also deeply grateful for the recognition received from the Korean Society of Laboratory Medicine, further highlighting the strong global collaboration that characterizes our discipline.

Looking ahead

EFLM continues to promote scientific exchange and collaboration through its flagship initiatives, including the EFLM Conference on the Preanalytical Phase. Alongside this well-established event, new initiatives aimed at strengthening collaboration among EFLM functional units and enhancing the dissemination of scientific outputs continue to emerge, reflecting the dynamic and cooperative spirit of our Federation.

A message of gratitude

I would like to conclude by expressing my heartfelt appreciation to the members of the EFLM Executive Board, the EFLM Office, our National Societies, Corporate Members, Committees, and all colleagues who contribute to the life of the Federation. Their dedication, professionalism, and enthusiasm have been the driving forces behind our shared progress.

It has been a privilege to serve as President of EFLM. I am confident that the Federation will continue to thrive under its new leadership, building upon the strong foundations established over the years and further reinforcing the essential role of laboratory medicine in modern healthcare.

With my sincere gratitude and best wishes,
Mario Plebani
EFLM President (2024-2025)

Chapter 2: Organisation, Structure and Function

- 2.1. Introduction
 - 2.2. Organisation of EFLM
 - 2.3. The EFLM Executive Board 2024-2025 (EB)
 - 2.4. Clinical Chemistry and Laboratory Medicine: Role in Healthcare
 - 2.5. Mission Statement and Aims of EFLM
 - 2.6. Strategic Objectives 2024-2025
 - 2.7. A Brief History of EFLM
 - 2.8. EFLM Presidents timelines
-

2.1. Introduction

The European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) was formed in June 2007 at the EuroMedLab Congress in Amsterdam by the merger of the Forum of European Societies of Clinical Chemistry (FESCC) and the European Communities Confederation of Clinical Chemistry (EC4).

EFLM connects National Societies of Clinical Chemistry and Laboratory Medicine and creates a platform for all European “Specialists in Laboratory Medicine”. EFLM provides European leadership in Clinical Chemistry and Laboratory Medicine to national professional societies, the diagnostic industry and to governmental and non-governmental organisations in order to serve the public interest in health care.

2.2. Organisation of EFLM

After 10 years of continuous growth and several achievements, the Executive Board has considered a global reorganisation of the structure of the EFLM functional units, which was discussed with the Committees Chairs and then presented at the EFLM General Meeting in June 2024. The new EFLM structure was implemented in January 2025. In the frame of this reorganisation, some adjustments have been necessary, mainly to those few functional units which have been merged or whose tasks have been incorporated under the responsibility of other functional units.

Also, the terminology related to the EFLM functional units is changed to be aligned with the terminology in use in IFCC. According to this solution, starting from January, EFLM will have 4 Divisions instead of the 5 previously named as Committees, outlined as follows:

- Division “Science: Value Based Laboratory Medicine”
- Division “Quality, Standards and Regulations”
- Division “Education and Profession”
- Division “Communication”

All functional units belonging to Divisions will be collectively referred to as Committees or Technical Committees, regardless of whether they were previously designated as Working Groups, Task Groups, or Task Forces. A constructive discussion with all those involved was conducted in which criticisms and suggestions were collected and considered to implement the new organization in the right way and to promote further development. However, as for any new initiative, further evaluation and monitoring should be performed based on the outcomes and, eventually, some minor or major revision taken into consideration.

The GM is the governing body of EFLM and is composed of a nominated representative from each National Society Full Member of EFLM entitled to vote on behalf of its National Society. The GM usually convenes at least once every two years, preferably connected to the EuroMedLab Congress. The EB is the executive body of EFLM and is composed of 7 officers (president, past-president, president elect, secretary, treasurer and two members-at-large) elected by the GM for 2-year terms.

Membership in EFLM Committees is by application and open to nominations by EFLM Full National Societies when a call for nominations is issued. While membership in TCs is by invitation of the TC Chair and the proposal must be notified and approved by the EB being. The detailed process of nominations is described in the EFLM Procedure Manual.

2.3. EFLM Executive Board 2024-2025 (EB)

President	Mario PLEBANI Dept of Laboratory Medicine University Hospital – Padova, University of Padova Padova, Italy
Past President	Tomris OZBEN Dept. of Clinical Biochemistry Faculty of Medicine, Akdeniz University Antalya, Turkey
President-Elect	Tomas ZIMA Inst. of Clin. Chem. & Lab. Diagnostic First Faculty of Medicine Charles Univ. Prague, Czech Republic
Secretary	Snezana JOVICIC Dept for Medical Biochemistry Faculty of Pharmacy, University of Belgrade Belgrade, Serbia
Treasurer	Klaus P. KOHSE Univ. Medicine Oldenburg, Inst. for Clin. Chemistry and Lab. Medicine Klinikum Oldenburg Oldenburg, Germany
Member at Large	Pilar FERNANDEZ-CALLE Dept. of Laboratory Medicine Hospital Universitario La Paz Madrid, Spain
Member at Large	Dalius VITKUS Centre of Laboratory Medicine, Vilnius University Hospital Santaros Klinikos Vilnius, Lithuania

2.4. Clinical Chemistry and Laboratory Medicine: Role in Healthcare

Clinical Chemistry and Laboratory Medicine is at the heart of modern healthcare, and plays a vital role in screening for disease, diagnosis, risk assessment, treatment selection, monitoring of therapy, prognosis and other aspects of clinical decision-making. It is thus central to effective patient care. Patients throughout Europe have the right to expect high standards of Laboratory Medicine wherever they present to the health care system.

2.5. Mission Statement and Aims of EFLM

The mission of EFLM is to enhance patient care and improve outcomes by promoting and improving the scientific, professional and clinical aspects of clinical chemistry and laboratory medicine and to

ensure effective representation of laboratory medicine both at European Union level and to other pan-European and sub-regional bodies. EFLM deals with specific European issues of Clinical Chemistry and Laboratory Medicine.

2.6. Strategic Objectives 2024-2025

The EFLM Strategic Plan for 2024-2025 outlined the Federation's priorities and objectives aimed at strengthening the role of laboratory medicine across Europe. The plan was developed by the EFLM Executive Board, taking into account comments and proposals received from several EFLM National Societies and from the Chairs of the EFLM Functional Units, who were invited to contribute ideas and potential actions within their respective fields of expertise. The feedback received was highly positive and reflected the strong engagement of the EFLM community in shaping the future of laboratory medicine.

The Strategic Plan was structured around five key strategic areas, encompassing 35 objectives and a wide range of actions designed to promote innovation, collaboration, education, and scientific development within the discipline.

Improving the Future of Laboratory Medicine

This area focused on identifying emerging trends and clinical needs in laboratory medicine. Key priorities included promoting value-based laboratory medicine, supporting standardisation and harmonisation initiatives, addressing developments such as decentralised testing and self-testing, and fostering new education and training models. Particular attention was also given to improving patient outcomes through better test utilisation, the integration of new technologies such as artificial intelligence, and the dissemination of scientific outcomes in accessible formats.

2. Structure and Organization

Actions in this area aimed at strengthening the internal organisation of EFLM. These included the implementation of the new structure of Functional Units, the evaluation of their activities and outputs, improvements in internal communication and collaboration platforms, and initiatives to increase the visibility and benefits of EFLM membership. Efforts were also directed toward encouraging active participation from National Societies and promoting greater involvement of young scientists.

3. Relations with Other Organizations

Strengthening collaboration with external partners represented an important component of the strategic vision. The plan promoted closer cooperation with clinical and scientific societies, the in vitro diagnostics industry, regulatory and legislative bodies, and international organisations such as IFCC and the World Health Organization. These collaborations aimed to support integrated diagnostics, joint guideline development, and harmonisation initiatives.

4. Profession, Education and Training, and Communication

This strategic area addressed professional development and educational opportunities for specialists in laboratory medicine. Actions included promoting the EFLM Academy, the continuing professional education credit system (CPECS®), and the development of new educational formats such as webinars, online clinical case discussions, and practical training courses. Communication initiatives also aimed to increase awareness of EFLM activities and strengthen engagement within the professional community.

5. Scientific Affairs

The final strategic area focused on advancing scientific innovation and research in laboratory medicine. Objectives included identifying emerging areas of translational research, evaluating disruptive technologies, promoting guidance on laboratory-developed tests and direct-to-consumer testing, and supporting the development of integrated diagnostics. The strategic plan also addressed the growing role of artificial intelligence, big data, and improved laboratory reporting in enhancing clinical decision-making and patient care.

Overall, the Strategic Plan 2024-2025 reflected EFLM's commitment to a collaborative and forward-looking approach, involving all stakeholders in the identification of innovative ideas and initiatives aimed at strengthening the impact of laboratory medicine in Europe.

2.7. A Brief History of EFLM

The origin of EFLM is based on the history of FESCC, EC4, EFCC (latterly EFLM).

In the 1970s it was becoming clear to Clinical Chemists in a number of European countries that there was concern for the comparability of the profession in Europe. At the 1987 IFCC World Congress at the Hauge, Gerard Sanders, then President of the Netherlands Society, convened a meeting of all European Society Presidents to consider writing a Training Programme for a vocational programme to achieve recognition; there were a number of meetings and from this FESCC developed. Prof Hermann Wisser (DE) was nominated as President and wanted a structure that would enable FESCC to be a European branch of IFCC which was supported by the IFCC President Gerard Siest.

EC4 was originally initiated as an informal body of some of the EC (European Community) National Society representatives by Ad Jansen (father of Rob Jansen) in 1977-8 at Bergeyk, Netherlands. The intention was to achieve a Sectorial Directive for Clinical Chemists comparable to the Medical Directive.

FESCC represented the interests of clinical chemistry in the geographical area of Europe whilst EC4 represented these activities within the EU. As the EU expanded and activities overlapped an initiative at the General Assembly in Glasgow in 2005 proposed a merger of FESCC and EC4; Mike Hallworth and Rob Jansen for EC4 worked with FESCC to propose the merged organisation of EFCC, this was accepted at the General Assembly in Amsterdam in June 2007.

EFCC absorbed the Committees and Working Groups of EC4 under the activity of the Profession Committee, this enabled continuity of on-going work and to identify new directions. EFCC took also the role of FESCC as the European Region of IFCC, formal agreements were established to define the relationship and the responsibilities around the EuroMedLab Congress, which are regularly updated. As a new organisation, EFLM was registered in Brussels as an Association Internationale Sans But Lucratif (AISBL), though the administrative office remained in Milano.

The European Federation for Clinical Chemistry and Laboratory Medicine was originally abbreviated to EFCC in 2007, subsequently it was agreed that to better reflect the Laboratory Medicine element and its specialty, the abbreviation "EFLM" was adopted in 2012.

2.8. EFLM Executive Board Members timelines

EFLM Presidents

- 2024-2025 Mario Plebani (IT)
- 2022-2023 Tomris Ozben (TR)
- 2020-2021 Ana-Maria Simundic (HR)
- 2018-2019 Michael Neumaier (DE)
- 2016-2017 Sverre Sandberg (NO)
- 2014-2016 Mauro Panteghini (IT)
- 2011-2013 Ian Watson (UK)
- 2009-2011 Andrea (Rita) Horvath (HU)
- 2008-2009 Michael Hallworth (UK)
- 2007-2008 Victor Blaton (BE)

EFLM Executive Board Secretaries

- 2024-2025 Snezana Jovicic (SRB)

- 2022-2023 Snezana Jovicic (SRB)
- 2020-2021 Giuseppe Lippi (IT)
- 2018-2019 Giuseppe Lippi (IT)
- 2016-2017 Ana-Maria Simundic (HR)
- 2014-2015 Ana-Maria Simundic (HR)
- 2011-2013 Ana-Maria Simundic (HR)
- 2009-2011 Hans van Pelt (NL)
- 2007-2009 Hans van Pelt (NL)

EFLM Treasurers

- 2024-2025 Klaus Kohse (DE)
- 2021-2023 Klaus Kohse (DE)
- 2020-2021 Klaus Kohse (DE)
- 2019-2019 Huib Storm (NL)
- 2016-2017 Huib Storm (NL)
- 2014-2015 Huib Storm (NL)
- 2011-2013 Peter Schuff-Werner (GE)
- 2009-2011 Peter Schuff-Werner (GE)
- 2007-2009 Peter Schuff-Werner (GE)

Members at Large

2024-2025 Pilar Fernandez-Calle (SP) - Dalius Vitkus (LT)
 2022-2023 Pilar Fernandez-Calle (SP) - Dalius Vitkus (LT)
 2020-2021 Pilar Fernandez-Calle (SP) - Dalius Vitkus (LT)
 2018-2019 João Tiago Guimaraes (PT) - Tomas Zima (CZ)
 2016-2017 Grazyna Sypnieweska (PL) - Tomas Zima (CZ)
 2014-2015 Grazyna Sypnieweska (PL) - Tomas Zima (CZ)
 2011-2013 Huib Storm (NL) - Tomas Zima (CZ)
 2009-2011 Mario Pazzagli (IT) - Kari Pulkki (FI)
 2007-2009 Mario Pazzagli (IT) - Kari Pulkki (FI)

Chapter 3: National Membership

- 3.1. Full Members
 - 3.2. Affiliate Members
-

3.1. Full Members

Full membership is open to any IFCC Full Member NS/Association active in the field of Laboratory Medicine and from a European country (as defined by the WHO country classification). Only one NS/Association per country is eligible to Full membership.

At the time of this Guidebook, EFLM has the following Full Members:

ALBANIA

Albania Society of Clinical Biochemistry and Laboratory Medicine

EFLM National Representative: Prof. Anyla Bulo Kasneci

National Society President: Prof. Anyla Bulo Kasneci

ARMENIA

Association of Medical Laboratory Diagnostics Specialists

EFLM National Representative: Prof. Avanesyan Alvard

National Society President: Prof. Avanesyan Alvard

AUSTRIA

Austrian Society of Laboratory Medicine and Clinical Chemistry

EFLM National Representative: Prof. Andrea Griesmacher

National Society President: Dr. Georg Mustafa

AZERBAIJAN

Azerbaijan Society of Clinical Laboratory Specialists

EFLM National Representative: Prof. Ramin Bayramli

National Society President: Prof. Arif Afandiyev

BELGIUM

Royal Belgian Society of Laboratory Medicine

EFLM National Representative: Prof. Pieter Vermeersch

National Society President: Prof. Etienne Cavalier

BOSNIE-HERZEGOVINA

Association of Medical Biochemists in Bosnia-Herzegovina

EFLM National Representative: Prof. Radivoj Jadric

National Society President: Prof. Radivoj Jadric

BULGARIA

Bulgarian Society Clinical Laboratory

EFLM National Representative: Prof. Milena Velizarova

National Society President: Prof. Yana Bocheva

CROATIA

Croatian Society of Medical Biochemistry and Laboratory Medicine

EFLM National Representative: Prof. Marija Grdić Rajković

National Society President: Dr. Ivana Čelap

CYPRUS

Association of Clinical Laboratory Directors, Biomedical and Clinical Laboratory Scientists

EFLM National Representative: Ms Spyroula Christou

National Society President: Dr. Chris Charilaou

CZECH REPUBLIC

Czech Society of Clinical Biochemistry

EFLM National Representative: Dr. Richard Pikner

National Society President: doc. Ing. Drahomíra Springer

DENMARK

Danish Society of Clinical Chemistry

EFLM National Representative: Dr. Ann-Britt Nygaard Hillig

National Society President: Prof. Mads Nybo

ESTONIA

Estonian Society of Laboratory Medicine

EFLM National Representative: Dr. Karel Tomberg

National Society President: Mrs. Anu Tamm

FINLAND

Finnish Society of Clinical Chemistry

EFLM National Representative: Prof. Kari Pulkki

National Society President: Dr. Tapio Lahtiharju

FRANCE

Société Française de Biologie Clinique

EFLM National Representative: Dr. Marie Lenski

National Society President: Prof. Katell Peoc'h

GEORGIA

Georgian Laboratory Medicine Association

EFLM National Representative: Dr. Maia Khutsishvili

National Society President: Prof. Manana Akhvlediani

GERMANY

German Society of Clinical Chemistry and Laboratory Medicine

EFLM National Representative: Prof. Mariam Klouche

National Society President: Prof. Harald Renz

GREECE

Greek Society of Clinical Chemistry and Clinical Biochemistry (EEKX-KB)

EFLM National Representative: Prof. Christos Tsatsanis

National Society President: Dr. Alexander Haliassos

HUNGARY

Hungarian Society of Laboratory Medicine

EFLM National Representative: Dr. Zsuzsanna Bereczky

National Society President: Prof. Éva Ajzner

ICELAND

Icelandic Society of Laboratory Medicine

EFLM National Representative: Prof. Leifur Franzson

National Society President: Dr. Ólöf Sigurðardóttir

IRELAND

Association of Clinical Biochemists in Ireland

EFLM National Representative: Ms. Alison Bransfield

National Society President: Dr. Paula O'Shea

ISRAEL

Israel Society for Clinical Laboratory Sciences

EFLM National Representative: Dr. Mariel Kaplan

National Society President: Dr. Avi Peretz

ITALY

SIBioC - Laboratory Medicine (The Italian Society of Clinical Biochemistry and Clinical Molecular Biology)

EFLM National Representative: Dr. Anna Carobene

National Society President: Prof. Marcello Ciaccio

KOSOVO

Kosova Association of Clinical Chemistry

EFLM National Representative Prof. Valdete Haxhibeqiri

National Society President: Dr. Gramos Begolli

LATVIA

Latvian Society of Laboratory Specialists

EFLM National Representative: Dr. Dagne Gravele

National Society President: Dr. Dagne Gravele

LITHUANIA

Lithuanian Society of Laboratory Medicine

EFLM National Representative: Prof. Dalius Vitkus

National Society President: Prof. Dalius Vitkus

LUXEMBOURG

Luxembourg Society of Clinical Biology

EFLM National Representative: Mr. Jean-Hugues Francois

National Society President: Mr. Jean-Hugues Francois

MOLDOVA

Association of Physicians and Specialists in the field of Laboratory Medicine of the Republic of Moldova

EFLM National Representative: Dr. Felicia Robu

National Society President: Prof. Anatolie Visnevschi

MONTENEGRO

Montenegrin Association of Clinical Chemistry and Laboratory Medicine

EFLM National Representative: Dr. Tanja Antunovic

National Society President: Dr. Tanja Antunovic

NETHERLANDS

Netherlands Society for Clinical Chemistry and Laboratory Medicine

EFLM National Representative: Dr. Marc Elisen

National Society President: Dr. Merel van Wijnen

NORTH MACEDONIA

Macedonian Society of Medical Biochemistry and Laboratory Medicine

EFLM National Representative: Prof. Jasna Bogdanska

National Society President: Dr. Katerina Tosheska-Trajkovska

NORWAY

Norwegian Society of Medical Biochemistry

EFLM National Representative: Dr. Ragnhild Nome

National Society President: Dr. Morten Lindberg

POLAND

Polish Society for Laboratory Diagnostics

EFLM National Representative: Dr. Katarzyna Fischer

National Society President: Prof. Katarzyna Winsz-Szczotka

PORTUGAL

Portuguese Society of Clinical Chemistry, Genetics and Laboratory Medicine

EFLM National Representative: Dr. Henrique Reguengo

National Society President: Prof. Cristina Marques

ROMANIA

Romanian Association of Laboratory Medicine (AMLR)

EFLM National Representative: Prof. Ioana Brudasca

National Society President: Dr. Daniela Jitaru

RUSSIA

Association of Laboratory Specialists and Organizations «Federation of Laboratory Medicine» (FLM)

EFLM National Representative: Prof. Andrey Ivanov

National Society President: Prof. Andrey Ivanov

SERBIA

Society of Medical Biochemists of Serbia

EFLM National Representative: Prof. Nada Majkic-Singh

National Society President: Prof. Snežana Jovičić

SLOVAK REPUBLIC

Slovak Society of Clinical Biochemistry

EFLM National Representative: Ing. Jan Balla

National Society President: Dr. Hedviga Pivovarníková

SLOVENIA

Slovenian Association for Clinical Chemistry and Laboratory Medicine

EFLM National Representative: Mrs. Lidija Gobec

National Society President: Mrs. Lidija Gobec

SPAIN

Spanish Society of Laboratory Medicine (SEMEDLAB)

EFLM National Representative: Dr. Merce Ibarz Escuer

National Society President: Dr. Antonio Buño Soto

SWEDEN

Swedish Society for Clinical Chemistry

EFLM National Representative: Dr. Marie Larsson

National Society President: Dr. Henrik von Horn

SWITZERLAND

Swiss Society of Clinical Chemistry

EFLM National Representative: Dr. Pierre-Alain Binz

National Society President: Dr. Pierre-Alain Binz

TURKEY

Turkish Biochemical Society

EFLM National Representative: Prof. Abdurrahman Coskun

National Society President: Prof. Dogan Yucel

UNITED KINGDOM

The Association for Clinical Biochemistry & Laboratory Medicine

EFLM National Representative: Ms Victoria Logan

National Society President: Dr. Ian Godber

UKRAINE

Association of Clinical Chemistry & Laboratory Medicine of Ukraine

EFLM National Representative: Prof. Sergiy Klymenko

National Society President: Prof. Sergiy Klymenko

3.2. Affiliate Members

Affiliate membership is open to any other NS/Association active in the field of Laboratory Medicine and from a European country (as defined by the WHO country classification).

At the time of this Guidebook, EFLM has the following Affiliate Members:

ARMENIA

Armenian Association of Laboratory Medicine
EFLM Representative: Dr. Anahit Petrosyan
President: Dr. Zaruhi Gevorgyan

FRANCE

LABAC - Network of accredited ISO 15189 Laboratories
EFLM Representative: Dr. Bernard Gouget
President: Dr. Jean-Marc Giannoli

IRELAND

Faculty of Pathology - Royal College of Physicians of Ireland
EFLM Representative: Dr. Gerard Boran
President: Prof. Louise Burke

IRELAND

Academy of Clinical Science and Laboratory Medicine
EFLM Representative: Ms Jemma Kehoe
President: Dr Sinead Creagh

ROMANIA

Order of Biochemists, Biologists and Chemists in the Romanian Health System
EFLM Representative: Mrs. Cristina Gabriela Ivan
President: Dr. Constanta Popa

SERBIA

Serbian Society for Clinical Laboratory Medicine and Science
EFLM Representative: Prof. Sanja Stankovic
President: Prof. Sanja Stankovic

SPAIN

Spanish Association of Clinical Laboratory (AEFA)
EFLM Representative: Dr. Antonio Rider Pérez
President: Dr. Antonio Rider Pérez

SPAIN (merged with Spanish Society of Laboratory Medicine (SEMEDLAB) in January 2025
Associació Catalana de Ciències de Laboratori Clínic (ACCLC)
EFLM Representative: Dr. Roser Ferrer Costa
President: Dr. Roser Ferrer Costa

SPAIN

Andalusian Society of Clinical Analysis and Laboratory Medicine (SANAC)
EFLM Representative: Dr. M^a Luisa Hortas Nieto
President: Dr. M^a Luisa Hortas Nieto

TURKEY

Society of Clinical Biochemistry Specialists (KBUD)
EFLM Representative: Prof. Dildar Konukoglu
President: Prof. Dildar Konukoglu

Chapter 4: Corporate Membership

- 4.1. Corporate Members
 - 4.2. EFLM Policy for Corporates
-

4.1. Corporate Members

EFLM corporate membership is open to companies, corporate entities or research establishments concerned with the field of clinical laboratory practice. Corporate membership has an observer status on occasion of the EFLM General Meetings.

List of EFLM Corporate Members

BD UK Limited
Contact: Dr Brendan Meyer

Beckman Coulter Eurocenter S.A.
Contact: Dr Jean-Sebastien Blanchet

Greiner Bio-One GmbH
Contact: Dr. Helene Ivanov

Inpeco
Contact: Mr Paolo Anedda

Shenzhen Mindray Bio-Medical Electronics Co., LTD
Contact: Ms Sasha Duan

Qualab Biotech Co., Ltd. (Shanghai)
Contact: Mr Welch Cheng

Radiometer Medical ApS
Contact: Dr Anne Skurup

Roche Diagnostics International Ltd
Contact: Dr Jamie Deeter

Shenzhen New Industries Biomedical Engineering Co., Ltd. (SNIBE)
Contact: Mr Vincent Chen

4.2. EFLM Policy for Corporates

EFLM recognizes and appreciates the role of IVD companies. EFLM aims to strengthen and advance collaborative models of engagement with IVD companies, fostering mutual benefits. To maintain transparency and integrity of our Federation, the EFLM Executive Board has designed a dedicated policy.

Goals

EFLM encourages IVD companies to become EFLM Corporate Members and to engage in a working relationship with the Federation. The main goals of the collaboration are:

- to serve as a regular forum for exchange of information, to meet and discuss issues of mutual importance,
- to initiate and develop collaboration between EFLM and IVD companies on mutually beneficial scientific, educational and professional projects,

- to take into consideration trends and needs of IVD companies in discussion about EFLM strategic goals and objectives of Laboratory Medicine as a profession.

We believe that through such reciprocity and constructive dialogue we can best serve our profession and our members.

Expected opportunities

EFLM offers a wide range of opportunities to EFLM Corporate Members to demonstrate their commitment to the advancement of Laboratory Medicine. The benefits of EFLM Corporate Members are:

- Being directly involved with the leading European organization promoting contributions to Laboratory Medicine in modern health care.
- EFLM membership is very helpful for companies to enhance and promote the value provided by them and have excellent access to a variety of resources and target audiences.
- Being able to delegate Expert/Consultant to the EFLM Functional Units (excluding Executive Board) and to influence decision making processes and to strengthen communication and collaboration between IVD industry and laboratory professionals.
- Receiving all documents, publications, and announcements of the EFLM.
- Priority will be given to the EFLM Corporate members in sponsoring awards, conferences, satellite symposia, webinars and various educational activities thus enabling high visibility of companies to an ideal target audience.
- Being able to use the EFLM logo to identify the company as an EFLM Corporate Member.
- Having access to numerous promotional opportunities.
- Receiving a 20% discount* on exhibition fees and a premium location on the exhibition floor at the EuroMedLab Congresses as a Corporate member of both IFCC and EFLM. (*First year of membership: discount 10%)
- Receiving a 25% discount on fees for advertising in the EFLM eNewsletter.

Endorsements

EFLM Corporate Members will be indicated in the homepage of the EFLM website with a rotating logo at the bottom page. However, EFLM does not offer any kind of direct public endorsement of commercial products or services.

Financial relationship

Financial relationship for all types of active engagement shall be agreed between EFLM and the IVD company on an individual basis depending on the type of support.

Disclosure of corporate funding

EFLM is committed to responsible engagement with corporations in compliance with the Belgian law as well as with all relevant international rules and regulations. We recognize the importance of ethical and transparent business agreements and shall disclose all corporate funding to our members and to the public.

Chapter 5: International Organisations

▪ 5.1. International Organisations working with EFLM

5.1. International Organisations working with EFLM

To meet its strategic goals and follow its mission, EFLM aims to establish relationships at European level and worldwide (if there is a specific interest) with the main European and International Regulatory and Legislative Bodies, the European Commission Cabinets and international clinical laboratory organisations.

Current International Organisations working with EFLM:

- AACB (Australasian Association of Clinical Biochemists)
- ACN (Active Citizenship Network)
- AFCB (Arab Federation of Clinical Biology)
- BCLF (Balcan Clinical Laboratory Federation)
- BioMedAlliance (Biomedical Alliance in Europe)
- CEN (European Committee for Standardization)
- CENELEC (European Committee for Electrotechnical Standardization)
- CLSI (Clinical and Laboratory Standards Institute)
- COLABIOCLI (Latin America Confederation of Clinical Biochemistry)
- CSLM (Chinese Society of Laboratory Medicine)
- EA (European co-operation for Accreditation)
- EANM (European Association of Nuclear Medicine)
- EAS (European Atherosclerosis Society)
- EASI (European Autoimmunity Standardization Initiative)
- EC (European Commission)
- ECO (European Cancer Organisation)
- EMA (European Medicine Agency)
- EQALM (External Quality Assurance Programmes in Laboratory Medicine)
- ESR (European Society for Radiology)
- FEBS (Federation of European Biochemical Societies)
- IFCC (International Federation of Clinical Chemistry and Laboratory Medicine)
- ISO (International Organization for Standardization)
- MedTech Europe (European trade association for the medical technology industry)

Chapter 6: Congresses and Conferences

- 6.1. EuroMedLab Congress
 - 6.2. EFLM Strategic Conference
 - 6.3. EFLM Preanalytical Conference
 - 6.4. CELME Symposium
 - 6.5. EFLM General Meeting
-

6.1. EuroMedLab Congress

The IFCC-EFLM European Congress of Clinical Chemistry and Laboratory Medicine (EuroMedLab) Congress is held every two years and is organized in partnership with the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC). The EuroMedLab delivers an international forum for the free and open exchange of information on the science and technology of clinical chemistry and laboratory medicine in the academic, clinical and industrial settings; enables a European forum for clinical laboratory scientists and clinicians to interact with their peers; and provides a platform to promote human health. It is the most important congress of Laboratory Medicine in Europe.

The great success of all EuroMedLab Congresses is made possible thanks to the selected eminent speakers, the chairs, the IVD industry representatives, the EFLM and IFCC Officers and staff and all the participants attending the Congress from different countries all around the world.

Below the list of EuroMedLab Congresses:

- 1974 - Munich
- 1976 - Prague
- 1979 - Brighton
- 1981 - Wien
- 1983 - Budapest
- 1985 - Jerusalem
- 1987 – The Hague
- 1989 - Milan
- 1991 - Krakow
- 1993 - Nice
- 1995 - Tampere
- 1997 - Basel
- 1999 - Florence
- 2001 - Prague
- 2003 - Barcelona
- 2005 - Glasgow
- 2007 - Amsterdam
- 2009 - Innsbruck
- 2011 - Berlin
- 2013 - Milano
- 2015 - Paris
- 2017 - Athens
- 2019 - Barcelona
- 2021 - Munich (postponed to 2022 due to COVID)
- 2023 – Rome
- 2025 – Brussels

6.2. EFLM Strategic Conference

The EFLM Strategic Conference is a specialized conference organized preferably biannually, usually initiated under the coordination of the President-Elect and managed by the Executive Board. The first edition was held in Milan (IT) in 2014.

The general goal of this Conference is to focus on an important aspect in laboratory medicine in which some strategic actions/measures should be taken. Lectures and contributions presented at the Conferences are published in a special issue of the official EFLM Scientific Journal, Clinical Chemistry and Laboratory Medicine.

An outcome of each Conference could be the creation of an EFLM functional unit dealing with the main topics of the Conference.

The four EFLM Strategic Conferences were held respectively as follows:

- 1st EFLM Strategic Conference: Defining analytical performance goals 15 years after the Stockholm Conference – Milan (IT), 24-25 September 2014
- 2nd EFLM Strategic Conference: The end of laboratory medicine as we know it? Handling disruption of laboratory medicine in digital health – Mannheim (DE) 15-19 June 2018
- 3rd EFLM Strategic Conference: Smart and Green Laboratories. How to implement IVDR, emerging technologies and sustainable practices in medical laboratories? – on-line, 25-27 May 2022
- 4th EFLM Strategic Conference: A vision to the future: value-based laboratory medicine – Padua (IT), 23-24 September 2024

6.3. EFLM Preanalytical Conference

This conference is organized by the EFLM C-Preanalytical Phase with the aim to focus on the quality of the preanalytical phase of the laboratory work. It is the largest such conference in Europe, which brings together a large number of participants each year. The conference programme is tailored by the scientific committee to deliver up to date knowledge in the field and to create an open forum for interactive discussions. For every edition the selection of topics is guided by the feedback of the participants from the previous Conference in order to be different, pragmatic, practical and interactive, to address some most common preanalytical challenges, to raise questions and offer answers and solutions.

The six EFLM Preanalytical Conferences were held respectively as follows:

- 2011 Parma (IT) - Title: "Preanalytical quality improvement - from dream to reality"
- 2013 Zagreb (HR) - Title: "Preanalytical quality improvement – in quality we trust"
- 2015 Porto (PT) - Title: "Preanalytical quality improvement - in pursuit of harmony"
- 2017 Amsterdam (NL) - Title: "Improving quality in the preanalytical phase through innovation"
- 2019 Zagreb (HR) - Title: "Preanalytical challenges - Time for solutions"
- 2022 On-line (moved from 2021 due to COVID) - Title: "Preanalytical quality - an interdisciplinary journey"
- 2025 Padova (IT) – Title: "New insights in preanalytical quality"

6.4. CELME Symposium

The symposium CELME "Cutting Edge of Laboratory Management in Europe" is organized jointly with the Czech Society of Clinical Biochemistry every two years in Autumn in the historical building of the Charles University Prague "Carolinum" located in the centre of Prague.

The concept of the CELME Symposium is to explore the innovations and the best practice in delivering high quality clinical laboratory services in Europe through presentations of international expert innovators presenting new ways of solving financial, quality and organizational problems.

The five CELME Symposia organized till now were held on the following topics:

- CELME 2015: The Revolution in Microbiology and Consolidation of Laboratory Activities
- CELME 2017: Regulatory matters, quality delivering, the 'omics" revolution and the added value of the Laboratory Medicine
- CELME 2019: Emerging challenges in Laboratory Medicine
- CELME 2021: Emerging challenges in Laboratory Medicine
- CELME 2023: Analytical performance specifications (APS): moving from models to practical recommendations

6.5. EFLM General Meeting

The General Meeting is the governing body of EFLM and is composed of a nominated representative, who is entitled to vote on behalf of each of the EFLM Full Member Societies. The GM convenes once a year, in even year preferably connected to the EuroMedLab Congress.

The following decisions are reserved to the General Meeting:

1. Amend the Articles of Association;
2. Appoint and dismiss the Board Members;
3. Where necessary, appoint and dismiss the auditors and set their remuneration, if any;
4. Grant discharge to the Board Members;
5. Approve the budget and accounts;
6. Voluntarily dissolve the Association;
7. Admit or expel full, provisional, affiliated and co-opted members.

The list of the EFLM General Meeting, the related minutes and presentations are available on the EFLM Website.

During the mandate 2024-2025, the following meetings has been held:

- 2024: Twentieth EFLM General Meeting via Zoom
- 2025: Twenty-first EFLM General Meeting in Brussels

Chapter 7: Division “Science: Value-based Laboratory Medicine” (D-S)

- 7.1. Division “Science: Value-based Laboratory Medicine”
Committees and Technical Committees
 - 7.2 Area: Total Testing Cycle Harmonisation
 - 7.2.1. C: Biological Variation
 - 7.2.2. C: Clinical and Analytical Performance Specifications
 - 7.2.3. C: Harmonisation
 - 7.2.4. C: Postanalytical Phase
 - 7.2.5. WG: Patient Focused Laboratory Medicine (incorporated in C-DCLTPE on 31/12/2024)
 - 7.2.6. C: Practical Guide to Implement Measurement Uncertainty
 - 7.2.7. C: Preanalytical Phase
 - 7.2.8. WG: Test Evaluation (incorporated in C-CAPS on 31/12/2024)
 - 7.2.9. C: Value-Score for Clinical Laboratories
 - 7.2.10. TC: Biological Variation Database
 - 7.3. Area: Integrated Diagnostics
 - 7.3.1. C: Autoimmunity Testing
 - 7.3.2. C: Biological Markers of Nitrous Oxide Abuse
 - 7.3.3. C: Biomarkers of Mild Traumatic Brain Injury
 - 7.3.4. C: Chronic Kidney Disease
 - 7.3.5. C: Integrative Diagnostics
 - 7.3.6. C: Vascular Risk Biomarkers
 - 7.3.7. TG: Performance Specifications Based on Outcome Studies (incorporated in C-CAPS on 31/12/2024)
 - 7.4. Area: Emerging Perspectives
 - 7.4.1. C: Digitalisation and Artificial Intelligence
 - 7.4.2. C: Direct-to-Consumer Laboratory Testing and Patient Empowerment
 - 7.4.3. C: European Regulatory Affairs
 - 7.4.4. C: Green & Sustainable Laboratories
 - 7.4.5. C: Preparation of Labs for Emergencies
 - 7.4.6. TFG: Urinalysis (Closed on 31/12/2024)
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7.1. Division “Science: Value-based Laboratory Medicine”

The Science Division (D-S) focuses on promotion of research that translates the scientific results of laboratory medicine to clinical applications and improves patient outcomes through the appropriate use and interpretation of laboratory data in clinical practice.

Terms of Reference

- Identify scientific and technological areas of relevance to Clinical Chemistry and Laboratory Medicine and facilitate the translation of research evidence to the profession.
- Identify new and emerging IVD biomarkers and technological innovations, appraise evidence of their analytical and clinical performance, and provide recommendations and guidelines on how to implement them in clinical laboratory practice and integrative diagnostic strategies.
- Establish safety and quality standards to be met in delivering value to patients, clinicians, public health agencies and authorities through better test utilization, test-assisted clinical decision, integrated diagnostics, personalized (precision) diagnostics and patient empowerment.
- Promote harmonisation of the total testing process, through the production of guidance documents stating best practice in pre-analytical, analytical and post-analytical areas.
- Practical guidance to implement clinical and analytical test performance specifications, measurement uncertainty, and biological variation estimates in clinical laboratory practice. Deliver biological variation data to the global laboratory community.

- Facilitate digital transformation, Artificial Intelligence (A.I.) applications and standardized health data coding to enable novel approaches in the exchange and use of diagnostic data.
- Organize and participate in international collaborative projects between scientific and professional organizations within and outside Europe and engage in guideline development in co-operation with relevant clinical specialists' scientific societies and multidisciplinary consensus initiatives.
- Respond to scientific, clinical and technical needs, opportunities, or (pandemic) emergencies by translating expert scientific and clinical evidence into advice for EFLM Member Societies, IVD Industry, European Regulatory and other key stakeholders to ensure the clinical benefit and safety of IVD tests.
- Produce criteria and recommendations to implement sustainable practices in the medical laboratories.

Membership

Chair

Michel Langlois - Bruges, Belgium

second term 2024-2025

Division's Executive Committee Members

Olga Ciepiela – Warsaw, Poland

first term 2025-2026

Pilar Fernandez-Calle – Madrid, Spain

first term 2025-2026

Merve Sibel Gungoren – Ankara, Turkiye

first term 2025-2026

Tommaso Trenti – Modena, Italy

first term 2025-2026

Committees and Technical Committees

7.2. Area: Total Testing Cycle Harmonisation

7.2.1. C: Biological Variation

Terms of reference

- To publish biological variation data for new measurands, population groups and states of health
- To improve and explore methods to deliver biological variation data
- To facilitate the effective use and application of biological variation data
- To develop the concept and publish data on personalized Laboratory Medicine

Membership

Chair

Sverre Sandberg, Norway

second term: 2025-2026

Full Members

Anna Carobene, Italy

first term: 2024-2025

Niels Jonker, the Netherlands

third term: 2024-2025

Outi Itkonen, Finland

third term: 2024-2025

Jorge Diaz-Garzon (YS), Spain

third term: 2024-2025

Corresponding Members

Julien Favresse, Belgium

Carine Hejl, France

Irini Leimoni, Greece

Karel Kotaska, Czech Republic

Ebru Sezer, Turkiye

Experts/Consultants

Aasne Karine Aarsand, Norway

William A Bartlett, UK

Abdurrahman Coskun, Turkiye

Pernille Kjeilen Fauskanger, Norway

Pilar Fernandez-Calle, Spain

Deniz Ilhan Topcu, Trukiye

Publications

1. Novel biomarkers in bone pathophysiology: Establishing reference intervals and biological variations estimates for serum leptin, sclerostin, lipocalin-2, osteoprotegerin, resistin and Dickkopf-related protein-1 from the European biological variation study (EuBIVAS) populations
Sansoni V, Lombardi G, Díaz–Garzón J , Fernández Calle P, Bartlett W A, Coşkun A, Itkonen O, Jonker N, Sandberg S, Aarsand A K , Banfi G, Carobene A, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Committee on Biological Variation
Clinica Chimica Acta 2025; <https://doi.org/10.1016/j.cca.2025.120213>
2. The biological variation of insulin resistance markers: data from the European Biological Variation Study (EuBIVAS)
Carobene A, Kilpatrick E, Bartlett A. W, Fernandez Calle P, Coskun A, Diaz-Garzon J, Jonker N, Locatelli M, Sandberg S, Aarsand K. A, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation
Clin Chem Lab Med 2024; <https://doi.org/10.1515/cclm-2024-0672>
3. A standard to report biological variation data studies – based on an expert opinion
Bartlett WA, Sandberg S, Carobene A, Fernandez–Calle P, Diaz-Garzon J, Coskun A, Jonker N, Galior K, Gonzales-Lao E, Moreno-Parro I, Sufrate-Vergara B, Webster C, Itkonen O, Marques-Garcia F, Aarsand AK, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Task Group for the Biological Variation Database, and Biological Variation Working Group
Clin Chem Lab Med 2024; <https://doi.org/10.1515/cclm-2024-0489>
4. The European biological variation study (EuBIVAS): Biological variation data for testosterone, follicle stimulating hormone, prolactin, luteinizing hormone and dehydroepiandrosterone sulfate in men
Itkonen O, Jonker N, Aarsand AK, Sandberg S, Diaz-Garzone J, Fernandez-Calle P, Coskun A, Bartlett WA, Locatelli M, Carobene A, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation
Chimica Clinica Acta 2024; <https://doi.org/10.1016/j.cca.2024.117806>
5. Sex-related differences in within-subject biological variation estimates for 22 essential and non-essential amino acids
Coskun A, Carobene A, Demirelce O, Mussap M, Braga F, Sezer E, Aarsand AK, Sandberg S, Fernández Calle P, Díaz-Garzón J, Erkaya M, Coskun C, Nur Erol E, Dag H, Bartlett B, Serteser M, Jonker N, Unsal I, European Federation of Clinical Chemistry, Laboratory Medicine Working Group on Biological Variation, Task Group for the Biological Variation Database
Chimica Clinica Acta 2024; <https://doi.org/10.1016/j.cca.2023.117632>
6. Biological variation estimates of Alzheimer's disease plasma biomarkers in healthy individuals
Brum WS, Ashton NJ, Simrén J, di Molfetta G, Karikari TK, Benedet AL, Zimmer ER, Lantero-Rodriguez J, Montoliu-Gaya L, Jeromin A, Aarsand AK, Bartlett WA, Calle PF, Coşkun A, Díaz-Garzón J, Jonker N, Zetterberg H, Sandberg S, Carobene A, Blennow K
Alzheimers Dement. 2024; <https://doi.org/10.1002/alz.13518>
7. Biological variation of inflammatory and iron metabolism markers in high-endurance recreational athletes; are these markers useful for athlete monitoring?
Diaz-Garzon J, Itkonen O, Aarsand AK, Sandberg S, Coskun A, Carobene A, Jonker N, Bartlett WA, Buño A, Fernandez-Calle P, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation
Clin Chem Lab Med 2024; <https://doi.org/10.1515/cclm-2023-1071>
8. Biological variation: recent development and future challenges
Sandberg S, Carobene A, Bartlett B, Coskun A, Fernandez-Calle P, Jonker N, Díaz-Garzón J, Aarsand AK

- Clin Chem Lab Med 2023; <https://doi.org/10.1515/cclm-2022-1255>
9. Biological variation of serum iron from the European biological variation study (EuBIVAS)
Carobene A, Aarsand AK, Coşkun K, Díaz-Garzón J, Locatelli M, Fernandez-Calle P, Sandberg S, Ceriotti F
Clin Chem Lab Med 2022; <https://doi.org/10.1515/cclm-2022-1091>
 10. Critical review and meta-analysis of biological variation estimates for tumor markers
Marques-Garcia F, Boned B, González-Lao E, Braga F, Carobene A, Coskun A, Díaz-Garzón J, Fernández-Calle J, Carmen Perich M, Simon M, Jonker N, Aslan B, Bartlett WA, Sandberg S, Aarsand AK, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation and Task Group for the Biological Variation Database
Clin Chem Lab Med 2022; <http://doi.org/10.1515/cclm-2021-0725>
 11. Long-term within- and between-subject biological variation of 29 routine laboratory measurands in athletes
Diaz-Garzon J, Fernandez-Calle P, Aarsand AK, Sandberg S, Coskun A, Carobene A, Jonker N, Itkonen O, Bartlett WA, Buno A, European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation
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 12. Biological variation estimates of thyroid related measurands - meta-analysis of BIVAC compliant studies
Fernández-Calle P, Díaz-Garzón J, Bartlett W, Sandberg S, Braga F, Beatriz B, Carobene A, Coskun A, Gonzalez-Lao E, Marques F, Perich C, Simon M, Aarsand AK, EFLM Working Group on Biological Variation and Task Group for the Biological Variation Database
Clin Chem Lab Med 2021; <http://doi:10.1515/cclm-2021-0904>
 13. Within- and between-subject biological variation data for serum zinc, copper and selenium obtained from 68 apparently healthy Turkish subjects
Coşkun A, Carobene A, Aarsand AK, Aksungar FB, Serteser M, Sandberg S, Díaz-Garzón J, Fernandez-Calle P, Karpuzoğlu FH, Coskun C, Kizilkaya E, Fidan D, Jonker N, Uğur E, Unsal I, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation and Task Group for the Biological Variation Database
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 15. The European Biological Variation Study (EuBIVAS): a summary report
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Clin Chem Lab Med 2021
 16. Systematic review and meta-analysis of withinsubject and between-subject biological variation estimates of serum Zinc, Copper and Selenium
Coskun A, Aarsand AK, Braga F, Carobene A, Díaz-Garzón J, Fernandez-Calle P, Jonker N, Gonzalez Lao E, Marques-Garcia F and Sandberg S, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation and Task Group for the Biological Variation Database
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 17. The European Biological Variation Study (EuBIVAS): a summary report
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Clin Chem Lab Med 2021; <http://doi.org/10.1515/cclm-2021-0370>
 18. Within- and between-subject biological variation data for tumor markers based on the European Biological Variation Study
Coşkun A, Aarsand AK, Sandberg S, Guerra E, Locatelli M, Díaz-Garzón J, Fernandez-Calle P, Ceriotti F, Jonker N, Bartlett WA, Carobene A, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation
Clin Chem Lab Med 2021; <http://doi.org/10.1515/cclm-2021-0283>

19. European Biological Variation Study (EuBIVAS): within- and between-subject biological variation estimates for serum thyroid biomarkers based on weekly samplings from 91 healthy participants
Bottani M, Aarsand AK, Banfi G, Locatelli M, Coskun A, Díaz-Garzón J, Fernandez-Calle P, Sandberg S, Ceriotti A, Carobene A and on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation
Clin Chem Lab Med 2021; <http://doi.org/10.1515/cclm-2020-1885>
20. Biological Variation of Cardiac Troponins in Health and Disease: A Systematic Review and Meta-analysis
Diaz-Garzon J, Fernandez-Calle P, Sandberg S, Ozcurumez M, Bartlett WA, Coskun A, Carobene A, Perich C, Simon M, Marques F, Boned b, Gonzalez-Lao E, Braga F, Aarsand AK, EFLM Working Group on Biological Variation and Task Group for the Biological Variation Database
Clin Chem Lab Med 2020; <http://doi.org/10.1515/cclm-2020-1490>
21. Biological variation of serum insulin: updated estimates from the European Biological Variation Study (EuBIVAS) and meta-analysis
Carobene A, Gonzalez Lao E, Simon M, Locatelli M, Coskun A, Diaz-Garzon J, Fernandez-Calle P, Sandberg S, Aarsand AK, on behalf of the EFLM Working Group on Biological Variation
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22. Critical appraisal and meta-analysis of biological variation estimates for kidney related analytes
Jonker N, Aslan B, Boned B, Marques-García F, Ricós C, Alvarez V, Bartlett W, Braga F, Carobene A, Coskun A, Diaz-Garzón J, Fernández-Calle P, Gonzalez-Lao E, Minchinela J, Perich C, Simón M, Sandberg S, Aarsand AK, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation and Task Group for the Biological Variation Database
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23. European Biological Variation Study (EuBIVAS): within- and between-subject biological variation estimates for serum biointact parathyroid hormone based on weekly samplings from 91 healthy participants
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Ann Transl Med 2020;8:855; <http://doi.org/10.21037/atm-19-4498>
24. Biological variation of morning serum cortisol: Updated estimates from the European biological variation study (EuBIVAS) and meta-analysis
Carobene A, Guerra E, Marqués-García F, Boned B, Locatelli M, Coşkun A, Díaz-Garzón J, Fernandez-Calle P, Sandberg S, Aarsand AK on behalf of the European Federation of Clinical Chemistry, Laboratory Medicine Working Group on Biological Variation
Clin Chim Acta 2020; <http://doi.org/10.1016/j.cca.2020.06.038>
25. Critical appraisal and meta-analysis of biological variation studies on glycosylated albumin glucose, and HbA1c
Ricós C, Fernández-Calle P, Gonzalez-Lao E, Simón M, Díaz-Garzón J, Boned B, Marqués-García F, Minchinela J, Perich MC, Tejedor-Ganduxé X, Corte Z, Aarsand A, Asland B, Carobene A, Coskun, Sandberg S.
Adv Lab Med 2020; <http://doi.org/10.1515/almed-2020-0029>
26. The European Biological Variation Study (EuBIVAS): weekly biological variation of cardiac troponin I estimated by the use of two different high-sensitivity cardiac troponin I assays
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Clin Chem Lab Med 2020; <http://doi.org/10.1515/cclm-2019-1182>
27. Analytical Performance Specifications for Lipoprotein(a), Apolipoprotein B-100, and Apolipoprotein A-I Using the Biological Variation Model in the EuBIVAS Population
Clouet-Foraison N, Marcovina SM, Guerra E, Aarsand AK, Coşkun A, Díaz-Garzón J, Fernandez-Calle P, Sandberg S, Ceriotti F, Carobene A, the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation
Clinical Chemistry 2020; <http://doi.org/10.1093/clinchem/hvaa054>
28. European Biological Variation Study (EuBIVAS): within- and between-subject biological variation estimates of β -isomerized C-terminal telopeptide of type I collagen (β -CTX), N-terminal propeptide

of type I collagen (PINP), osteocalcin, intact fibroblast growth factor 23 and uncarboxylated-unphosphorylated matrix-Gla protein

Cavaliere E, Lukas P, Bottani M, Aarsand AK, Ceriotti F, Coşkun A, Díaz-Garzón J, Fernández-Calle P, Guerra E, Locatelli M, Sandberg S, Carobene A & on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation and IOF-IFCC Committee on Bone Metabolism Int 2020; <http://doi.org/10.1007/s00198-020-05362-8>

29. Systematic review and meta-analysis of within-subject and between-subject biological variation estimates of 20 haematological parameters
Coskun A, Braga F, Carobene A, Ganduxe AT, Aarsand AK, Fernandez-Calle P, Diaz-Garzon Marco J, Bartlett J, Jonker N, Aslan B, Minchinela J, Boned B, Gonzalez-Lao E, Marques-Garcia F, Perich C, Ricos C, Simon M, Sandberg S, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Working Group on Biological Variation and Task Group for the Biological Variation Database
Clin Chem Lab Med 2019; <https://doi.org/10.1515/cclm-2019-0658>
30. European Biological Variation Study (EuBIVAS): Within- and Between-Subject Biological Variation Data for 15 Frequently Measured Proteins
Carobene A, Aarsand AK, Guerra E, Bartlett WA, Coskun A, Díaz-Garzón J, Fernandez-Calle P, Jonker N, Locatelli M, Sandberg S, Ceriotti F; European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation.
Clin Chem 2019; <http://doi:10.1373/clinchem.2019.304618>
31. Biological variation data for lipid cardiovascular risk assessment biomarkers. A systematic review applying the biological variation data critical appraisal checklist (BIVAC)
Díaz-Garzón J, Fernández-Calle P, Minchinela J, Aarsand AK, Bartlett WA, Aslan B, Boneda B, Braga F, Carobene A, Coskun A, Gonzalez-Lao E, Jonker N, Marques-Garcia F, Perich C, Ricos C, Simón M, Sandberg S.
Clin Chim Acta 2019; <http://doi: 10.1016/j.cca.2019.05.013>
32. Systematic review of the biological variation data for diabetes related analytes.
González-Lao E, Corte Z, Simón M, Ricós C, Coskun A, Braga F, Aarsand A.K, Carobene A, Bartlett WA, Boned B, Aslan B, Díaz-Garzón J, Marqués-García F, Minchinela J, Perich C, Fernández-Calle P, Roraas T, Fernández-Fernández P, Jonker N, Sandberg S. on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation and Task Group for the Biological Variation Database
Clin Chim Acta 2018; <http://doi: 10.1016/j.cca.2018.10.031>
33. Biological variation estimates for prostate specific antigen from the European Biological Variation Study; consequences for diagnosis and monitoring of prostate cancer.
Carobene A, Guerra E, Locatelli M, Cucchiara V, Briganti A, Aarsand AK, Coşkun A, Díaz-Garzón J, Fernandez-Calle P, Røraas T, Sandberg S, Jonker N, Ceriotti F, on behalf of the EFLM Working Group on Biological Variation
Clin Chim Acta 2018;486:185-91
34. Providing Correct Estimates of Biological Variation—Not an Easy Task. The Example of S100-Protein and Neuron-Specific Enolase.
Carobene A, Guerra E, Locatelli M, Ceriotti F, Sandberg S, Fernandez-Calle P, Coskun A, Aarsand AK on behalf of the EFLM Working Group on Biological Variation.
Clin Chem 2018; <http://doi.org/10.1373/clinchem.2018.292169>
35. EuBIVAS: Within- and Between-Subject Biological Variation Data for Electrolytes, Lipids, Urea, Uric Acid, Total Protein, Total Bilirubin, Direct Bilirubin, and Glucose.
Aarsand AK, Diaz-Garzon J, Fernandez-Calle P, Guerra E, Locatelli M, Bartlett WA, Sandberg S, Roraas T, Ceriotti F, Orvim Solvik U, Sverresdotter Sylte M, Coskun A, Serteser M, Unsal I, Tosato F, Plebani M, Jonker N, Barla G, Carobene A, European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation.
Clin Chem 2018;64:1380-93
36. Harmonization initiatives in the generation, reporting and application of biological variation data.
Aarsand AK, Røraas T, Bartlett WA, Coşkun A, Carobene A, Fernandez-Calle P, Jonker N, Díaz-Garzón J, Braga F, Sandberg S; European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Working Group on Biological Variation.
Clin Chem Lab Med 2018;56:1629-36

Within-subject and between-subject biological variation estimates of 21 hematological parameters in 30 healthy subjects.

Coşkun A, Carobene A, Kilercik M, Serteser M, Sandberg S, Aarsand AK, Fernandez-Calle P, Jonker N, Bartlett WA, Díaz-Garzón J, Huet S, Kızıldaş C, Dalgakıran I, Ugur E, Unsal I; European Biological Variation Study of the EFLM Working Group on Biological Variation.

Clin Chem Lab Med 2018;56:1309-18

37. The Biological Variation Data Critical Appraisal Checklist: a Standard for Evaluating Studies on Biological Variation.

Aarsand AK, R Raas T, Fernandez-Calle P, Ricos C, Díaz-Garzón J, Jonker N, Perich C, González-Lao E, Carobene A, Minchinela J, Coşkun A, Simón M, Álvarez V, Bartlett WA, Fernández-Fernández P, Boned B, Braga F, Corte Z, Aslan B, Sandberg S.

Clin Chem 2018;64:501-14

38. The European Biological Variation Study (EuBIVAS): delivery of updated biological variation estimates, a project by the Working Group on Biological Variation in the European Federation of Clinical Chemistry and Laboratory Medicine.

Carobene A; on behalf of the EFLM Working Group on Biological Variation.

J Lab Precis Med; <http://doi.org/10.21037/jlpm.2017.08.13>

39. The EuBIVAS Project: Within- and Between-Subject Biological Variation Data for Serum Creatinine Using Enzymatic and Alkaline Picrate Methods and Implications for Monitoring

Carobene A, Marino I, Coskun A, Serteser M, Unsal I, Guerra E, Bartlett WA, Sandberg S, Aarsand AK, Sverresdotter Sylte M, Røraas T, Ørvim Sølviq U, Fernandez-Calle P, Diaz-Garzon J, Tosato F, Plebani M, Jonker N, Barla G and Ceriotti F on behalf of the European Biological Variation Study of the EFLM Working Group on Biological Variation

Clin Chem 2017;63:1527-36

40. Biological Variation Estimates Obtained from 91 Healthy Study Participants for 9 Enzymes in Serum.

Carobene A, Roraas T, Solvik UO, Sylte MS, Sandberg S, Guerra E, Marino I, Jonker N, Barla G, Bartlett WA, Fernandez-Calle P, Diaz-Garzon J, Tosato F, Plebani M, Coskun A, Serteser M, Unsal I, Ceriotti F.

Clin Chem 2017;63:1141-50

41. Sample collections from healthy volunteers for biological variation estimates' update: a new project undertaken by the Working Group on Biological Variation established by the European Federation of Clinical Chemistry and Laboratory Medicine.

Carobene A, Stollo M, Jonker N, Barla G, Bartlett WA, Sandberg S, Sverresdotter Sylte M, Røraas T, Ørvim Sølviq U, FernandezCalle P, Díaz-Garzón J, Tosato F, Plebani M, Coşkun A, Serteser M, Unsal, I, Ceriotti F, on behalf of the Biological Variation Working Group, European Federation of Clinical Chemistry and Laboratory Medicine.

Clin Chem Lab Med 2016;54:1599-608

42. A checklist for critical appraisal of studies of biological variation.

Bartlett WA, Braga F, Carobene A, Coskun A, Prusa R, Fernandez-Calle P, Roraas T, Jonker N, Sandberg S on behalf of the Biological Variation Working Group, European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)

Clin Chem Lab Med 2015;53:879-85

7.2.2. C: Clinical and Analytical Performance Specifications

Terms of Reference

- In cooperation with the C-BV, develop conceptual frameworks and methods for defining clinical and analytical performance specifications for measurands based on intended purpose of tests;
- Develop practical tools which support the design, conduct and appraisal of clinical trials that provide high quality evidence for the clinical and analytical performance of biomarker and IVD medical devices;

- Collaboration with C-ERA by providing methodological support for the evaluation of the clinical and analytical performance of biomarkers and IVD medical devices both at the pre-market assessment and post-market surveillance phase of the test evaluation cycle;
- Dissemination of the work of C-CAPS at webinars and conferences;
- Collaboration with the IVD industry, Regulatory and other key stakeholders in the above-mentioned areas in order to ensure that laboratory tests on the market are fit for their intended purposes.

Membership

Chair

Phillip J Monaghan, UK

second term: 2025-2026

Members

Mariska Leeflang, The Netherlands

first term: 2025-2026

Marija Sarić Matutinović, Serbia

first term: 2025-2026

Emmi Rotgers, Finland

first term: 2025-2026

Alexander Tolios (YS), Austria

third term: 2024-2025

Corresponding Member

Tomas Salek, Czech Republic

Robert De Jonge, The Netherlands

Muhittin Serdar, Türkiye

Experts/Consultants

Katy Bell, Australia

Patrick Bossuyt, The Netherlands

Andrea R. Horvath, Australia

Eric Kilpatrick, UK

Graham Jones, Australia

Tze Ping Loh, Singapore

Sally Lord, Australia

Sverre Sandberg, Norway

Anne Incamps, France

Robert Müller, Germany

Manfred Reim. Germany

Publications

1. Is this test fit-for-purpose? Principles and a checklist for evaluating the clinical performance of a test in the new era of in vitro diagnostic (IVD) regulation
Lord S J, Horvath R, Sandberg S, Monaghan P J, Cobbaert C M, Reim M, Tolios A, Mueller R, Bossuyt P M, on behalf of the former EFLM Working Group on Test Evaluation
Critical Reviews in Clinical Laboratory Sciences 2025
2. Setting clinical performance specifications to develop and evaluate biomarkers for clinical use
Lord SJ, St John A, Bossuyt PM, Sandberg S, Monaghan PJ, O'Kane M, Cobbaert CM, Röddiger R, Lennartz L, Gelfi C, Horvath AR; Test Evaluation Working Group of the European Federation of Clinical Chemistry and Laboratory Medicine.
Ann Clin Biochem. 2019;56:527-35
3. Practical guide for identifying unmet clinical needs for biomarkers
Monaghan P, Robinson P, Rajdl D, Bossuyt PMM, Sandberg S, St John A, O'Kane M, Lennartz L, Röddiger R, Lord SJ, Cobbaert CM, Horvath AR
eJIFCC 2018;29;129-37
4. Biomarker development targeting unmet clinical needs
Monaghan P, Lord SJ, St John A, Sandberg S, Cobbaert CM, Lennartz L, Verhagen-Kamerbeek WDJ, Ebert C, Bossuyt PMM, Horvath AR for the EFLM Working Group on Test Evaluation

Clin Chim Acta 2016;460:211-9

5. Setting analytical performance specifications based on outcome studies – is it possible?
Horvath AR, Bossuyt PMM, Sandberg S, StJohn A, Monaghan PJ, Verhagen-Kamerbeek WDJ, Lennartz L, Cobbaert CM, Ebert C, Lord SJ on behalf of the joint EFLM Working Group on Test Evaluation (WG-TE)
Clin Chem Lab Med 2015;53:841–8
6. From biomarkers to medical tests: The changing landscape of test evaluation
Horvath AR, Lord SJ, StJohn A, Sandberg S, Cobbaert CM, Lorenz S, Monaghan PJ, Verhagen-Kamerbeek WDJ, Ebert C, Bossuyt PMM for the Test Evaluation Working Group of the European Federation of Clinical Chemistry Laboratory Medicine
Clin Chim Acta 2014;427:49–57

7.2.3. C: Harmonisation

Terms of Reference

- Promote and coordinate the diffusion of promising harmonization initiatives among the EFLM member societies.
- Take initiatives to harmonize nomenclature, units and reference intervals on a European level.

Membership

Chair

Martina Zaninotto, Italy

second term: 2024-2025

Members

Sedat Abusoglu, Türkiye

second term: 2024-2025

Leila Akhvlediani, Georgia

second term: 2025-2026

Lora Dukic, Croatia

second term: 2024-2025

Luisa Agnello (YS), Italy

second term: 2024-2025

Corresponding Members

Volodymyr M. Protsenko, Ukraine

Georgeta Sorescu, Romania

Publications

1. Is it feasible for European laboratories to use SI units in reporting results?
Zaninotto M, Agnello L, Dukic L, Salek T, Linko-Parvinen A, Kalaria T, Vermersch P, On Behalf of European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Committee-Harmonization (C-H) and Committee -Postanalytical Phase (C-POST)
Clin Chem Lab Med 2025
2. Assessing post-analytical phase harmonization in European laboratories: a survey promoted by the EFLM Working Group on Harmonization
Zaninotto M, Agnello L, Dukic L, Akhvlediani L, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Working Group on Harmonization
Clin Chem Lab Med 2024
3. Harmonisation of the laboratory testing process: need for a coordinated approach
Ceriotti F, Gligorovic Barhanovic N, Kostovska I, Karel Kotaska K, Perich Alsina MC on behalf of the EFLM Working Group on Harmonisation of Total Testing Process
Clin Chem Lab Med 2016;54:e361-e363
4. Harmonization initiatives in Europe
Ceriotti F.
eJIFCC 2016;27:23-9

7.2.4. C: Postanalytical Phase

Terms of Reference

- To promote the importance of those activities that can improve clinical utilisation of laboratory tests in the postanalytical (PA) and post-postanalytical (PPA) phases including assisted test requesting (AR).
- To support laboratories in taking an active, prominent role in the above activities when they assist clinicians in finding the appropriate laboratory tests to meet their clinical needs and in translating the laboratory results to diagnostic information.
- To develop and organize surveys and collaborate with external quality assurance (EQA) programme organizers focusing on laboratory and/or clinical aspects of the above activities in European laboratories.
- To provide a scientific paper and a feedback report summarising the main findings of each survey and updating the recent literature of the investigated practice on each project.

Membership

Chair

Pieter Vermeersch, Belgium

second term: 2024-2025

Members

Annemieke Heijboer, the Netherlands

first term: 2025-2026

Anna Linko-Parvinen, Finland

second term: 2025-2026

Tomas Salek, Czech Republic

third term: 2025-2026

Tejas Kalaria (YS), UK

third term: 2025-2026

EQUALM representative

Rachel Marrington, UK

Corresponding Members

Jasna Lenicek Krleza, Croatia

George Kamkamidze, Georgia

Davide Giavarina, Italy

Katarzyna Fischer, Poland

Svetlana Ignjatovic, Serbia

Alenka Trampuš Bakija, Slovenia

Zeliha Gunnur Dikmen, Turkiye

Experts/Consultants

Eva Ajzner, Hungary

Janne Cadamuro, Austria

Danielle B. Freedman, UK

Ann-Helen Kristoffersen, Norway

Piet Meijer, the Netherlands

Alexander von Meyer, Germany

Publications

1. Is it feasible for European laboratories to use SI units in reporting results?
Zaninotto M, Agnello L, Dukic L, Salek T, Linko-Parvinen A, Kalaria T, Vermersch P, On Behalf of European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Committee-Harmonization (C-H) and Committee -Postanalytical Phase (C-POST)
Clin Chem Lab Med 2025

2. Efficiency, efficacy and subjective user satisfaction of alternative laboratory report formats. An investigation on behalf of the Working Group for Postanalytical Phase (WG-POST), of the European Fede
Cadamuro C, Winzer J, Perkhofer L, von Meyer A, Bauça JM, Plekhanova O, Linko-Parvinen A, Watine J, Kniewallner KM, Keppel MH, šálek T, Mrazek C, Felder TM, Oberkofler H, Haschke-Becher E, Vermeersch P, Kristoffersen AH and Eisl C.
Clin Chem Lab Med 2023
3. An international study on activated partial thromboplastin time prolongation. Part 1: Analytical results
Bauça JM, Ajzner E, Cadamuro J, Hillarp A, Kristoffersen AH, Meijer P; Working Group on the Postanalytical Phase of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)
Clinica Chimica Acta 2023
4. An international study on activated partial thromboplastin time prolongation. Part 2: Interpretative commenting
Bauça JM, Ajzner E, Cadamuro J, Hillarp A, Kristoffersen AH, Meijer P; Working Group on the Postanalytical Phase of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)
Clinica Chimica Acta 2023
5. Efficiency, efficacy and subjective user satisfaction of alternative laboratory report formats. An investigation on behalf of the Working Group for Postanalytical Phase (WG-POST), of the European Fede
Cadamuro J, Winzer J, Perkhofer L, von Meyer A, Bauça J. M , Plekhanova O, Linko-Parvinen A, Watine J, Kniewallner K. M, Keppel M. H, Šálek T, Mrazek C, Felder T. K, Oberkofler H, Haschke-Becher E, Vermeersch P, Kristoffersen A. E. and Eisl C, on behalf of the EFLM Working Group for Postanalytical Phase (WG-POST)
Clin Chem Lab Med 2022
6. Presentation and formatting of laboratory results: a narrative review on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Working Group "postanalytical phase" (WG-POST)
Cadamuro J, Hillarp A, Unger A, von Meyer A, Miquel Bauça J, Plekhanova O, Linko-Parvinen A, Watine J, Leichtle A, Buchta C, Haschke-Becher E, Eisl C, Winzer J, Kristoffersen AH
Crit Rev Clin Lab Sci 2021 doi 10.1080/10408363.2020.1867051
7. Is D-dimer used according to clinical algorithms in the diagnostic work-up of patients with suspicion of venous thromboembolism? A study in six European countries
Kristoffersen AH, Ajzner E, Rogic D, Sozmen EY, Carraro P, Faria AP, Watine J, Meijer P, Sandberg S for the joint EFLM-EQALM Working Group on Postanalytical Phase (WG-POST)
Thromb Res 2016;142:1-7
8. An international study of how laboratories handle and evaluate patient samples after detecting an unexpected APTT prolongation
Ajzner E, Rogic D, Meijer P, Kristoffersen AH, Carraro P, Sozmen E, Faria AP, Sandberg S on behalf of the joint EFLM-EQALM Working Group on Postanalytical Phase (WG-POST)
Clin Chem Lab Med 2015;53:1593-603

7.2.5. WG: Patient Focused Laboratory Medicine (incorporated in C-DCLTPE on 31/12/2024)

7.2.6. C: Practical Guide to Implement Measurement Uncertainty

Terms of Reference

- To develop a practical proposal on how to implement the Measurement Uncertainty (MU) in medical laboratories.
- To develop MU-based Analytical Performance Specifications (APS) for the measurands.
- To use MU of the measurands for the need of harmonization of different instruments and laboratories.

Membership

Chair

Abdurrahman Coskun, Türkiye

second term: 2025-2026

Members

Wytze Oosterhuis, The Netherlands

second term: 2025-2026

Jorge Pinheiro, Portugal

first term: 2025-20236

Elvar Theodorsson, Sweden

second term: 2025-2026

Corresponding Members

Expert/Consultant

Sverre Sandberg, Norway

Publications

1. Performance specifications for sodium should not be based on biological variation
Oosterhuis WP, Coskun A, Sandberg S, Theodorsson E.
Clinica Chimica Acta 2023
2. Measurement uncertainty for practical use
Coskun A, Theodorsson E, Oosterhuis W, Sandberg S, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Task and Finish Group on Practical Approach to Measurement Uncertainty
Clinica Chimica Acta 2022

7.2.7. C: Preanalytical Phase

Terms of reference

- To promote the importance of the quality of the preanalytical phase of laboratory medicine;
- To define the best practices and provide recommendations for some critical activities in the preanalytical phase;
- To design and validate questionnaires for assessing the current practices related to some pre-analytical variables;
- To conduct surveys using validated questionnaires with the aim to assess the current pre-analytical practices;
- Organize symposia, workshops, webinars or training courses on preanalytical phase issues.

Membership

Chair

Alexander von Meyer, Germany

first term: 2025-2026

Members

Ada Aita, Italy

first term: 2025-2026

Michael Cornes, UK

third term: 2024-2025

Zorica Sumarac, Serbia

third term: 2024-2025

Ricardas Stonys (YS), Lithuania

third term: 2024-2025

EQALM Representative

Gro Gidske, Norway

Rachel Marrington, UK

Corresponding Members

Sean Costelloe, Ireland
Pinar Eker, Turkey
Charles Lefevre, France
Mercedes Ibarz, Spain
Tomas Salek, Czech Republic
Jasna Lenicek Krleza, Croatia
Pieter Vermeersch, Belgium
Edmée van Dongen-Lases, the Netherlands

Experts/Consultants

Geoffrey S. Baird, US
Jean-Sebastien Blanchet, Beckman Coulter
Aliaume Breteau, BHealthCare
Janne Cadamuro, Austria
Vincent De Guire, Canada
Peter Deman, Bio-Rad Laboratories
Cesar Ferreira, maksense Indexor
Luuk Giesen, Vitestro
Rubén Gómez Rioja, Spain
Maksim Harbatsevich, Samplify FZCO
Gabriel Lima Oliveira, Latin-American Confederation of Clinical Biochemistry (COLABIOCLI)
Giuseppe Lippi, Italy
Riccardo Melis, Inpeco
Brendan Meyer, Becton Dickinson
Mads Nybo, Denmark
Andrea Padoan, Italy
Christa Seipelt, Sarstedt
Ana-Maria Simundic, Greiner Bio-One
Anne Skurup, Radiometer
Britta Willman, Sweden

Publications

1. The final part of the CRESS trilogy – how to evaluate the quality of stability studies
Cornes M, Vermeersch P, Simundic AM, Von Meyer A, Salek T, Meyer B, Costelloe S, De Guire V, Gomez-Rioja R, Cadamuro J, on behalf of the EFLM Working Group for the Preanalytical Phase (WG-PRE)
Clin Chem Lab Med 2024
2. Preservation of urine specimens for metabolic evaluation of recurrent urinary stone formers
Šálek T, Musil P, Vermeersch P, Marrington R, Dikmen Z. G, Poláchová R, Kipman U, Kouri T, Cadamuro J, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group Preanalytical Phase and Task and Finish Group Urinalysis
Clin Chem Lab Med 2024
3. Recommendations for blood sampling in emergency departments from the European Society for Emergency Medicine (EUSEM), European Society for Emergency Nursing (EuSEN), and European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Working Group for the Preanalytical Phase. Executive summary
Garcia-Castrillo L, Cadamuro J, Dodt C, Lauwaert D, Hachimi-Idrissi S, Van Der Linden C, Bergs J, Costelloe S, Grossmann F, Koca A, Palomäki A, Ruiz J.L, Stonys R, Thorsteinsdottir T.K, von Meyer A, Vermeersch P, Alvarez M.C.A, Eker P, Golea A, Kurland L, Lippi G, Zhilenkova Y, Sehmi K
Clin Chem Lab Med 2024
4. Recommendation for the design of stability studies on clinical specimens
Gomez-Rioja R, Von Meyer A, Cornes M, Costelloe S, Vermeersch P, Simundic AM, Nybo M, Stuart Baird G, Kristensen GBB and Cadamuro J, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Working Group Preanalytical Phase (C-PRE)
Clin Chem Lab Med 2023; <https://doi.org/10.1515/cclm-2023-0221>

5. Acidification of 24-hour urine in urolithiasis risk testing: An obsolete relic?
 Cadamuro J, Decho C, Frans G, Auer S, von Meyer A, Kniewallner K. M, Heinrich E, Keppel M. H, Mrazek C, Felder T. K, Oberkofler H, Haschke-Becher E, Kipman U, Salek T, Vermeersch P, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Working Group "Preanalytical Phase" (C-PRE)
Clinica Chimica Acta 2022;532:1-9
6. Preanalytical quality improvement – an interdisciplinary journey
 Cadamuro J, Baird G, Baumann G, Bolenius K, Cornes M, Ibarz M, Lewis T, Lima Oliveira G, Lippi G, Plebani M, Simundic AM, von Meyer A, on behalf of the European Federation for Clinical Chemistry and Laboratory Medicine (EFLM) Working Group for Preanalytical Phase (C-PRE)
Clin Chem Lab Med 2022; <http://doi.org/10.1515/cclm-2022-0117>
7. How to meet ISO15189:2012 pre-analytical requirements in clinical laboratories? A consensus document by the EFLM C-PRE
 Vermeersch P, Frans G, von Meyer A, Costelloe S, Lippi G, Simundic AM
Clin Chem Lab Med 2021; <http://doi.org/10.1515/cclm-2020-1859>
8. The CRESS checklist for reporting stability studies: on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Working Group for the Preanalytical Phase (C-PRE)
 Cornes M, Simundic A-M, Cadamuro J, Costelloe SJ, Baird G, Kristensen GBB, von Meyer A, Nybo M and Gómez Rioja R, on behalf of the Working Group for the Preanalytical Phase (C-PRE), of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)
Clin Chem Lab Med 2020; <http://doi.org/10.1515/cclm-2020-0061>
9. 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 (C-PRE)
 von Meyer A, Lippi G, Simundic AM, Cadamuro J.
Clin Chem Lab Med 2020; <http://doi.org/10.1515/cclm-2020-0273>
10. PREDICT: a checklist for preventing preanalytical diagnostic errors in clinical trials
 Lippi G, von Meyer A, Cadamuro J, Simundic AM, for the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Working Group for Preanalytical Phase (C-PRE)
Clin Chem Lab Med 2019; <http://doi.org/10.1515/cclm-2019-1089>
11. 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
 Cadamuro J, Lippi G, von Meyer A, Ibarz M, van Dongen Lases E, Cornes M, Nybo M, Vermeersch P, Grankvist K, Guimaraes JT, Kristensen GBB, de la Salle B, Simundic AM
Biochem Med 2019; <http://doi.org/10.11613/BM.2019.020704>
12. 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)
 Cadamuro J, Lippi G, von Meyer A, Ibarz M, van Dongen Lases E, Cornes M, Nybo M, Vermeersch P, Grankvist K, Guimaraes JT, Kristensen GBB, de la Salle B, Simundic AM
Biochem Med 2019; <https://doi.org/10.11613/BM.2019.020705>
13. Preanalytical challenges – time for solutions
 Lippi G, Betsou F, Cadamuro J, Cornes M, Fleischhacker M, Fruekilde P, Neumaier M, Nybo M, Padoan A, Plebani M, Sciacovelli L, Vermeersch P, von Meyer A, Simunic AM, on behalf of the Working Group for Preanalytical Phase (C-PRE), European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)
Clin Chem Lab Med 2019; <http://doi.org/10.1515/cclm-2018-1334>
14. Joint EFLM-COLABIOCLI Recommendation for venous blood sampling v 1.1, June 2018
 Simundic AM, Bolenius K, Cadamuro J, Church S, Cornes MP, van Dongen-Lases EC, Eker P, Erdeljanovic T, Grankvist K, Guimaraes JT, Hoke R, Ibarz M, Ivanov H, Kovalevskaya S, Kristensen GBB, Lima-Oliveira G, Lippi G, von Meyer A, Nybo M, De la Salle B, Seipelt C, Sumarac Z, Vermeersch P, on behalf of the Working Group for Preanalytical Phase (C-PRE), of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) and Latin American Working Group for Preanalytical Phase (C-PRE-LATAM) of the Latin America Confederation of Clinical Biochemistry (COLABIOCLI)
Clin Chem Lab Med 2018; <http://doi.org/10.1515/cclm-2018-0602>

15. The EFLM strategy for harmonization of the preanalytical phase
Lippi G, Simundic A-M, on behalf of the European Federation for Clinical Chemistry and Laboratory Medicine (EFLM) Working Group for Preanalytical Phase (C-PRE).
Clin Chem Lab Med 2018;56:1660-6
16. Call for more transparency in manufacturers declarations on serum indices: on behalf of the Working Group for Preanalytical Phase (WGPPE), European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)
von Meyer A, Cadamuro J, Lippi G, Simundic AM
Clin Chim Acta 2018;484:328-32
17. Blood Glucose Determination: Effect of Tube Additives
Lippi G, Nybo M, Cadamuro J, Guimaraes JT, van Dongen-Lases E, Ana-Maria Simundic AM
On behalf of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Working Group for Preanalytical Phase (C-PRE)
Adv Clin Chem 2018;84:101-23
18. Local quality assurance of serum or plasma (HIL) indices
Lippi G, Cadamuro J, von Meyer A, Simundic AM, on behalf of the EFLM Working Group for Preanalytical Phase (C-PRE)
Clin Biochem 2018;54:112-8
19. Practical recommendations for managing hemolyzed samples in clinical chemistry testing
Lippi G, Cadamuro J, von Meyer A, Simundic AM, on behalf of the EFLM Working Group for Preanalytical Phase (C-PRE)
Clin Chem Lab Med 2018;56:718-27
20. Improving quality in the preanalytical phase through innovation, on behalf of the European Federation for Clinical Chemistry and Laboratory Medicine (EFLM) Working Group for Preanalytical Phase (C-PRE)
Lippi G, Baird GS, Banfi G, Bölenius K, Cadamuro J, Church S, Cornes MP, Dacey A, Guillon A, Hoffmann G, Nybo M, Premawardhana LD, Salinas M, Sandberg S, Slingerland R, Stankovic A, Sverresdotter SM, Vermeersch P, Simundic AM.
Clin Chem Lab Med 2017; 55:489-500
21. Order of blood draw: Opinion Paper by the European Federation for Clinical Chemistry and Laboratory Medicine (EFLM) Working Group for the Preanalytical Phase (C-PRE)
Cornes M, van Dongen-Lases E, Grankvist K, Ibarz M, Kristensen G, Lippi G, Nybo M, Simundic AM.
Clin Chem Lab Med 2017;55:27-31
22. Patient identification and tube labelling – a call for harmonisation
van Dongen-Lases E, Cornes MP, Grankvist K, Mercedes Ibarz M, Kristensen GBB, Lippi G, Nybo M, Simundic AM on behalf of the Working Group for Preanalytical Phase (C-PRE), European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)
Clin Chem Lab Med 2016;54:1141-5
23. The role of European Federation of Clinical Chemistry and Laboratory Medicine Working Group for Preanalytical Phase in standardization and harmonization of the preanalytical phase in Europe
Cornes MP, Church S, van Dongen-Lases E, Grankvist K, Guimaraes JT, Ibarz M, Kovalevskaya S, Kristensen GBB, Lippi G, Nybo M, Sprongl L, Sumarac Z, Simundic AM
Ann Clin Biochem 2016;53:539-47
24. EFLM C-Preanalytical phase opinion paper: local validation of blood collection tubes in clinical laboratories
Lippi G, Cornes MP, Grankvist K, Nybo M, Simundic AM
Clin Chem Lab Med 2016;54:755-60
25. Colour coding for blood collection tube closures – a call for harmonisation.
Simundic AM, Cornes MP, Grankvist K, Lippi G, Nybo M, Ceriotti F, Theodorsson T, Panteghini M.
on behalf of the European Federation for Clinical Chemistry and Laboratory Medicine (EFLM)
Clin Chem Lab Med 2015;53:371-6
26. Compliance of blood sampling procedures with the CLSI H3-A6 guidelines: An observational study by the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) working group for the preanalytical phase (C-PRE)
Simundic AM, Church S, Cornes MP, Grankvist K, Lippi G, Nybo M, Nikolac N, van Dongen-Lases E, Eker P, Kovalevskaya S, Kristensen GBB, Sprongl L, Sumarac Z.
Clin Chem Lab Med 2015;53:1321-31

27. Preanalytical quality improvement. In pursuit of harmony, on behalf of European Federation for Clinical Chemistry and Laboratory Medicine (EFLM) Working group for Preanalytical Phase (C-PRE)
Lippi G, Banfi G, Church S, Cornes M, De Carli G, Grankvist K, Kristensen GB, Ibarz M, Panteghini M, Plebani M, Nybo M, Smellie S, Zaninotto M, Simundic AM.
Clin Chem Lab Med 2015;53:357-70
28. Standardization of collection requirements for fasting samples: for the Working Group on Preanalytical Phase (C-PA) of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)
Simundic AM, Cornes M, Grankvist K, Lippi G, Nybo M.
Clin Chim Acta 2014;432:33-7
29. Preanalytical quality improvement: in quality we trust
Lippi G, Becan-McBride K, Behúlová D, Bowen RA, Church S, Delanghe J, Grankvist K, Kitchen S, Nybo M, Nauck M, Nikolac N, Palicka V, Plebani M, Sandberg S, Simundic AM.
Clin Chem Lab Med 2013;51:229-41
30. Survey of national guidelines, education and training on phlebotomy in 28 European countries: an original report by the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) working group for the preanalytical phase (C-PA)
Simundic AM, Cornes M, Grankvist K, Lippi G, Nybo M, Kovalevskaya S, Sprongl L, Sumarac Z, Church S.
Clin Chem Lab Med 2013;51:1585-93
31. Preanalytical quality improvement: from dream to reality
Lippi G, Chance JJ, Church S, Dazzi P, Fontana R, Giavarina D, Grankvist K, Huisman W, Kouri T, Palicka V, Plebani M, Puro V, Salvagno GL, Sandberg S, Sikaris K, Watson I, Stankovic AK, Simundic AM.
Clin Chem Lab Med 2011;49:1113-26

7.2.8. WG: Test Evaluation (incorporated in C-CAPS on 31/12/2024)

7.2.9. C: Value-Score for Clinical Laboratories

Terms of reference

- To identify some fundamental requirements which allow to understand the true quality of clinical laboratory services.
- To accomplish an objective evaluation of quality in the total testing process.
- To develop a value-based score- based on the previously cited requirements – with information that should be easily collected (avoiding manual collection as automation is the goal).
- To accomplish an effective program of benchmark between clinical laboratories.

Membership

Chair

Mario Plebani, Italy

first term: 2025-2026

Members

Pawel Kozlowski, Poland

first term: 2025-2026

Matthijs Oyaert, Belgium

first term: 2025-2026

Maria Venihaki, Greece

first term: 2025-2026

Kamil Taha Uçar (YS), Turkiye

first term: 2025-2026

Experts/Consultants

Giuseppe Banfi, Italy

Aburrahman Coskun, Turkiye

7.2.10. TC: Biological Variation Database

Terms of Reference

- To improve the quality of BV data
- To critically appraise published BV data
- To expand and maintain a database on BV data on the BVD website
- To explore how to evaluate data mining studies reporting BV data and how to incorporate these results in the BVD
- To explore publishing an overview of which measurands are allocated to the different models in the Milan hierarchy in the BVD website

Membership

Chair

Aasne Karine Aarsand, Norway

second term: 2025-2026

Members

Kornelia Delfina Galior, USA

second term: 2025-2026

Isabel Moreno Parro, Spain

second term: 2025-2026

Berta Sufrate, Spain

second term: 2025-2026

Deniz Ilhan Topcu (YS), Turkiye

first term: 2024-2025

Experts/Consultants

William A Bartlett, UK

Anna Carobene, Italy

Abdurrahman Coskun, Turkey

Jorge Díaz-Garzon, Spain

Pilar Fernández-Calle, Spain

Elisabet Gonzalez-Lao, Spain

Niels Jonker, The Netherlands

Sverre Sandberg, Norway

Craig Webster, UK

Publications

1. Systematic review and meta-analysis of biological variation data of urine albumin, albumin to creatinine ratio and other markers in urine
Aslan B, Carobene A, Jonker N, Galior K, Boned B, Marqués-Garcia F, Ricos C, Bartlett W, Coskun A, Diaz-Garzon J, Fernandez-Calle P, Gonzales-Lao E, Simon M, Sandberg S, Aarsand A K, on behalf of the European Federation of Clinical Chemistry, Laboratory Medicine Task Group for the Biological Variation Database (TG-BVD)
Clinica Chimica Acta 2024
2. A standard to report biological variation data studies – based on an expert opinion
Bartlett WA, Sandberg S, Carobene A, Fernandez-Calle P, Diaz-Garzon J, Coskun A, Jonker N, Galior K, Gonzales-Lao E, Moreno-Parro I, Sufrate-Vergara B, Webster C, Itkonen O, Marques-Garcia F, Aarsand AK, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Task Group for the Biological Variation Database, and Biological Variation Working Group
Clin Chem Lab Med 2024
3. Sex-related differences in within-subject biological variation estimates for 22 essential and non-essential amino acids
Coskun A, Carobene A, Demirelce O, Mussap M, Braga F, Sezer E, Aarsand AK, Sandberg S, Fernández Calle P, Díaz-Garzón J, Erkaya M, Coskun C, Nur Erol E, Dag H, Bartlett B, Serteser

M, Jonker N, Unsal I, European Federation of Clinical Chemistry, Laboratory Medicine Working Group on Biological Variation, Task Group for the Biological Variation Database
Chimica Clinica Acta 2024

4. Analytical performance specifications based on biological variation data – considerations, strengths and limitations
Sandberg S, Coskun A, Carobene A, Fernandez-Calle P, Diaz-Garzon J, Bartlett WA, Jonker N, Galior K, Gonzales-Lao E, Moreno-Parro I, Sufrate-Vergara B, Webster C, Aarsand AK, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Task Group for the Biological Variation Database
Clin Chem Lab Med 2024
5. Critical review and meta-analysis of biological variation estimates for tumor markers
Marques-Garcia F, Boned B, González-Lao E, Braga F, Carobene A, Coskun A, Díaz-Garzón J, Fernández-Calle J, Carmen Perich M, Simon M, Jonker N, Aslan B, Bartlett WA, Sandberg S, Aarsand AK, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation and Task Group for the Biological Variation Database
Clin Chem Lab Med 2022
6. Biological variation estimates of thyroid related measurands - meta-analysis of BIVAC compliant studies
Fernández-Calle P, Díaz-Garzón J, Bartlett W, Sandberg S, Braga F, Beatriz B, Carobene A, Coskun A, Gonzalez-Lao E, Marques F, Perich C, Simon M, Aarsand AK, EFLM Working Group on Biological Variation and Task Group for the Biological Variation Database
Clin Chem Lab Med 2021 doi:10.1515/cclm-2021-0904
7. Within- and between-subject biological variation data for serum zinc, copper and selenium obtained from 68 apparently healthy Turkish subjects
Coşkun A, Carobene A, Aarsand AK, Aksungar FB, Serteser M, Sandberg S, Díaz-Garzón J, Fernandez-Calle P, Karpuzoglu FH, Coskun C, Kizilkaya E, Fidan D, Jonker N, Ugur E, Unsal I, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation and Task Group for the Biological Variation Database
Clin Chem Lab Med 2021
8. Systematic review and meta-analysis of withinsubject and between-subject biological variation estimates of serum Zinc, Copper and Selenium
Coskun A, Aarsand AK, Braga F, Carobene A, Díaz-Garzón J, Fernandez-Calle P, Jonker N, Gonzalez Lao E, Marques-Garcia F and Sandberg S, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation and Task Group for the Biological Variation Database
Clin Chem Lab Med 2021
9. Biological Variation of Cardiac Troponins in Health and Disease: A Systematic Review and Meta-analysis
Diaz-Garzon J, Fernandez-Calle P , Sandberg S , Ozcurumez M, Bartlett WA, Coskun A, Carobene A, Perich C , Simon M, Marques F, Boned b, Gonzalez-Lao E, Braga F, Aarsand AK, EFLM Working Group on Biological Variation and Task Group for the Biological Variation Database
Clin Chem Lab Med 2020 doi 10.1515/cclm-2020-1490
10. Critical appraisal and meta-analysis of biological variation estimates for kidney related analytes
Jonker N, Aslan B, Boned B, Marques-García F, Ricós C, Alvarez V, Bartlett W, Braga F, Carobene A, Coskun A, Diaz-Garzón J, Fernández-Calle P, Gonzalez-Lao E, Minchinela J, Perich C, Simón M, Sandberg S, Aarsand AK, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation and Task Group for the Biological Variation Database
Clin Chem Lab Med 2020
11. Systematic review and meta-analysis of within-subject and between-subject biological variation estimates of 20 haematological parameters
Coskun A, Braga F, Carobene A, Ganduxe AT, Aarsand AK, Fernandez-Calle P, Diaz-Garzon Marco J, Bartlett J, Jonker N, Aslan B, Minchinela J, Boned B, Gonzalez-Lao E, Marques-Garcia F, Perich C, Ricos C, Simon M, Sandberg S, on behalf of the European Federation of Clinical

Chemistry and Laboratory Medicine (EFLM) Working Group on Biological Variation and Task Group for the Biological Variation Database
Clin Chem Lab Med 2019

12. Systematic review of the biological variation data for diabetes related analytes
González-Lao E, Corte Z, Simón M, Ricós C, Coskun A, Braga F, Aarsand A.K, Carobene A, Bartlett WA, Boned B, Asland B, Díaz-Garzón J, Marqués-García F, Minchinela J, Perich C, Fernández-Calle P, Roraas T, Fernández-Fernández P, Jonker N, Sandberg S. on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation and Task Group for the Biological Variation Database
Clin Chim Acta 2018 doi: 10.1016/j.cca.2018.10.031
13. The Biological Variation Data Critical Appraisal Checklist: a Standard for Evaluating Studies on Biological Variation.
Aarsand AK, R Raas T, Fernandez-Calle P, Ricos C, Díaz-Garzón J, Jonker N, Perich C, González-Lao E, Carobene A, Minchinela J, Coškun A, Simón M, Álvarez V, Bartlett WA, Fernández-Fernández P, Boned B, Braga F, Corte Z, Aslan B, Sandberg S.
Clin Chem 2018;64:501-14

7.3. Area: Integrated Diagnostics

7.3.1. C: Autoimmunity Testing

Terms of reference

To harmonize the measurement and use of autoimmunity tests specifically by:

- performing surveys and/or literature search in order to collect data and information on autoimmunity testing practices and policies in European countries.
- developing recommendations on best laboratory practices for some mutually agreed issues.
- publishing results of the surveys and/or consensus recommendations.
- organizing training courses, symposia or conferences in the field of autoimmunity guidelines.

Membership

Chair

Xavier Bossuyt, France

third term: 2024-2025

Members

Marcos Lopez-Hoyos, Spain

third term: 2024-2025

David Goncalves, France

first term: 2025-2026

Alessandra Melegari, Italy

first term: 2025-2026

Manca Ogric, Slovenia

second term: 2025-2026

Corresponding Members

Michal Rataj, Czech Rep.

Experts/Consultants

Carolien Bonroy, Belgium

Martine Vercammen, Belgium

Publications

1. Harmonization of antineutrophil cytoplasmic antibodies (ANCA) testing by reporting test result specific likelihood ratios: position paper
Bossuyt X, Damoiseaux J, Rasmussen N, van Paassen P, Hellmich B, Baslund B, Blockmans D, Vermeersch P, Lopez-Hoyos M, Vercammen M, Barret E, Hammar F, Leinfelder U, Mahler M, Olschowka N, Roggenbuck D, Schlumberger W, Walker R, Rönnelid J, Cohen Tervaert JW, Csernok E, Fierz W for the European Federation of Laboratory Medicine (EFLM) Task and Finish

Group “Autoimmunity Testing”, the European Autoimmune Standardization Initiative (EASI) and the European Consensus Finding Study Group on autoantibodies (ECFSG)
Clin Chem Lab Med 2020

7.3.2. C: Biological Markers of Nitrous Oxide Abuse

Terms of Reference

- To promote relation between biologists and clinicians (neurologists and emergency physicians) for manage patient with nitrous oxide abuse
- To provide recommendations on biological markers to be used in the diagnosis and follow-up of the nitrous oxide abusing patient.
- To provide a scientific paper and a feedback report summarising the main findings of literature and clinical trial associated.

Membership

Chair

Guillaume Grzych, France

second term: 2025-2026

Members

Medine Alpdemir, Turkey

second term: 2025-2026

Graham Lee, Ireland

second term: 2025-2026

Emeline Gernez (YS) France

second term: 2025-2026

Experts/Constultants

Kurt Anseeuw, Belgium

Anne-Lise Bjorke Monsen, Norway

Jørgen Bramness, EUFAS representative

Etienne Cavalier, Belgium

Kathleen Croes, Belgium

Joe El Khoury, USA

Jasmin Hamzic, Croatia

Alastair Noyce, UK

Mohamed Ouni, Tunisia

Benjamin Rolland, EUFAS representative

Sanja Stankovic, Serbia

Pieter Vermeersch, Belgium

Publications

1. Addressing the silent epidemic of recreational nitrous oxide use: a position, call to action and recommendations by the European Federation of Clinical Chemistry and Laboratory Medicine Committee on Biological Markers of Nitrous Oxide Abuse
Grzych G, Lee GR, Alpdemir M, Gernez E, Anseeuw K, Bjorke-Monsen AL, Croes K, El-Khoury JM, Hamzic J, Noyce AJ, Stankovic S, Rolland B, Bramness J, Vermeersch P, Cavalier E, on behalf of the EFLM Committee on Biological Markers of Nitrous Oxide Abuse
Clin Chem Lab Med 2025

7.3.3. C: Biomarkers of Mild Traumatic Brain Injury

Terms of Reference

- To provide recommendations on biomarkers to be used, to be avoided in the diagnosis and prognosis of mTBI.
- To promote biological expertise between clinical biologists and clinicians (in emergency department) to better manage patients with mTBI
- To provide scientific papers summarizing the main finding of the literature on mTBI biomarkers and of their integration of global algorithm/management of mTBI patients.

Membership

Chair

Vincent Sapin, France

second term: 2025-2026

Members

Chiara Di Resta, Italy

first term 2025-2026

Helena Ferreira Da Silva, Portugal

second term: 2025-2026

Aurélie Ladang, Belgium

second term: 2025-2026

Anne-Cécile Chiollaz (YS), Switzerland

first term 2024-2025

Corresponding Members

Lara Milevoj Kocinovic, Croatia

Sanja Stankovic, Serbia

Experts/Constultants

Tomris Ozben, Turkiye

Christos Varounis, Abbott Diagnostics Representative

7.3.4. C: Chronic Kidney Disease

Terms of Reference

- To promote GFR measurement in Europe
- To enhance the Promotion and Validation of the EKFC Equation
- To standardize and Promote the Use of Bone Turnover Markers in CKD
- To foster Cross-Disciplinary Collaboration Between Nephrology and Clinical Chemistry.
- To survey and Harmonize Renal Function Testing in Europe
- To support the Implementation of KDIGO Guidelines in Europe

Membership

Chair

Etienne Cavalier, Belgium

second term: 2024-2025

Members

Soren Egstrand, Denmark

first term: 2025-2026

Konstantinos Makris, Greece

second term: 2024-2025

Tomas Zima, Czech Rep.

second term: 2024-2025

Michelle van der Helm (YS), the Netherlands

first term: 2025-2026

Corresponding Members

Maria Averina, Norway

Barbara Dołęgowska, Poland

Sanja Stankovic, Serbia

Janez Klavž, Slovenia

Nayra Rico Santana, Spain

Oytun Portakal, Turkiye

Experts/Consultants

Pierre Delanaye, Belgium

Publications

1. The importance of laboratory medicine in the management of CKD-MBD: insights from the KDIGO 2023 controversies conference
Vasikaran SD, Makris K, Pal Bhattoa H, Zima T, Delanaye P, Evenepoel P, Jørgensen HS, Haarhaus M, McCloskey E, Lombardi G, Cavalier E, IFCC Committee on Bone Metabolism, EFLM Committee on Chronic Kidney Disease
Clin Chem Lab Med 2025
2. Recommendations for European laboratories based on the KDIGO 2024 Clinical Practice Guideline for the Evaluation and Management of Chronic Kidney Disease
Cavalier E, Zima T, Datta P, Makris K, Schaeffner E, Langlois M, Plebani M, Delanaye P, on behalf of the EFLM Task Group on Chronic Kidney Disease (TG-CKD)
Clin Chem Lab Med 2024
3. Assessing the status of European laboratories in evaluating biomarkers for chronic kidney diseases (CKD) and recommendations for improvement: insights from the 2022 EFLM Task Group on CKD survey
Etienne Cavalier, Konstantinos Makris, Oytun Portakal, Ana Nikler, Pradip Datta, Tomas Zima, Pierre Delanaye and for the EFLM Task Group on CKD
Clin Chem Lab Med 2023
4. The new, race-free, Chronic Kidney Disease Epidemiology Consortium (CKD-EPI) equation to estimate glomerular filtration rate: is it applicable in Europe? A position statement by the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)
Delanaye P, Schaeffner E, Cozzolino M, Langlois M, Plebani M, Ozben T, Cavalier E, on behalf of the Board members of the EFLM Task Group Chronic Kidney Diseases
Clin Chem Lab Med 2022 <https://doi.org/10.1515/cclm-2022-0928>

7.3.5. C: Integrative Diagnostics

Terms of reference

- To review and evaluate current diagnostic techniques and technologies for NSCLC, including imaging, biopsy, and molecular testing.
- To identify gaps and limitations in the current diagnostic approach for NSCLC, and to develop strategies for improving diagnostic accuracy and efficiency.
- To establish guidelines and protocols for the integration of diagnostic results across disciplines, including radiology, pathology, and oncology.
- To promote collaboration and communication among healthcare providers, to ensure continuity of care and to avoid duplicating tests or missing important information.
- To review and evaluate new and emerging diagnostic technologies and methods for NSCLC, and to make recommendations for their adoption and implementation.
- To provide education and training for healthcare providers on the use of integrated diagnostic techniques and technologies for NSCLC.
- To develop a plan for monitoring and evaluating the effectiveness of the integrated diagnostic approach for NSCLC and to make recommendations for improvements as needed.
- To provide regular updates to relevant stakeholders, including patients, healthcare providers, payers, and policymakers, on the progress of the task and finish group and the impact of the integrated diagnostic approach for NSCLC.
- To establish a timeline for the task and finish group's activities and to set specific goals and objectives.

- To ensure that the task and finish group's activities are in line with relevant ethical and legal guidelines, including patient privacy and data security.

Membership

Chair

Jochen Lennerz, USA

second term: 2025-2026

Members

Fabio Del Ben, Italy

second term: 2025-2026

Joao Tiago Guimarães, Portugal

second term: 2025-2026

Luis Martí-Bonmatí, Spain

second term: 2025-2026

Nino Berishvili (YS), Georgia

first term: 2025-2026

Experts/Consultants

Sergio Bernardini, Italy

Miriam Bredella, USA

Reinhard Buettner, Germany

Anna Carobene, Italy

Verena Haselmann, Germany

Tomris Ozben, Turkiye

Daniele Regge, Italy

Roberto Salgado, Australia

Albrecht Stenzinger, Germany

Norman Zerbe, Germany

7.3.6. C: Vascular Risk Biomarkers

Terms of Reference

- To prepare an overview of lipoproteins and atherosclerosis risk marker assays available in Europe, their assay principles, and recommended result reporting
- To obtain a comprehensive survey of laboratory practices in European countries to determine lipoproteins and risk marker concentrations and report results including the availability of molecular analysis
- To compare EQA-schemes for lipoproteins and risk markers among European countries
- To provide recommendations on how to measure and report lipoproteins and risk markers
- To follow-up evidence of emerging cardiovascular risk factors such as Lp(a), remnant lipoproteins and apolipoproteins, and prepare an update guidance for their measurements

Membership

Chair

Karl Lackner, Germany

first term: 2024-2025

Members

Christa Cobbaert, the Netherlands

first term: 2024-2025

Michel Langlois, Belgium

first term: 2024-2025

Kari Pulkki, Finland

first term: 2024-2025

Blanca Fabre-Estremera, Spain

first term: 2024-2025

Corresponding Members

Maria Donata di Taranto, Italy

Oguzhan Ozcan, Turkiye

7.3.7. TG: Performance Specifications Based on Outcome Studies (incorporated in C-CAPS on 31/12/2024)

7.4. Area: Emerging Perspectives

7.4.1. C: Digitalisation and Artificial Intelligence

Terms of Reference

- To establish the guideline for the use of laboratory data in Machine Learning;
- To evaluate the suitable application of the Machine Learning approach in Laboratory Medicine;
- To publish studies where Machine Learning algorithms are applied to well characterized laboratory data collected from different European laboratories for meaningful and appropriate tasks;
- To define interdisciplinary lectures and courses on Artificial Intelligence topics.

Membership

Chair

Andrea Padoan, Italy

second term: 2024-2025

Members

Željko Debeljak, Croatia

second term: 2024-2025

Glynis Frans, Belgium

second term: 2024-2025

Habib Özdemir, Turkiye

second term: 2024-2025

Sander De Bruyne (YS), Belgium

second term: 2024-2025

Corresponding Members

Helena Lame, Albania

Hanoch Goldshmidt, Israel

William van Doorn, the Netherlands

Salomón Martín Pérez, Spain

Experts/Consultants

Federico Cabitza, Italy

Janne Cadamuro, Austria

Anna Carobene, Italy

Johannes Elias, Germany

Alexander Tolios, Austria

Publications

1. EFLM checklist for the assessment of AI/ML studies in laboratory medicine: enhancing general medical AI frameworks for laboratory-specific applications
Carobene A, Cadamuro J, Frans G, Goldshmidt H, Debeljak Z, De Bruyne S, van Doorn W, Elias J, Özdemir H, Perez SM, Lame H, Tolios A, Cabitza F, Padoan A, On behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Committee on Digitalisation and Artificial Intelligence
Clin Chem Lab Med 2025
2. A comprehensive survey of artificial intelligence adoption in European laboratory medicine: current utilization and prospects
Cadamuro J, Carobene A, Cabitza F, Debeljak Z, De Bruyne S, van Doorn W, Johannes E, Frans G, Özdemir H, Perez S M, Rajdl D, Tolios A, Padoan A, on behalf of the EFLM Working Group on Artificial Intelligence (WG-AI)
Clin Chem Lab Med 2024

3. Data flow in clinical laboratories: could metadata and peridata bridge the gap to new AI-based applications? An investigation on behalf of the EFLM Working Group on Artificial Intelligence (WG-AI)
Padoan A, Cadamuro J, Frans G, Cabitza F, Tolios A, De Bruyne S, van Doorn W, Elias J, Debeljak Z, Perez S. M, Özdemir H, Carobene A
Clin Chem Lab Med 2024
4. Potentials and pitfalls of ChatGPT and natural-language artificial intelligence models for the understanding of laboratory medicine test results. An assessment by the EFLM WG on Artificial Intelligence
Cadamuro J, Cabitza F, Debeljak Z, De Bruyne S, Frans G, Martin Perez S, Ozdemir H, Tolios A, Carobene A and Padoan A
Clin Chem Lab Med 2023

7.4.2. C: Direct-to-Consumer Laboratory Testing and Patient Empowerment

Terms of Reference

- Education of laboratory specialists, law makers, and notified bodies how patients' safety is guaranteed in IVD testing
- Aid IVD vendors, testing services, and patients/consumers with the "intended use" of certain IVD testing services
- Developing standards to be met when DTCT data has to be used for healthcare
- Recommendations for or against the use of certain IVD tests as DTCT
- Explore and promote the engagement of patients and professionals in enabling patients to receive individualised support in understanding what their results mean for them
- Develop surveys and projects that support the above

Membership

Chair

Matthias Orth, Germany

second term: 2025-2026

Members

Nathalie De Vos, Belgium

first term: 2025-2026

Sophie Hepburn, UK

third term: 2025-2026

Joanna Siódmiak, Poland

third term: 2024-2025

Maximillian Kittel (YS), Germany

third term: 2024-2025

Corresponding Members

Iva Lukic, Croatia

Vladimir Palicka, Czech Rep

Marge Kutt, Estonian

Bernard Gouget, France

Ekaterine Kupatadze, Georgia

Jennifer Brady, Ireland

Avi Peretz, Israel

Tommaso Trenti, Italy

Oana Oprea, Romania

Marina Pijanović, Serbia

Jan Balla, Slovakia

Marta Duque Alcorta, Spain

Mathias Karlsson, Sweden

Murat Cihan, Turkiye

Berni Croal, UK

Experts/Consultants

Snezana Jovicic, Serbia
Piret Kedars, Estonia
Banu Isbilen Basok, Turkiye
Wytze Oosterhuis,
Tomris Ozben, Turkiye
Mario Plebani, Italy
Sverre Sandberg, Norway
Delphine Sartiaux, Medtech
Patty Shih, Australia

Publications

1. Direct-to-consumer testing as consumer initiated testing: compromises to the testing process and opportunities for quality improvement. An opinion paper from the EFLM DTCT-Taskforce
Shih P, Sandberg S, Balla J, Isbilen Basok B, Brady J. J, Croal B, De Vos N, Karlsson M, Kedars P, Ozben T, Pijanovic M, Plebani M, Orth M
Clin Chem Lab Med 2024
2. Quality benchmarking of smartphone laboratory medicine applications: comparison of laboratory medicine specialists' and non-laboratory medicine professionals' evaluation
Jovicic S, Siodmiak J, Duque Alcorta M, Kittel M, Oosterhuis W, Moberg Aakre K, Jørgensen P, Palicka V, Kutt M, Anttonen M, Velizarova MG and Marc J, European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Patient-Focused Laboratory Medicine
Clin Chem Lab Med 2021;59:693–9
3. Quality evaluation of smartphone applications for laboratory medicine
Jovicic S, Siodmiak J and Watson ID, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Patient Focused Laboratory Medicine
Clin Chem Lab Med 2019;57:388–97
4. A survey of patients' views from eight European countries of interpretive support from Specialists in Laboratory Medicine
Watson ID, Oosterhuis WP, Jorgensen PE, Z. Dikmen ZG, Siodmiak J, Jovicic S, Aakre KM, Palicka V, Kutt M on behalf of the EFLM Working Group on Patient Focused Laboratory Medicine
Clin Chem Lab Med 2017; 55: 1496–500
5. European views on patients directly obtaining their laboratory test results
Watson ID, Siodmiak J, Oosterhuis WP, Corberand J, Jorgensen PE, Gunnur Dikman Z, Jovicic S, Theodorsson E for the EFLM Working Group on Patient Focused Laboratory Medicine (WG-PFLM)
Clin Chem Lab Med 2015;53:1961-6
6. Making test results more easily understood by patients
Watson I on behalf of the EFLM Working Group on Patient Focused Laboratory Medicine (WG-PFLM)
BMJ 2015;350:h1942

7.4.3. C: European Regulatory Affairs

The EFLM C-ERA takes a continued proactive role in the phased role out of the IVDR (from May 2022 to May 2028) by means of a functional governance and communication structure which guarantees to be influential and “at the table” during meetings and consultations of the European Commission (EC) regarding interpretation and operationalization of the IVDR.

The EFLM C-ERA provides professional advice and/or guidance on the IVDR interpretation in main areas of work of the EC Medical Device Coordination Groups. C-ERA observers take part in public consultations of guidance documents prepared by Task Forces of the Competent Authorities/European Commission particularly, but not exclusively, on the following topics:

1. Performance Evaluation & Performance Studies #
2. Scope & Classification
3. Notified Bodies & Conformity Assessment ##

Florent J.L.A. Vanstapel F.J.L.A., Boursier G., Cobbaert C.M., on behalf of the EFLM Task Force on European Regulatory Affairs and the EFLM Quality and Regulations Committee
Clin Chem Lab Med 2023; <https://doi.org/10.1515/cclm-2023-0750>

3. ISO 15189 is a sufficient instrument to guarantee high-quality manufacture of laboratory developed tests for in-house-use conform requirements of the European In-Vitro-Diagnostics Regulation
Vanstapel F.J.L.A, Orth M, Streichert T., Capoluongo E.D, Oosterhuis W.P, Can Çubukçu H, Bernabeu-Andreu F.A, Thelen M, Jacobs L.H.J, Linko S, Pal Bhattoa H, Bossuyt P.M.M, Meško Brguljan P, Boursier G, Cobbaert C.M and Neumaier M
Clin Chem Lab Med 2023; <https://doi.org/10.1515/cclm-2023-0045>

7.4.4. C: Green & Sustainable Laboratories

Terms of Reference

- Informing and consulting EFLM member societies for implementing sustainable practices in medical laboratories.
- Establishing Guidelines (Green Lab Guide), Criteria and Key Recommendations for sustainable practices in clinical laboratories.
- Guiding the transition to Green Labs.
- Launching calls to receive applications for GREEN LAB Certification program.
- Evaluation of the applications and providing annual certificates of different categories.
- Evaluation of GREEN LAB Certification applications for renewals.

Membership

Chair

Tomris Ozben, Türkiye

second term: 2024-2025

Members

Damien Gruson, Belgium

second term: 2024-2025

Snezana Jovicic, Serbia

second term: 2024-2025

Ferhan Sagin, Türkiye

second term: 2024-2025

Paola Galozzi (YS), Italy

first term: 2025-2026

Corresponding Members

Ledina Mino, Albania

Andrea Griesmacher, Austria

Etienne Cavalier, Belgium

Ignace Van Hecke, Germany

Jozo Coric, Bosnia-Herzegovina

Tanya Deneva, Bulgaria

Ivana Celap, Croatia

Spyroula Christou, Cyprus

Martina Bunezova, Czech Rep

Mads Nybo, Denmark

Mahis Bakhoff, Estonia

Tuija Männistö, Finland

Joëlle Goudable, France

Helen Muller, France

Natia Bukhrashvili, Georgia

Ralf Lichtinghagen, Germany

Grigoratou Andriani, Greece

Agens Péterfalvi, Hungary

Leifur Franzson, Iceland

Sean Costelloe, Ireland

Ana Rakovac, Ireland

Greta Domarkaite, Ireland
Maanit Shapira, Israel
Tommaso Trenti, Italy
Gramos Begolli, Kosovo
Dagne Gravele, Latvia
Rasa Augliene, Lithuania
Jean-Hugues François, Luxemburg,
Najdana Gligorovic-Barhanovic, Montenegro
Evelien Boekhout, Netherlands
Marc Elisen, Netherlands
J.J.C.M. (Sjef) van de Leur, Netherlands
Jasna Bogdanska, North Macedonia
Elena Stanojevska Petrushevska, North Macedonia
Margunn Bye Tøsdal, Norway
Katarzyna Fischer, Poland
Luísa Espinhaço, Portugal
Cristina Marques, Portugal
Adina Hutanu, Romania
Dorina Popa, Romania
Mikhail Godkov, Russia
Iva Perović Blagojević, Serbia
Sanja Stankovic, Serbia
Hedviga Pivovarníková, Slovak Republic
Lidija Gobec, Slovenia
Blanca Fabre, Spain
Antonio Rider Pérez, Spain
Mats Ohlson, Sweden
Pierre-Alain Binz, Switzerland
Guzin Aykal, Turkey
Anna Sanders, United Kingdom
Sergiy Klymenko, Ukraine

Experts/Consultants

Mariana Marques, Portugal
Solveig Mo, Norway
Sanja Stankovic, Serbia

7.4.5. C: Preparation of Labs for Emergencies

According to the WHO, the European Region is in a “polycrisis” and “permacrisis” that stretches well beyond the pandemic, climate change and war. The ongoing COVID-19 pandemic, with several hundred million confirmed cases and with nearly 3 million recorded deaths in Europe, is another crisis that has put health higher on scientific agenda. Then, we have the current monkeypox public health emergency of international concern. And, not least, the devastating war in Ukraine, which unfortunately shows no signals of de-escalation, and is compounded by horrific attacks on health facilities and providers. Additional and potentially devastating scenarios include climate emergencies (tornadoes, thunderstorms, hail), earthquakes and tsunamis, fires, chemical/biological/radiological (CBR) emergencies, aircraft crashes, terrorism and bioterrorism, civil disorders, and so forth. As specifically concerns infectious diseases, laboratory responsiveness is expected to further improve the timeliness, completeness, and accuracy of case reporting during outbreaks and also enhance feedback and transparency. Nevertheless, what we have learn from the past is that laboratory medicine is largely unprepared for this challenge. For this reason, the new EFLM Task Force "Preparation of Labs for emergencies" has been created to be prepared to face these challenges putting into practice suitable solutions offering laboratory diagnostics in areas affected by various anthropogenic and non-anthropogenic emergencies.

Terms of Reference

- Survey EFLM Countries to understand the state-of-the-art on lab preparation for emergencies across Europe and possibly identify (or set) the benchmark
- Define priority areas (i.e., type of emergencies) to become specific targets of laboratory medicine of the emergencies
- Provide indications on suitable strategies to prepare laboratory medicine facilities to face emergencies

Membership

Chair

Giuseppe Lippi, Italy

second term: 2025-2026

Members

Maia Alkhashvili, Georgia

first term: 2025-2026

Julien Favresse, Belgium

second term: 2025-2026

Katell Peoc'h, France

first term: 2025-2026

Virginia Quaresima (YS), Italy

first term: 2025-2026

Corresponding Members

Laetitia Moreno Banuls, Belgium

Antnija Perović, Croatia

Marge Kütt, Estonia

Hervé Delacour, France

Salome Akhvlediani, Georgia

Mariam Klouche, Germany

Avi Peretz, Israel

Aigars Reinis, Latvia

Romualdo Luis García de Guadiana, Spain

Dogan Yucel, Turkiye

Catherine Moore, UK

Experts/Consultants

Janne Cadamuro, Austria

Elisa Danese, Italy

Emmanuel Favaloro, Australia

Brandon M. Henry, USA

Snezana Jovicic, Serbia

Tomris Ozben, Turkiye

Mario Plebani, Italy

Jecko Thachil, UK

Publications

1. EFLM Task Force Preparation of Labs for Emergencies (TF-PLE) recommendations for reinforcing cyber-security and managing cyberattacks in medical laboratories
Lippi G, Akhvlediani S, Cadamuro J, Danese E, de Guadiana Romualdo L. G, Delacour H, Favaloro E. J, Favresse J, Henry B. M, Jovicic S, Kutt M, Moreno y Banuls L, Ozben T, Peretz A, Perovic A, Thachil J, Yucel D, Plebani M
Clin Chem Lab Med 2024
2. EFLM Task Force Preparation of Labs for Emergencies (TF-PLE) survey on cybersecurity
Lippi G, Cadamuro J, Danese E, Favaloro E J , Favresse J, Henry B M, Jovicic S, Ozben T, Thachil J, Plebani M, on behalf of the European Federation of Clinical Chemistry, Laboratory Medicine Task Force Preparation of Labs for Emergencies (TF-PLE)
Clin Chem Lab Med 2024

7.4.6. TFG: Urinalysis (Closed on 31/12/2024)

Chapter 8: Division “Education and Profession” (D-EP)

- 8.1. Division “Education and Profession”
 - 8.2. Committees
 - 8.2.1. C: Congresses and Postgraduate Education
 - 8.2.2. C: Distance Education and e-Learning
 - 8.2.3. C: EFLM CPECS
 - 8.2.4. C: Ethics in Laboratory Medicine
 - 8.2.5. TC: EFLMLabX
 - 8.2.6. TC: Register
 - 8.3. EFLM Academy
 - 8.4. EFLM e-learning platform
 - 8.5. EFLM Syllabus course
 - 8.6. EFLM Scholarship Programme in memory of Prof. Vic Blaton
 - 8.7. EFLM auspices
-

8.1. Division “Education and Profession”

Terms of Reference

- Represent the professional interests of specialists in laboratory medicine across Europe to achieve recognition of professional qualifications under European Union legislation based on the principles of free movement of professionals within Europe.
- Maintain and grow the Academy and EuSpLM Register.
- Address the needs of EFLM National Societies in education and management skills and assist in transfer of knowledge in all areas of the profession (Syllabus Courses, e-learning, live educational events, EFLMLabX).
- Produce and ensure the quality of EFLM educational documents (Syllabus, CTE, Guidelines).
- Address and maintain the ethical principles of the Laboratory Medicine Profession.
- Evaluate bids for EuroMedLab Congresses producing a joint recommendation with the IFCC C-CC to be submitted to the Executive Boards of EFLM and IFCC for final endorsement.
- Evaluate bursaries for EFLM Scholarship Programme for young scientists and in memory of Prof. Vic Blaton.
- Granting the CPECS for educational events organized by EFLM functional units.

Membership

Chair

Evgenija Homsak, Slovenia

third term: 2024-2025

Division’s Executive Committee Members

Olga Martyna Koper-Lenkiewicz

first term: 2025-2026

Daria Pasalic

first term: 2025-2026

Daniel Rajdl

first term: 2025-2026

Sedef Yenice

first term: 2025-2026

Publications

1. The European Register of Specialists in Clinical Chemistry and Laboratory Medicine: code of conduct, version 3 – 2023
Queraltó J, Brady J, Carobene A, Homšak E, Wieringa G.
Clin Chem Lab Med 2023; <https://doi.org/10.1515/cclm-2023-0031>
2. A proposed common training framework for specialists in laboratory medicine under EU directive 2013/55/EC (The recognition of professional qualifications)

- Wieringa G, Queralto J, Homšak E, Jassam N, Cavalier E, Svinarov D, Krleža JL, Christou S, Pikner R, Rennebod Larsen T, Tomberg K, Linko-Parvinen A, Sapin V, Baum H, Kroupis C, Bagoly Z, Costelloe S, Sciacovelli L, Stasulans J, Vitkus D, Meunier D, Solnica B, Reguengo H, Mambet C, Kovac G, Krhin B, Ohlson M, Buhagiar G, Simundic A-M
Clin Chem Lab Med 2020; <http://doi.org/10.1515/cclm-2020-1504>
3. The Academy of the European Federation of Clinical Chemistry and Laboratory Medicine and the European Register of Specialists in Laboratory Medicine: guide to the Academy and the Register, version 4 – 2020
Wieringa G, Jassam N, Homsak E, Rako I, Racek J
Clin Chem Lab Med 2020; <http://doi.org/10.1515/cclm-2020-1507>
 4. The European Federation of Clinical Chemistry and Laboratory Medicine syllabus for postgraduate education and training for Specialists in Laboratory Medicine: version 5 – 2018
Jassam N, Lake J, Dabrowska M, Queralto J, Rizos D, Lichtinghagen R, Baum H, Ceriott F, O'Mullane J, Homšak E, Charilaou C, Ohlson M, Rako I, Vitkus D, Kovac G, Verschuure P, Racek J, Chifiriuc CM, Wieringa G.
Clin Chem Lab Med; <http://doi.org/10.1515/cclm-2018-0344>
 5. Our profession now has a European name: Specialist in Laboratory Medicine.
Zerah S, McMurray J, Horvath AR.
Biochem Med 2012;22:272-3
 6. The EC4 European syllabus for post-graduate training in clinical chemistry and laboratory medicine: Version 4 - 2012.
Wieringa G, Zerah S, Jansen R, Simundic AM, Queralto J, Solnica B, Gruson D, Tomberg K, Riittinen L, Baum H, Brochet JP, Buhagiar G, Charilaou C, Grigore C, Johnsen AH, Kappelmayer J, Majkic-Singh N, Nubile G, O' Mullane J, Opp M, Pupure S, Racek J, Reguengo H, Rizos D, Rogic D, Spanar J, Strakl G, Szekeres T, Tzatchev K, Vitkus D, Wallemacq P, Wallinder H.
Clin Chem Lab Med 2012;50:1317-28
 7. The European Register of Specialists in Clinical Chemistry and Laboratory Medicine: Guide to the Register, Version 3-2010
McMurray J, Zerah S, Hallworth M, Schuff-Werner P, Haushofer A, Szekeres T, Wallemacq P, Tzatchev K, Charilaou C, Racek J, Johnsen A, Tomberg K, Harmoinen A, Baum H, Rizos D, Kappelmayer J, O'Mullane J, Nubile G, Pupure S, Kucinskiene Z, Opp M, Jansen R, Solnica B, Reguengo H, Grigore C, Spanar J, Strakl G, Queralto J, Wallinder H and Wieringa G
Clin Chem Lab Med 2010;48:999–1008
Keywords: postgraduate training; specialist in laboratory medicine; C-P
 8. The European Register of Specialists in Clinical Chemistry and Laboratory Medicine: Code of Conduct, Version 2 – 2008.
McMurray J, Zerah S, Hallworth M, Koeller U, Blaton V, Tzatchev K, Charilaou C, Racek J, Johnsen A, Tomberg K, Harmoinen A, Baum H, Rizos D, Kappelmayer J, O'Mullane J, Nubile G, Pupure S, Kucinskiene Z, Opp M, Huisman W, Solnica B, Reguengo H, Grigore C, Spanar J, Strakl G, Queralto J, Wallinder H, Schuff-Werner P.
Clin Chem Lab Med 2009;47:372-5
 9. The European Register for Specialists in Clinical Chemistry and Laboratory Medicine: Guide to the Register Version 2-2003 and Procedure for Re-registration
Gurr E, Koller U, Blaton U, Lund E, Harmoinen A, Zerah S, Rizos D, Kenny D, Pazzagli M, Opp M, Willems H, Reguengo H, Queralto J, Wallinder H, McMurray J, Jansen R, Parviainen M, Beastall G and Kohse KP (European Communities Confederation of Clinical Chemistry and Laboratory Medicine (EC4), EC4 Register Commission)

8.2. D-EP Committees

8.2.1. C: Congresses and Postgraduate Education

Terms of Reference

- To provide and support the postgraduate education;

- To be responsible for EFLM auspices;
- To evaluate bids for EuroMedLab Congresses.
- To maintain the EFLM European Syllabus;
- To maintain the EFLM European Syllabus Courses;
- To identify and disclose the requirements for postgraduate training in EuSpLM from the various EFLM member national societies.

Membership

Chair

Eser Sozmen, Turkey

third term: 2025-2026

Members

Zsuzsa Bagoly, Hungary

third term: 2025-2026

Giuliana Cangemi, Italy

second term: 2024-2025

Marielle Kaplan, Israel

third term: 2025-2026

Tamar Ramishvili (YS), Georgia

first term: 2025-2026

Corresponding Members

Gramos Begolli, Kosovo

Radomír Hyspler, Czech Republic

Dalius Vitkus, Lithuania

Experts/Consultant

Guillaume Grzych, France

Snezana Jovicic, Serbia

Publications

1. Practice in financial support of third party organised conferences and courses at a national level for health care professionals in Europe
Pašalić D, Homšak E, Buño A, Bergmann K and Carru C on behalf of the EFLM Committee on Education and Training (C-ET), Working Group for Congresses and Postgraduate Education (C-CPE)
Clin Chem Lab Med 2019;57:1319-28
2. EFLM project “Exchange of practical knowledge and skills in Laboratory Medicine”
Homsak E.
eJIFCC 2018;29:191-5
3. Continuing professional development crediting system for specialists in Laboratory Medicine within 28 EFLM National Societies.
Topic E, Beletic A, Zima T.
Biochem Med 2013;23:332-41

8.2.2. C: Distance Education and e-Learning

Terms of Reference

- To establish and maintain efficient distance learning channels between EFLM and its National Societies;
- To organize EFLM webinars;
- To manage the educational contents of the EFLM e-learning platform.

Membership

Chair

Petros Karkalousos, Greece

second term: 2024-2025

Members

Manana Akhvlediani, Georgia
Dovile Karciauskaite, Lithuania
Oguzhan Zengi, Turkey
Sopiko Jashiashvili (YS), Georgia

first term: 2025-2026
first term: 2025-2026
second term: 2024-2025
second term: 2024-2025

Corresponding Members

Graham Lee, Ireland

Experts/Consultants

Svetlana Evgina, Russia
Daniel Rajdl, Czech Republic

8.2.3. C: EFLM-CPECS

Terms of Reference

- **Establishment and oversight of the EFLM-CPECS® System**
Develop, implement, and maintain the CPECS® as the standardized credit system for certifying the quality of professional development events within EFLM's scope.
Ensure that CPECS® credit assignments reflect rigorous standards for continuing education and continuous professional development (CE/CPD).
- **Evaluation and assignment of credit points**
Review and assess applications from event providers to award CPECS® credits, adhering strictly to the established criteria.
Ensure consistency, transparency and fairness in the assignment of credit points for CE/CPD events.
- **Guidance for CPECS® certification process**
Provide comprehensive instructions and guidelines for event providers on the issuance of CPECS® certificates.
Support providers throughout the application and certification processes to uphold a high standard.
- **Collaboration with Accreditation Authorities**
Work closely with National Accrediting Authorities and International Accreditation Bodies to facilitate mutual recognition of CPECS® credits with other CE/CPD credit systems.
Foster partnerships to enhance the credibility and acceptance of CPECS® credits across different regions and professional networks.

Membership

Chair

Sedef Yenice, Turkey

third term: 2025-2026

Members

Mojca Bozic Mijovski, Slovenia
Naira Rico Santana, Spain
Ali Unlu, Türkiye

third term: 2024-2025
second term: 2023-2024
first term: 2025-2026

Corresponding Member

Akcin Oytun Portakal, Türkiye
Nino Tabatadze, Georgia
Isabelle O'Callaghan, Ireland

Experts/Consultant

James O'Connor, Ireland

The EFLM Continuing Professional Education Credit System (CPECS®) was established as an administrative system to promote recognition of continuing professional development educational events and to serve as a quality assurance mechanism for the accreditation of educational events based on high-quality educational and scientific content in laboratory medicine and relevant scientific topics for medical laboratory specialists, medical laboratory scientists, and clinical laboratory professionals offered by EFLM by EFLM national member societies, non-member societies, International or Regional Federations/Associations and Public or Private Scientific Organizations.

8.2.4. C: Ethics in Laboratory Medicine

Terms of Reference

- Ethics in Laboratory Medicine in clinical setting
- Ethics in Laboratory Medicine in research
- Ethics in Laboratory Medicine in experimental medicine
- Ethics of protection of patients' data
- Research integrity and ethics in scientific literature

Membership

Chair

Giuseppe Banfi, Italy

first term: 2024-2025

Members

Borut Božič, Slovenia

first term: 2024-2025

Murat Cihan, Turkiye

first term: 2024-2025

Daria Pasalic, Croata

first term: 2024-2025

Publications

1. Point-of-care testing, near-patient testing and patient self-testing: warning points
Banfi G, Božič B, Cihan M, Pašalić D, Pennestrì F, Plebani M
Clin Chem Lab Med 2024

8.2.5. TC: EFLMLabX

Terms of Reference

- Support of EFLMLabX project;
- Taking care for the EFLMLabX website platform and related issues (answering on questions);
- Follow-up applications of users and offerers of different practice/research/exchanging knowledge;
- Promotion of the project to potential users and providers/new partners of this project through the EFLM countries and beyond.

Membership

Chair

Evgenija Homsak, Slovenia

second term: 2024-2025

Members

Rok Kogovšek, Slovenia

second term: 2024-2025

Tara Rolic, Croatia

first term: 2022-2023

Christos Tsatsanis

second term: 2024-2025

Daniel Charles Turnock, UK

second term: 2024-2025

The EFLMLabX is the EFLM Professional Exchange initiative of EFLM.

The dedicated platform was designed by the members of the EFLM Task group EFLMLabX and constantly kept updated with new opportunities of training.

It helps to facilitate the professional exchange in Europe for those professionals in Laboratory Medicine wishing to make an experience abroad.

8.2.6. TC: Register

Terms of Reference

- To adjudicate applications to hold the title European Specialist in Laboratory Medicine (EUSpLM);
- To grow the EFLM Academy and the EuSpLM Register;
- To support the Profession Committee in its strategy to achieve recognition of Specialists in Laboratory Medicine.

Membership

Chair

Ivana Rako, Croatia

second term: 2024-2025

Members

Alvaro Gonzalez-Hernandez, Spain

second term: 2024-2025

Henrique Reguengo, Portugal

second term: 2025-2026

Katerina Tosheska-Trajkovska, North Macedonia

third term: 2024-2025

Jozefina Palić (YS), Croatia

second term: 2025-2026

Corresponding Members

Hannsjörg Baum, Germany

Charis Ch. Charilaou, Cyprus

Berrak Guven, Turkey

Snezana Jovicic, Serbia

Evgenia Konsta, Greece

Leonard Kurti, Kosovo

Mats Ohlson, Sweden

Mario Pazzagli, Italy

Micheál Ryan, Ireland

Drahomira Springer, Czech Republic

Greta Strakl, Slovenia

Daniel Charles Turnock, UK

Dalius Vitkus, Lithuania

Experts/Consultant

Nuthar Jassam, UK

8.3. EFLM Academy

The EFLM Academy is a package of professional benefits for Specialists in Laboratory Medicine through which EFLM aims to support the education, training, and continuous professional development of laboratory medicine practitioners in Europe.

The register for EuSpLM is an important base for the ongoing efforts of EFLM in the recognition process of Laboratory Medicine profession, according to EU Directive 2013/55/EC for professional

recognition across Europe. Those interested in joining the EFLM Register can do that only through the application to the EFLM Academy.

8.4. EFLM e-learning platform

A dedicated e-learning platform was developed in 2021 and launched in 2022 to host a selection of interactive, web-based, educational resources designed by the members of the C-CPE and C-DE to improve the laboratory expertise.

The platform is composed of 4 sections: the live webinars scheduled on a monthly basis, the webinars on-demand (the recorded version of the live webinars), the EFLM Syllabus Course (more than 300 lectures covering the entire curricula of Laboratory Medicine) and a section with further interactive learning material.

The contents of the EFLM e-learning platform are exclusively accessible to EFLM Academy Members as a free opportunity.

8.5. EFLM Syllabus course

The EFLM Syllabus course is produced to support the harmonization of postgraduate education of specialists in laboratory medicine in Europe. It is addressed to postgraduate students, residents, young trainees and PhD students, and everyone else interested in laboratory medicine.

The aim of this top-quality revision course is to increase the knowledge and exam confidence for postgraduate students. It provides a comprehensive source of generic and specialist knowledge in laboratory medicine, to enable mastering necessary skills and competencies needed for the practice of laboratory medicine, as well as adopting leadership and management skills, which will empower the future specialists of laboratory medicine to work autonomously in complex environment of a clinical laboratory.

The course mirrors to the European Syllabus (1), the key document for EFLM which represents the basis for the Common Training Framework for non-medical Specialists in Laboratory Medicine under EU Directive 2013/55/EU (The recognition of Professional Qualifications).

EFLM Syllabus course consists of more than 40 modules and over 300 lectures which cover all four main sections of the EFLM Syllabus:

Section A: the generic knowledge, skills and competencies that need to be acquired during training.

Section B: the specialist knowledge within each discipline.

Section C: the skills and competencies required to carry out research, development and audit.

Section D: leadership skills and competencies.

(1) Jassam N, Lake J, Dabrowska M, Queralto J, Rizos D, Lichtinghagen R, Baum H, Ceriotti F, O'Mullane J, Homšak E, Charilaou C, Ohlson M, Rako I, Vitkus D, Kovac G, Verschuure P, Racek J, Chifiriuc MC, Wieringa G. The European Federation of Clinical Chemistry and Laboratory Medicine syllabus for postgraduate education and training for Specialists in Laboratory Medicine: version 5 - 2018. *Clin Chem Lab Med* 2018;56(11):1846-63. doi: 10.1515/cclm-2018-0344. PMID: 29870392.

8.6. EFLM Scholarship Programme in memory of Prof. Vic Blaton

The "EFLM Scholarship Programme in memory of Prof. Vic Blaton" has been initiated by the EFLM Executive Board in 2020 and is addressed to a defined group of EFLM National Societies selected according to UN and World bank classification criteria. This new EFLM initiative is dedicated to the memory of Prof. Vic Blaton who was a pioneer of our Profession. He was especially committed to help and support the less-developed and developing countries in Europe to reach professional and educational standards of the Western countries in the European Community at times of big political and economic changes. With this initiative the EFLM Executive Board aims to move forward his vision for the years to come. The programme consists in a series of free professional and educational opportunities.

8.7. EFLM Auspices

The EFLM is committed to maintain and promote exchange of information in Clinical Chemistry and Laboratory Medicine. The mission of the EFLM is to create academic, clinical and industrial links of communication for clinical laboratory scientists and physicians through highly qualified professional meetings which the EFLM may support in a variety of ways. With the above in mind, congress and conference organizers of EFLM member states or any non-profit association for events where the topics are directly related to the activities of EFLM may request for assistance from the EFLM in promoting their meetings.

The EFLM is interested in granting its Auspices primarily for European meetings, conferences and congresses which comply with these guidelines, in order to assist conference organizing committees to promote their meeting widely and attract a large professional participation.

The granting of EFLM Auspices, and its involvement in conferences enhancing the field of Clinical Chemistry and Laboratory Medicine, furthers the reputation of the EFLM.

The Education and Training Committee prepared a specific guideline detailing the process of EFLM auspices' granting. These guidelines are available on the EFLM website (section "Downloads").

Chapter 9: Division “Quality, Standards and Regulations” (D-QSR)

- 9.1. Division “Quality, Standards and Regulations”
 - 9.2. Committees
 - 9.2.1 C: Accreditation and ISO/CEN standards
-

9.1. Division “Quality, Standards and Regulations”

Terms of reference

The Quality, Standards and Regulations Division is responsible for the following specific objectives of EFLM:

- produce guidance documents to harmonise practices in quality management.
- supporting the establishment of effective accreditation schemes in all European countries.
- coordinating accreditation matters relating to laboratory medicine and liaising with ISO, CEN and European cooperation on accreditation matters.
- represent EFLM as stakeholder with European and International regulatory and legislative bodies.

Membership

Chair

Marc Thelen, the Netherlands

first term: 2024-2025

Division’s Executive Committee Members

Guilaine Boursier, France

first term 2025-2026

Emilie Catry, Belgium

first term 2025-2026

Panagiotis Kanellopoulos, Greece

first term 2025-2026

Ekaterine Kupatadze, Georgia

first term 2025-2026

9.2. D- QSR Committees

9.2.1. C: Accreditation and ISO/CEN standards

Terms of reference

1. To represent EFLM and the interest of European laboratories in EA, ISO TC212 and CEN TC140 & EU regulatory frameworks (EU IVD Regulation, EU Health Policy Group)
 - to remain informed on developments and to disseminate this information to EFLM National Society Members;
 - to address legitimate concerns of the profession in these organizations;
 - to cooperate with the diagnostics industry
2. To harmonize accreditation in Europe:
 - by carrying out international surveys on current practices;
 - by developing guidance documents for laboratories which support the translation and implementation of accreditation standards in practice;
 - by educating and training Specialists in Laboratory Medicine and assessors of accrediting bodies on the application of specific professional standards of ISO 15189.

Membership

Chair

Guilaine Boursier, France

third term: 2024-2025

Members

Solveig Linko, Finland	third term: 2024-2025
Pika Mesko Brguljan, Slovenia	third term: 2024-2025
Katerina Tosheska-Trajkovska, North Macedonia	second term: 2025-2026
Hikmet Can Cubukcu (YS), Turkey	third term: 2024-2025

Corresponding Members

Duilio Brugnoli, Italy
Nana Dzneladze, Georgia
Maria Lohmander, Sweden
Neda Milinkovic, Serbia
Luděk Šprongl, Czech Republic

Experts/Consultants

Hélène Mehay, France
Mauro Panteghini, Italy
Laura Sciacovelli, Italy

Publications

1. Regulating the future of laboratory medicine: European regulatory landscape of AI-driven medical device software in laboratory medicine
Can Çubukçu H, Boursier G, Linko S, Bernabeu-Andreu F. A, Brguljan P. M, Tosheska-Trajkovska K, Brugnoli D, Milinkovic N, Padoan A, Thelen M, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Division: Quality, Standards and Regulations, Committee on Accreditation and ISO/CEN standards (C: A/ISO)
Clin Chem Lab Med 2025
2. EN ISO 15189 revision: EFLM Committee Accreditation and ISO/CEN standards (C: A/ISO) analysis and general remarks on the changes
Linko S, Boursier G, Bernabeu-Andreu F A, Dzneladze N, Vanstapel F, Mesko Brguljan P, Toshevskaja Trajkovska K, Mehay H, Panteghini M, Brugnoli D, Milinkovic N, Lohmander M, Sprongl L, Can Cubukcu H, Thelen M, on behalf of the European Federation of Clinical Chemistry Committee "Accreditation and ISO/CEN standards" (C-A/ISO)
Clin Chem Lab Med 2025
3. EFLM Working Group accreditation and ISO/CEN standards on dealing with ISO 15189 demands for retention of documents and examination objects
Mesko Brguljan P, Thelen M, Bernabeu-Andreu F, Kroupis C, Boursier G, Vukasovic I, Barrett E, Brugnoli D, Lohmander M, Sprongl L, Vodnik T, Ghita I, Vanstapel F, Vaubourdolle M, Huisman W
Adv Lab Med 2024; <https://doi/10.1515/almed-2023-0053>
1. APS calculator: a data-driven tool for setting outcome-based analytical performance specifications for measurement uncertainty using specific clinical requirements and population data
Cubukcu HC, Vanstapel F, Thelen M, van Schrojenstein Lantman M, Bernabeu-Andreu FA, Mesko Brguljan P, Milinkovic N, Linko S, Panteghini M, Boursier G
Clin Chem Lab Med 2023; <https://doi/10.1515/cclm-2023-0740>
2. In-house diagnostic devices under the EU IVDR and unwanted side-effects of intentional transparency
Florent J.L.A. Vanstapel F.J.L.A., Boursier G., Cobbaert C.M., on behalf of the EFLM Task Force on European Regulatory Affairs and the EFLM Quality and Regulations Committee
Clin Chem Lab Med 2023; <https://doi.org/10.1515/cclm-2023-0750>
3. An approach for determining allowable between reagent lot variation
van Schrojenstein Lantman M, Can Çubukçu H, Boursier G, Panteghini M, Bernabeu-Andreu FA, Milinkovic N, Mesko Brguljan P, Linko S, Brugnoli D, O'Kelly R, Kroupis C, Lohmander M, šprongl L, Vanstapel F, Thelen M, European Federation of Clinical Chemistry, Laboratory Medicine EFLM Working Group Accreditation, ISO/CEN standards C-A/ISO
Clin Chem Lab Med 2022; <https://doi.org/10.1515/cclm-2022-0083>

Chapter 10: Division “Communication” (D-C)

- 10.1. Division “Communication”
 - 10.2. Committees
 - 10.2.1. C: Promotion & Publications
 - 10.2.2. C: Young Scientists
 - 10.3. European Laboratory Day
-

10.1. Division “Communication”

Terms of Reference

- Create, maintain, and develop an effective communication network within EFLM functional units.
- Manage activities and create plans for all EFLM communication channels.
- Establish and maintain a bidirectional communication network with National Societies (NSs) to integrate relevant information from both sides into EFLM and NS communication channels.
- Coordinate activities with IFCC and other IFCC regional federations to ensure that both EFLM and IFCC efforts are additive and multiplicative, reinforcing the impact of activities carried out by both institutions.
- Promote the profession by increasing awareness of the importance of clinical laboratories in healthcare and at the societal level, including organizing European Laboratory Day annually on November 5th to foster awareness, reinforce networking among specialists in laboratory medicine, and advocate the role of laboratory medicine in improving health across Europe.
- Coordinate the LabTestsOnline initiative across EFLM countries, providing accessible and reliable information on laboratory testing to the public and healthcare professionals to improve health literacy and patient understanding of laboratory results.

Membership

Chair

Daniel Rajdl, Czech Rep

third term: 2024-2025

Division’s Executive Committee Members

Graziella Bonetti, Italy

first term: 2025-2026

Nataliia Kozopas, Ukraine

first term: 2025-2026

Tara Rolic, Croatia

first term: 2025-2026

Kamil Taha Ucar, Türkiye

first term: 2025-2026

10.2. D-C Committees

10.2.1. C: Promotion & Publications

Terms of reference

The main communication channels of the Federation are: the website, the bimonthly newsletter (EuroLabNews), the social media, the EFLM section in the IFCC e-Newsletter, the EFLM mailing list, the regular messages to the NSs. The C liaises with the EFLM functional units in order to obtain relevant data and information to feed the communication channels.

To achieve the goals, the C:

- creates, develops and implements strategies how to promote:
 - EFLM activities most effectively;
 - laboratory medicine in targeted audiences (non-laboratory medical professionals and patients);

- actively obtains information from EFLM functional units and in cooperation with EFLM office and D-C Chair:
 - creates, updates and maintains the content of the website;
 - creates, updates and maintains the content of the social media;
 - creates and assembles the content of the EFLM Newsletter;
- actively cooperates with NSs to promote EFLM activities on NSs websites and other communication channels (e.g. social media);
- keeps memory of EFLM milestone achievements by systematically collecting evidence of EFLM activities (texts, photos, videos and other artefacts) and publishing it periodically in abovementioned communication channels

Membership

Chair

Harjit Pal Bhattoa, Hungary

third term: 2025-2026

Members

Lejla Alic, Bosnia & Herzegovina

third term: 2025-2026

Aleš Kvasnicka, Czech Rep.

second term: 2025-2026

Giulia Sancesario, Italy

first term: 2025-2026

Aleksei Tikhonov (YS), France

third term: 2025-2026

Corresponding Members

Serkan Bolat, Turkey

Minodora Dobreanu, Romania

Experts/Consultants

Eniko Kocsis, Romania

10.2.2. C: Young Scientists

Terms of reference

EFLM Committee Young Scientists (C-YS) is a coordination framework that puts together **young scientists, residents, all young professionals in laboratory medicine and related disciplines and from IVD companies** from all EFLM functional units and EFLM countries. The main activities of C-YS are:

- raising awareness of young scientists in laboratory medicine
- building a communication network of young scientists and laboratory professionals in Europe
- facilitate professional and scientific exchange of young scientists, e.g., through EFLMLabX exchange program
- regularly reporting about the activities of mother EFLM functional units and home countries in EFLM communication channels (Newsletter, social media, website)
- creative contributions promoting EFLM activities, laboratory medicine and laboratory specialists using innovative ways and formats
- organizing virtual and face to face social, scientific and educational meetings to share experience and foster collaboration among young scientists
- actively participating on events organized by EFLM
- inspiring EFLM functional units with topics relevant for young scientists
- promotion of „EFLM Young Laboratory Medicine Professional Award“ for extraordinary contribution to the field of Laboratory Medicine. Nominated can be a broad range of activities including scientific publication, education, popularization or innovation in clinical laboratory

All activities will be done in close cooperation with EFLM mother functional units and home countries and are coordinated with Communication Division.

Membership

Chair

Aleš Kvasnicka, Czech Rep.

first term: 2024-2025

Members

Monica Dugaescu, Romania

first term: 2024-2025

Emeline Gernez, France

first term: 2024-2025

Tara Rolic, Croatia

second term: 2024-2025

Aleksei Tikhonov

second term: 2024-2025

10.3. European Laboratory Day

On November 5th, we come together to celebrate the vital, yet often unseen, contributions of laboratory medicine professionals across Europe—from local labs to world-class research centres. Laboratory Medicine professionals are working behind the healthcare scene 24/7: we are at the heart of modern medicine, driving advancements in medical research, providing precise diagnoses, and ensuring effective treatments for millions. Whether it's routine tests guiding daily healthcare decisions or groundbreaking discoveries, our work is essential in shaping a healthier future for all. Our profession is vital in healthcare and it is our duty to show what we do and who is behind the numbers from a laboratory report.

European Laboratory Day initiative has the aim to incite EFLM members to organize an open-door day in their laboratories and organize activities in public that promote and advocate the role of Laboratory Medicine.

Chapter 11: Awards

- 11.1. EFLM Award for Scientific Achievements in Laboratory Medicine - sponsored by Roche
 - 11.2. EFLM Award for Achievements in Advancing Laboratory Medicine in Europe - sponsored by Roche
 - 11.3. EFLM Award for Excellence in Outcomes Research in Laboratory Medicine - sponsored by Abbott Diagnostics
 - 11.4. EFLM Award for Excellence in Performance Specifications Research - sponsored by Abbott Diagnostics
 - 11.5. EFLM Cardiac Marker Award - sponsored by HyTest
 - 11.6. EFLM Walter Guder Preanalytical Award - sponsored by BD
 - 11.7. EFLM Academy Award
 - 11.8. EFLM Young Laboratory Medicine Professional Award
-

11.1. EFLM Award for Scientific Achievements in Laboratory Medicine - sponsored by Roche

This award has been created to honour an individual, member of an EFLM National Societies, who has made important scientific contributions and innovations within the field of Clinical Chemistry and Laboratory Medicine. The EFLM award is granted for excellent work in basic, translational or clinical research to promote diagnostic medicine. It appreciates significant research contributions that advance the field in biochemical and molecular analytics and methods, digitalization, new diagnostic strategies, health technology assessment etc. The award is given on the occasion of the EuroMedLab congress. The award is financially supported by Roche Diagnostics with an amount of 5,000 Euros.

Awardees:

2025: Ana-Maria Šimundić (HR); 2025: Bill Bartlett (UK); 2023: Giuseppe Lippi (IT); 2021: Sverre Sandberg (NO); 2019: Andrea Rita Horvath (AU) and Joris Delanghe (BE); 2017: Callum Fraser (UK); 2015: Simone Zerah (FR); 2013: Victor Blaton (BE); 2011: Mike Hallworth (UK); 2009: Rob Jansen (NL); 2007: Matthias Muller (AU); 2005: Graham Beastall (UK); 2003: Gerard Sanders (NL); 2001: Hermann Wisser (DE).

11.2. EFLM Award for Achievements in Advancing Laboratory Medicine in Europe - sponsored by Roche

This award has been created to recognize an individual, member of an EFLM National Societies, who has made important contributions to advance the profession of Clinical Chemistry and Laboratory Medicine in Europe and to enhance the visibility of the discipline within diagnostic and therapeutic medicine. Such outstanding work includes e.g. the promotion of interoperable programs between EFLM member societies, professional development, dissemination and teaching, increasing the visibility of Laboratory Medicine or the harmonization of training curricula of the different professions within Clinical Chemistry and Laboratory Medicine. The nominee's role and contributions should be well-recognized and shall be demonstrated regarding their sustained impact to the profession. The award is given on the occasion of the EuroMedLab congress. The award is financially supported by Roche Diagnostics with an amount of 5,000 Euros.

Awardees:

2025: Aasne K. Aarsand (NO); 2023: Abdurrahman Coskun (TR); 2021: Mauro Panteghini (IT)

11.3. EFLM Award for Excellence in Outcomes Research in Laboratory Medicine - sponsored by Abbott Diagnostics

The Award is given to the best published paper, as judged by an independent panel of experts, which demonstrates improved clinical and/or economic outcomes of an in vitro diagnostic test or better management of laboratory/test data. The award is given on the occasion of the EuroMedLab congress. The award is financially supported by Abbott Diagnostics with an amount of 5,000 Euros.

Awardees:

- 2025: Abdurrahman Coskun (TR) & co-authors - Paper "Reference Intervals Revisited: A Novel Model for Population-Based Reference Intervals, Using a Small Sample Size and Biological Variation Data"
- 2023: Jain Shruti (FI) & co-authors – Paper "Diagnostic potential of nanoparticle aided assays for MUC16 and MUC1 glycovariants in ovarian cancer"
- 2021: Abdurrahman Coskun (TR) & co-authors - Paper "Personalized Reference Intervals in Laboratory Medicine: A New Model Based on Within-Subject Biological Variation"
- 2019: Maurits C.F.J. de Rotte (NL) & co-authors - Paper "Development and validation of a prognostic multivariable model to predict insufficient clinical response to methotrexate in rheumatoid arthritis"
- 2017: Andreas Huber (CH) & co-authors - Paper "Biomarkers from distinct biological pathways improve early risk stratification in medical emergency patients: the multinational, prospective, observational TRIAGE study CrossMark"
- 2015: Gabor Kovacs (HU) & co-authors - Paper "Noninvasive embryo viability assessment by quantitation of human haptoglobin alpha-1 fragment in the in vitro fertilization culture medium: an additional tool to increase success rate"
- 2013: Nick Mills (UK) & co-authors - Paper "Implementation of a sensitive Troponin I assay and risk of recurrent myocardial infarction and death in patients with suspected acute coronary syndrome "
- 2011: Steve Goodacre (UK) & co-authors - Paper "The Randomised Assessment of Treatment using Panel Assay of Cardiac Markers (RATPAC) trial: a randomised controlled trial of point-of-care cardiac markers in the emergency department"

11.4. EFLM Award for Excellence in Performance Specifications Research - sponsored by Abbott Diagnostics

The Award is given to the best published paper, as judged by an independent panel of experts, which demonstrates an important and novel contribution to the theory or practical application of performance specifications. The award is given on the occasion of the EuroMedLab congress. The award is financially supported by Abbott Diagnostics with an amount of 5,000 Euros.

Awardees:

- 2025: Hikmet Can Çubukçu (Türkiye) & co-authors - Paper "APS calculator: a data-driven tool for setting outcome-based analytical performance specifications for measurement uncertainty using specific clinical requirements and population"
- 2023: Fernando Marques Garcia (Spain) & co-authors – Paper "Within-subject biological variation estimates using an indirect data mining strategy. Spanish multicenter pilot study (BiVaBiDa)"
- 2021: Etienne Cavalier (BE) & co-authors - Paper "Analytical Performance Specifications for 25-Hydroxyvitamin D Examinations"
- 2019: Aasne Karine Aarsand (NO) & co-authors - Paper "The Biological Variation Data Critical Appraisal Checklist: A Standard for Evaluating Studies on Biological Variation"

11.5. EFLM Cardiac Marker Award - sponsored by Hytest

This award has been created to achieve wider recognition of the importance of high quality research in the field of cardiac markers among laboratory professionals in Europe. The EFLM Cardiac Marker Award is granted to a young scientist under 40y for remarkable scientific work in the field of cardiovascular diseases. The award is given on the occasion of the EuroMedLab congress.

The award is given every two years on the occasion of the EuroMedLab congresses and is financially supported by Hytest with an amount of 5,000 Euros.

Awardees:

- 2025: Selma Salonen (FI) & co-authors - Paper "Highly Sensitive Immunoassay for Long Forms of Cardiac Troponin T Using Upconversion Luminescence"
- 2023: Rami Aalto (FI) & co-authors – Paper "Novel Troponin Fragmentation Assay to Discriminate Between Troponin Elevations in Acute Myocardial Infarction and End-Stage Renal Disease"
- 2021: Jorge Diaz-Garzon (ES) & co-authors - Paper "Biological Variation of Cardiac Troponins in Health and Disease: A Systematic Review and Metaanalysis"
- 2019: Saara Wittfooth (FI) & co-authors - Paper "Direct Immunoassay for Free Pregnancy Associated Plasma Protein A (PAPP-A)"
- 2017: Tomas Kaier (UK) & co-authors - Paper "Quantifying the Release of Biomarkers of Myocardial Necrosis from Cardiac Myocytes and Intact Myocardium"

11.6. EFLM Walter Guder Preanalytical Award - sponsored by BD

The EFLM Walter Guder Preanalytical Award is granted to the best published paper, as judged by an independent panel of experts, which demonstrates an important and novel contribution to the improvement of the preanalytical phase. EFLM is very pleased to have partnered with BD on this award, through which we intend to achieve wider recognition of the importance of high-quality research in the field of preanalytical phase among laboratory professionals in Europe. The Award, consisting of a sum of 5,000 Euro in addition to the coverage of the Conference registration and travel/accommodation expenses, will be presented to the winner at the EFLM Conference on Preanalytical Phase.

Awardees:

- 2025: Emel Colak Samsun (TR) & co-authors – Paper "Comparison of lipemia interference created with native lipemic material and intravenous lipid emulsion in emergency laboratory tests"
- 2019: Marie-Louise Schleck (BE) & co-authors - Paper "Parathormone stability in hemodialyzed patients and healthy subjects: comparison on non-centrifuged EDTA and serum samples with second- and third-generation assays"
- 2016: Niamh Daly (IR) & co-authors - Paper "Impact of implementing preanalytical laboratory standards on the diagnosis of gestational diabetes mellitus: a prospective observational study"
- 2014: Johannes Zander (DE) & co-authors - Paper "Effect of biobanking conditions on short-term stability of biomarkers in human serum and plasma"

11.7. EFLM Academy Award

The EFLM Academy award has been created to promote excellence and honor extraordinary individuals who have made substantial contribution to the education in Laboratory Medicine in Europe. The award aims to encourage educational activities and recognize the value and importance of education for EFLM.

The award is granted annually to the author of the most distinguished educational activity or a project in the past 5 years. Eligible are various high quality educational materials, like educational papers, handbooks, books or book chapters, online educational resources, educational courses and workshops. EFLM values inclusiveness and accessibility through removing barriers and sharing resources in education. Therefore, although consideration will be given both to National and European projects, the preference will be given to the most outstanding European projects aimed to a wide International audience.

The award is presented on the occasion of the EuroMedLab congresses. The award is directly financially supported by EFLM and consists in a trophy in addition to the free registration to attend the EuroMedLab congress and the coverage of the travel and accommodation expenses.

Awardees:

- 2021: Evgenija Homšak (SL)
- 2022: Sedef Yenice (TR)
- 2023: Daria Pasalic (HR)
- 2024: Matteo Vidali (IT)

11.8. EFLM Young Laboratory Medicine Professional Award

The EFLM Young Laboratory Medicine Professional Award has been created to promote excellence and honour an extraordinary Young Scientist, who has made a substantial contribution to education or obtained a scientific achievement in Laboratory Medicine in Europe.

The award is granted annually and is given alternately on the occasion of the EFLM Strategic Conference and the EuroMedLab congress. The award is announced and handed over during the Congress Opening Ceremony or any other convivial occasion during the congress.

The call for Nominations shall be announced in January each year and the deadline for nominations is 15 March.

The award winner will receive a trophy and, as a token of appreciation, the free registration to the EFLM event where the award is presented including the coverage of the travel (economy fare) and reasonable accommodation expenses to attend the event.

Awardees:

2025: Jorge Díaz-Garzón (ES)

Chapter 12: Finances

- 12.1. Finances' organisation
 - 12.2. Budget
 - 12.3. Regulations for IVD companies' sponsorships
 - 12.4. Income from EFLM Events
-

12.1. Finances' organisation

All EFLM activities are managed under the direct supervision of the EFLM Treasurer with the assistance of the EFLM Office staff.

The Executive Board has overall responsibility for the financial wellbeing of EFLM.

The General Meeting discharges this responsibility by agreeing on the annual budget presented by the Treasurer on occasion of the General Meeting to be usually held between May and July each year. The EFLM financial year coincides with the calendar year.

Formal EFLM accounts are prepared annually and subject to external audit performed by a professional company in Belgium. A copy of the latest set of audited accounts is available to EFLM Members on written request to the Treasurer.

The legal domicile of the Federation is in Belgium and all formal financial transactions and formal accounts are carried out in EUR. However, to minimise the loss on exchange rates and to facilitate efficient and timely processing of financial matters the Treasury can operate bank accounts in currencies other than EUR.

12.2. Budget

The annual budget is agreed by the Executive Board upon receiving budget motivated requests by the Chairs of EFLM Committees and Task Forces. Whilst the Treasurer, in agreement with the Executive Board, has the responsibility for monitoring the overall expenditure against the allocated budget, Chairs of EFLM functional units are charged with responsibility for monitoring the sections of the budget pertinent to their activities.

Income

The annual membership fees for Full Members are fixed by the EFLM Executive Board and confirmed by the General Meeting. The membership fees are based on the number of registered members of each National Societies/Association and there are 4 different categories of fees:

>1000 members, from 500 to 999 members, from 250 to 499 members and <250 members.

Affiliate Members pay 50% of the regular membership fee of Full Members.

Corporate Members also contribute to the Federation and their dues are based on the world-wide turnover of the company's business in the field of Clinical Chemistry and Laboratory Medicine.

Congresses organized by EFLM make valuable contributions to the revenue of the Federation.

For certain activities developed by some EFLM functional units, Corporate Members can support EFLM by signing specific agreements signed by the EFLM President and EFLM Treasurer.

Expenditure

EFLM functional units' officers work on a voluntary basis and no honorarium is provided. EFLM recognizes this significant contribution to the Federation whose existence would not be possible without this act of generosity from the officers towards the Profession.

Much of the scientific work of EFLM is carried out by e-mail or conference calls, but occasional meetings are necessary. The cost of meetings is an important part of the budget setting process.

EFLM also spends money supporting bursaries' programmes to permit the attendance of young scientists or members from less developing countries at EFLM Congresses. Also 2 annual research grants per year are financially supported by EFLM.

The EFLM Office staff is paid from EFLM own resources identified in the annual budget.

12.3. Regulations for IVD companies' sponsorships

EFLM is dedicated to advancing Laboratory Medicine as a profession and to promoting the highest quality standards of laboratory practice to the best patient care. In furthering of its mission and goals, EFLM recognizes and appreciates the role of IVD companies. EFLM aims to strengthen and advance collaborative models of engagement with IVD companies, fostering mutual benefits.

EFLM encourages IVD companies to become EFLM Corporate Members and to engage in a working relationship with the Federation. Any sponsorship is covered by a written agreement signed by the EFLM President and the EFLM Treasurer.

To maintain transparency and integrity of our Federation, the EFLM Executive Board has designed a dedicated policy (downloadable from www.eflm.eu).

12.4. Income from EFLM Events

EFLM organises a number of scientific and educational events. The major EFLM event is the EuroMedLab Congress jointly organised with IFCC. The EuroMedLab Congress is subject to a contract between IFCC, EFLM, the host national society and the professional conference organiser employed to deliver the congress. One component of that contract is the financial basis upon which EFLM derives income from sponsorship of the congress.

Chapter 13: EFLM Statutes and Organisational Matters

- 13.1. EFLM Statutes
 - 13.2. EFLM Procedures Manual
 - 13.3. EFLM Essentials
 - 13.4. EFLM Office
-

13.1. EFLM Statutes

The EFLM is an Association Internationale Sans But Lucratif (AISBL) legally constituted under the Belgian Law (registration number 0524.835.227) and having its registered office in Brussels, rue d'Egmont, 11. EFLM general rules and internal agreements are stated in the EFLM Statutes (Articles of Association) of 2013 and further amended versions. The updated version is available in the dedicated section of the EFLM website (Official Documents).

13.2. EFLM Procedures Manual

The EFLM Procedure Manual includes information on how to carry out EFLM activities, lines of responsibility and interactions within the EFLM and between the EFLM and other organizations. It is intended as a guide to instruct new EFLM officers in the procedures to be followed in carrying out their duties and to update information on the operating procedures for the already present EFLM officers. The Procedure Manual is a flexible and practical document and is not meant to be a replacement for the EFLM Articles of Association, which have precedence.

Many of the items included have been contributed by EFLM officers and heads of functional units, who have given their time to this effort and to the advancement of EFLM and its mission.

13.3. EFLM Essentials

The biennial EFLM Essentials represents the pictures of EFLM under the specific 2-year mandate of the EFLM President and Executive Board. The Essentials lists all the EFLM functional units and Officers in charge with a valid term of office at the end of the EB mandate. The list of Full Members and Affiliate Members is also included.

13.4. EFLM Office

The main duties of the EFLM office are:

- provision of information, advice, and contact details;
- maintenance of database of EFLM NS/Corporate membership, contact details of Presidents, NRs, and EFLM officers involved in EFLM functional units (including their official appointment);
- maintenance of database of EFLM Academy Members;
- maintenance of an archive of EFLM document;
- mass mailings and other communication and promotion activities of EFLM EB approved documents;
- organization and assistance at the EFLM EB meetings, GM and EFLM elections;
- coordination and support to EFLM Officers for functional units activities;
- technical and administrative support at the EFLM booth on occasion of EFLM congresses;
- coordination, support and administration of EFLM financial matters.

The EFLM Operational Office is located in Via Farini 81, 20159 Milan (IT) and the current Office staff is composed of: Silvia Cattaneo, Silvia Terragni and Alessia Carere.

The EFLM registered office is located in rue d'Egmont, 11, 1000 Brussels (BE).

Chapter 14: EFLM Publications 2024-2025

- 14.1. EFLM Publications 2024-2025 (sorted by date of publication, from the most recent)
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14.1. EFLM Publications 2024-2025 (sorted by date of publication, from the most recent)

1. Strategy of Laboratory Medicine – EFLM Vision
Plebani M, Zima T, Gruson D, On behalf of the EFLM Executive Board
Clin Chem Lab Med 2026; <https://doi.org/10.1515/cclm-2025-1678>
2. Addressing the silent epidemic of recreational nitrous oxide use: a position, call to action and recommendations by the European Federation of Clinical Chemistry and Laboratory Medicine Committee on Biological Markers of Nitrous Oxide Abuse
Grzych G, Lee GR, Alpdemir M, Gernez E, Anseeuw K, Bjorke-Monsen AL, Croes K, El-Khoury JM, Hamzic J, Noyce AJ, Stankovic S, Rolland B, Bramness J, Vermeersch P, Cavalier E, on behalf of the EFLM Committee on Biological Markers of Nitrous Oxide Abuse
Clin Chem Lab Med 2025; <https://doi/10.1515/cclm-2025-1060>
3. EFLM checklist for the assessment of AI/ML studies in laboratory medicine: enhancing general medical AI frameworks for laboratory-specific applications
Carobene A, Cadamuro J, Frans G, Goldshmidt H, Debeljak Z, De Bruyne S, van Doorn W, Elias J, Özdemir H, Perez SM, Lame H, Tolios A, Cabitza F, Padoan A, On behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Committee on Digitalisation and Artificial Intelligence
Clin Chem Lab Med 2025; <https://doi.org/10.1515/cclm-2025-0841>
4. Urgent call to the European Commission to simplify and contextualize IVDR Article 5.5 for tailored and precision diagnostics
Cobbaert C, Schweiger C, Buchta C, Streichert T, Vanstapel F, Mullier F, Biaggini L, Capoluongo E, Bossuyt P, Pal Bhattoa H, Melvin T, Neumaier M, on behalf of the EFLM Committee on European Regulatory Affairs (EFLM C-ERA)
Clin Chem Lab Med 2025; <https://doi.org/10.1515/cclm-2025-1033>
5. The importance of laboratory medicine in the management of CKD-MBD: insights from the KDIGO 2023 controversies conference
Vasikaran SD, Makris K, Pal Bhattoa H, Zima T, Delanaye P, Evenepoel P, Jørgensen HS, Haarhaus M, McCloskey E, Lombardi G, Cavalier E, IFCC Committee on Bone Metabolism, EFLM Committee on Chronic Kidney Disease
Clin Chem Lab Med 2025; <https://doi.org/10.1515/cclm-2025-0802>
6. Regulating the future of laboratory medicine: European regulatory landscape of AI-driven medical device software in laboratory medicine
Can Çubukçu H, Boursier G, Linko S, Bernabeu-Andreu F. A, Brguljan P. M, Toseska-Trajkovska K, Brugnoli D, Milinkovic N, Padoan A, Thelen M, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Division: Quality, Standards and Regulations, Committee on Accreditation and ISO/CEN standards (C: A/ISO)
Clin Chem Lab Med 2025; <https://doi.org/10.1515/cclm-2025-0482>
7. A value-based score for clinical laboratories: promoting the work of the new EFLM committee
Plebani M
Clin Chem Lab Med 2025; <https://doi.org/10.1515/cclm-2025-0490>
8. New insights in preanalytical quality

Plebani M, Scott S, Simundic AM, Cornes M, Padoan A, Cadamuro J, Vermeersch P, Can Cubukcu H, Gonzalez A, Nybo M, Salvagno GL, Costelloe SJ, Falbo R, von Meyer A, Iaccino E, Botrè F, Banfi G, Lippi G
Clin Chem Lab Med 2025; <https://doi.org/10.1515/cclm-2025-0478>

9. Novel biomarkers in bone pathophysiology: Establishing reference intervals and biological variations estimates for serum leptin, sclerostin, lipocalin-2, osteoprotegerin, resistin and Dickkopf-related protein-1 from the European biological variation study (EuBIVAS) populations
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