1st INCAMS MEETING

International Network for Clinical Applications of Mass Spectrometry

KNOWLEDGE TOGETHER

RIMINI, ITALY

11th – 13th DECEMBER 2026



Under the auspices of

EFLM
EUROPEAN FEDERATION OF CLINICAL CHEMISTRY AND LABORATORY MEDICINE

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International Federation of Clinical Chemistry and Laboratory Medicine

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COMMITTEES

SCIENTIFIC COMMITTEE

Ilaria Belluomo, United Kingdom
Pierre-Alain Binz, Switzerland
Marco Cantù - Chair, Switzerland
Dario Cattaneo, Italy
Flaminia Fanelli, Italy
Simona Francese, United Kingdom
Ron Heeren, The Netherlands
Viviana Izzo, Italy
Antonin Lamaziere, France
Caroline Le Goff, Belgium
Markus Meyer, Germany
Michael Vogeser, Germany
Nicola Zamboni, Switzerland

CONGRESS ORGANISING COMMITTEE

Marco Cantù – Chair, Switzerland
Viviana Izzo, Italy
Flaminia Fanelli , Italy

PRESENTATION



In recent years, mass spectrometry (MS) has undeniably gained increasing popularity as an integral part of the techniques available in the clinical field and as a unique tool for a comprehensive understanding of pathophysiological mechanisms and therapeutic responses specific to each patient. The applications of this technique range from the qualitative and quantitative assessment of drugs, hormones, vitamins and a wide range of small organic molecules of clinical interest in biological matrices, to the identification of new biomarkers, with different approaches such as proteomics, metabolomics, imaging MS, and others, allowing to identify molecular determinants of diseases with unprecedented accuracy. MS coupled with liquid chromatography (LC) has proven to be exceptionally useful in the analysis of complex biological matrices, while high-resolution MS has expanded analytical capabilities, enabling the detection of low-abundance molecules and the elucidation of complex biological pathways. The growing interest in the clinical applications of MS requires technical innovations and the integration of MS with other techniques, opening up new opportunities for the discovery and validation of biomarkers and for the transfer of MS from conventional analysis laboratories to the clinic. Clinical applications of MS, which may involve either a targeted or an untargeted approach, cannot be separated from the development of shared experimental and regulatory procedures that ensure the rigorous and reliable application of this technique to biological samples and clinical problems. Indeed, recent developments in regulations, standards, and protocols for the analytical and clinical validation of MS-based analyses, including the most recent European Regulation 2017/746 (IVDR), have forced MS users to face complex challenges in using commercially available or laboratory-developed tests in their clinical routine.

The aim of this first INCAMS meeting is to bring together MS users, researchers and experts from different countries to discuss the opportunities and challenges of this technique, sharing the most innovative strategies and their actual potential in biomedical applications. Through its various sessions, the meeting will highlight both the similarities and differences between the different countries, thus paving the way for the creation of an international network for the development and application of mass spectrometry in the clinical field.

SCIENTIFIC TOPICS' COORDINATORS

- Clinical and Forensic Toxicology - *Markus Meyer, Germany*
- Clinical Pharmacology + Therapeutic proteins and nucleotides - *Dario Cattaneo, Italy*
- Emerging technologies, Bioinformatics and AI - *Lamaziere Antonin, France*
- Endogenous Small Molecules - *Caroline LeGoff, Belgium*
- Imaging MS - *Simona Francese, UK*
- Metabolomics: Lipidomics, glycomics - *Nicola Zamboni, Switzerland*
- Proteomics - *Pierre Alain Binz, Switzerland*
- Volatolomics analysis - *Ilaria Belluomo, UK*

TIMETABLE

11th DEC 2026

12.30-13.30	Registrations	
13.30-14.00	Welcome, introduction & orientation	
14.00-15.00	**Single Cell Imaging and implications in clinical diagnostics**	
15.00-16.00	Break & Poster Walk	
16.00-17.00	**Advanced LC-MS Method Development and Analytical Performance**	**Clinical and Forensic Toxicology**

12th DEC 2026

09.00-10.00	**Metabolomics beyond biomarkers**	**Emerging technologies, Bioinformatics and AI**
10.00-11.00	**Decoding Metabolic and Endocrine Pathways by Mass Spectrometry**	**Clinical applications of LC-MS/MS in infectious diseases**
11.00-11.30	Break & Poster Walk	
11.30-12.30	**Research transfer to business**	
12.30-13.30	**Present and future of clinical pharmacology and Toxicology**	
13.30-15.00	Lunch & Poster Walk	
15.00-16.00	**Industry Workshop (Roche):** The evolution of mass spectrometry in therapeutic drug monitoring: Advancing clinical value, laboratory performance and sustainability	**Industry Workshop**
16.00-17.00	**From Thyroid Hormones to Inborn Errors of Metabolism: New Frontiers in Clinical Mass Spectrometry**	**Breath Analysis, From Methodology to Clinical Translation**
17.00-18.00	**Metabolomics Lipidomics**	**Proteomics: from technical innovation to clinical applications**

13th DEC 2026

09.00-10.00	**LC-MS results in clinical diagnostic and patient management**	**Volatile Metabolites Across Biological Matrices: Microbiome and Skin**
10.00-11.00	**Inter-lab harmonization of metabolomics and lipidomics**	**The growing importance of TDM for biologic drugs**
11.00-11.30	Break	
11.30-12.30	**Role of MS in precision and personalized medicine**	
12.30-13.30	Closing	

12.30-13.30 Registrations
13.30-14.00 Welcome, introduction & orientation

14.00-15.00 **Single Cell Imaging and implications in clinical diagnostics**
Ron Heeren, The Netherlands

15.00-16.00 Break & Poster Walk

16.00-17.00 SCIROCCO ROOM

Advanced LC-MS Method Development and Analytical Performance
Caroline Le Goff, Giorgia Antonelli

Bridging analytical validation and clinical implementation: LC-MS measurement of hair cortisol as a case study - ***Alessia Lanno, Italy***

Development and Prevalidation of an LC-MS/MS Assay for the Simultaneous Quantification of Vitamin D Metabolites in Human Serum - ***Stéphanie Peeters, Belgium***

Automated LC-MS/MS in clinical laboratories: analytical validation and method comparison of cobas® i 601 system for steroid measurement - ***Veronica Pirana, italy***

16.00-17.00 LEVANTE ROOM

Clinical and Forensic Toxicology
Viviana Izzo, Giuliana Cangemi

Development and clinical validation of an UHPLC-MS/MS method for the measurement of urinary 3-O-methyldopa (3-OMD) in pediatric patients with neuroblastoma - ***Federica Pigliasco, Italy***

In silico, in vitro and in vivo metabolism of the synthetic cannabinoid receptor agonist EDMB-4en-PINACA - ***Arianna Giorgetti, Italy***

Simultaneous LC–MS/MS Quantification of 11 Antibiotics in Human Serum: Total and Unbound Fractions - ***Klara Michalikova, Czech Republic***

09.00-10.00 SCIROCCO ROOM

Metabolomics beyond biomarkers
Nicola Zamboni, Anastasiya Kuhalskaya

Plasma Bile Acid Levels and Frailty in Older Adults: Findings from the InCHIANTI Study - ***Laura Brunelli, Italy***

Clinical Metabolomics and Artificial Intelligence : From Biomarkers Discovery to Precision Laboratory Medicine - ***Audrey Le Gouellec, France***

Implementing Untargeted Metabolomics and Lipidomics in a Hospital Framework: From Clinical Case Solving to Novel Reference Materials - ***Aleš Kvasnička, Norway***

09.00-10.00 LEVANTE ROOM

Emerging technologies, Bioinformatics and AI
Antonin Lamazier, Alice Passoni

A tertiary cancer hospital experience of verifying the EXENT performance for identification and characterisation of monoclonal protein in samples from Waldenström Macroglobulinaemia patients ***Robyn Shea, UK***

From Plasma Proteome to Diagnosis: Improving the Classification of Adnexal Masses - ***Johannes Bruno Müller-Reif, Germany***

Integrating Mass Spectrometry Imaging and Computational Pathology for renal amyloid detection and typing - ***Greta Bindi, Italy***

10.00-11.00 SCIROCCO ROOM

Decoding Metabolic and Endocrine Pathways by Mass Spectrometry
Caroline Le Goff, Flaminia Fanelli

Development of a Derivatization-Free LC-MS/MS Assay for Comprehensive Urinary Organic Acid Profiling - ***Pia Sala, Austria***

Integrated liquid chromatography-high-resolution mass spectrometry (LC-HRMS) steroidomic and metabolomic profiling improves the characterization of adrenal tumors - ***Greta Galante, Italy***

Method and analytical sensitivity comparison of LC-HRMS Orbitrap and LC-QqQ for quantification of steroid, (nor)metanephrine and thyroid hormones in clinical samples - ***Lisa Dral, The Netherlands***

10.00-11.00 LEVANTE ROOM

Clinical applications of LC-MS/MS in infectious diseases
Antonio D'Avolio, Viviana Izzo

Beyond Plasma: The Key Role of Mass Spectrometry in Antibiotic Quantification Across Unconventional Biological Matrices
Sara Baldelli, Italy

Confirms Early Target Attainment of Teicoplanin Regimens in Pediatric Patients - ***Alessia Cafaro, Italy***

Expanding First-Line Antituberculosis TDM: Preliminary Integration of Pyrazinamide into an Established Multianalyte LC-MS/MS Workflow - ***Alessandro Mancini, Italy***

11.00-11.30 Break & Poster Walk

11.30-12.30 **Research transfer to business**
Paola Pozzi, Italy

12.30-13.30 **Present and future of clinical pharmacology and Toxicology**
Dario Cattaneo, Italy

13.30-15.00 Lunch & Poster Walk

15.00-16.00 SCIROCCO ROOM

Industry Workshop (Roche):
The evolution of mass spectrometry in therapeutic drug monitoring: Advancing clinical value, laboratory performance and sustainability

The role of the laboratory in meeting clinical needs in critical patient management - ***Giuliana Cangemi, Italy***
Economic and organizational analysis for the integration of automated mass spectrometry in clinical laboratories ***- Filippo Rumi, Italy***

16.00-17.00 SCIROCCO ROOM

From Thyroid Hormones to Inborn Errors of Metabolism: New Frontiers in Clinical Mass Spectrometry
Michael Vogeser, Flaminia Fanelli

Beyond Immunoassays: Measurement of Thyroid Hormones by Mass Spectrometry - ***Per Bjellerup, Sweden***

Performances of an unconventional approach for the analysis of amino acids in biological fluids - ***Bruno Casetta, Italy***

Behind the C5-Acylcarnitine Signal in Inborn Errors of Metabolism Testing: One Mass Spectrometric Transition, Multiple Interferences - ***Michela Perrone Donnorso, Italy***

16.00-17.00 LEVANTE ROOM

Breath Analysis, From Methodology to Clinical Translation
Ilaria Belluomo, Alice Passoni

Breathomics for Clinical Diagnostics: Opportunities, Challenges and Translation - ***Agnieszka Blanchet-Smolinska, The Netherlands***

Breathomics approaches for asthma monitoring, a focus on method translation - ***Thibault Massenet, Belgium***

Systematic review of breath analysis for lower respiratory tract infection in children - ***Jones Gareth, UK***

17.00-18.00 SCIROCCO ROOM

Metabolomics Lipidomics
Antonin Lamaziere, Anastasiya Kuhalskaya

Targeted Lipidomics using Mass Spectrometry for Physical Exercise Monitoring: Method Validation and Application
Philippe Massonnet, Belgium

Synovial Fluid Lipidomics Reveals a Reproducible Host-Response Signature of Infectious Arthritis - ***David Friedecky, Czech Republic***

A high-coverage LC-MS/MS steroidomics platform for integrated mapping of steroid metabolism across biological matrices ***Federico Ponzetto, Italy***

17.00-18.00 LEVANTE ROOM

Proteomics: from technical innovation to clinical applications
Andrea Armirotti, Fabrizio Dal Piaz

Rebel, Rebel: Breaking Norms with Protease Multiplexing for Glycoproteomics - ***Kathirvel Alagesan, Germany***

Supporting amyloid typing in complex cases through mass spectrometry-based proteomics - ***Clizia Chinello, Italy***

Proteomics as a Tool to Identify Novel Molecular Determinants of Cardiovascular Injury - ***Alice Mallia, Italy***

13th DEC 2026

09.00-10.00 SCIROCCO ROOM

LC-MS results in clinical diagnostic and patient management
Viviana Izzo, Giorgia Antonelli

Simultaneous measurement of 1-hydroxylated and 24-hydroxylated vitamin D metabolites by LC-MS/MS – an innovative tool in CKD management - ***Markus Herrmann, Austria***

Exploring the Relationship Between Sleep Duration and Salivary Amino Acid and Acylcarnitine Profiles: A Preliminary Study in Healthy Laboratory Workers - ***Miftakh Nur Rahman, Indonesia***

LC-MS/MS measurement of D- and L-2-hydroxyglutarate plasma levels in patients with diffuse IDH1/2-mutant lower-grade gliomas in treatment with Vorasidenib - ***Alessia Melis, Italy***

09.00-10.00 LEVANTE ROOM

Volatile Metabolites Across Biological Matrices: Microbiome and Skin
Ilaria Belluomo, Andrea Armirotti

Microbial metabolites in exhaled breath discriminate between moderately and highly stressed volunteers - ***Autuori Manon, Belgium***

Faecal volatile compounds analysis reveals gut microbiota activity in adults with constipation - ***Eloïse Viera Olivera, Belgium***

Unravelling the signature of volatile and semi-volatile metabolites for chronic inflammatory skin disease - ***Flavio A. Franchina, Italy***

10.00-11.00	SCIROCCO ROOM

The growing importance of TDM for biologic drugs
Dario Cattaneo, Antonio D'Avolio

Advancing TDM of biological drugs through mass spectrometry - ***Giuseppe Corona, Italy***

Analytical Strategy for LC-MS Quantification of Enfortumab vedotin in Plasma from Patients with Advanced Urothelial Carcinoma ***Jerome Chenau, France***

LC MS/MS Measurement of Infliximab, Adalimumab, Ustekinumab, Vedolizumab and Anti Drug Antibodies Using mAbXmise Kits on Xevo TQ Absolute XR MS for Clinical Research - ***Godo Bosch, France***

10.00-11.00	LEVANTE ROOM

Inter-lab harmonization of metabolomics and lipidomics
Nicola Zamboni, Fabrizio Dal Piaz

Harmonising metabolite panels across clinical laboratories: a robust, high-throughput LC-MS/MS pipeline from raw data to absolute quantification - ***Jacquel Basile, France***

Federated lipidomics of human blood plasma - ***Markus Wenk, Qatar***

Open software for reproducible, scalable untargeted data analysis ***Johannes Rainer, Italy***

11.00-11.30	Break
11.30-12.30	**Role of MS in precision and personalized medicine** ***Michael Vogeser, Germany***
12.30-13.30	Closing

CONGRESS VENUE

Hotel Savoia

Viale Amerigo Vespucci, 44
47921 Rimini



HOW TO REACH THE VENUE

BY CAR

From the A14 motorway, take the Rimini Sud exit and join State Road 72 (SS72). Continue along Viale Alberto dalla Chiesa, driving straight through the first two roundabouts. At the third roundabout, turn left, following the signs for Rimini Marina Centro and the seafront.
Continue onto Viale Tripoli and follow the road to Piazza Marvelli, then turn left onto Viale Vespucci.

BY PLANE

If you land in Rimini the hotel Savoia is situated only 4 km from the International Airport "Federico Fellini".

Bus: the airport is well connected to the city of Rimini with the bus line (START Romagna) number 9 and 9B, with regular frequency: about 15 minutes on weekdays and 30 minutes on public holidays. Stop at Rimini railway station and take the bus number 11 to the stop number 13. Another option is to walk for about 800 meters from the airport to the bus stop number 33 of the bus number 11 which leads directly to the hotel in approximately 30'.
Taxi: for those who prefer instead the taxi service, call the number: +39 0541 50020.

If you land in Bologna, the Airport is instead about 100km from the city of Rimini. Aerobus The shuttle service Rimini Bologna is available and can be booked online at this address: www.shuttleitalyairport.it
Taxi: for taxi services call the numbers: +39 051 372727 or +39 051 4590

BY TRAIN

OPTION 1 – BY BUS
Exit from the railway station and just on the square, on your left you will find the platform A where the bus line that leads to Marina Centro stops. Take the bus number 11 and get off at stop number 13.

OPTION 2 – WALKING
If the weather conditions permit and you do not have to carry heavy luggage you can enjoy the opportunity to take a nice stroll up to our hotel. Leaving the station turn right and travel along the avenue that runs along the station until the underpass that, along Viale Principe Amedeo, will take you up to the sea; once arrived at the fountain of the four horses, turn right and continue straight on for about 850 meters and you will find us on your left!
Walking time: 21'

OPTION 3 – BY TAXI
If you prefer you can enjoy a comfortable taxi service, located just outside the station, hat will take you directly to the hotel.
Journey time: 5'

REGISTRATIONS

Registration fees

Congress registration is mandatory for all delegates

Registration fees are as follows (22% Italian VAT included):

	Special rate until 20th June	**Early bird** from 21st June until 25th September	**Standard** from 26th September
Regular	400€	450€	550€
Young Scientist ≤ 40 years*	210€	260€	360€

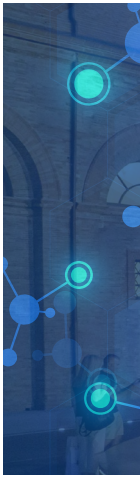
**Born in 1986 and after. Please send your ID to the Organising Secretariat as proof of age.*

The full registration fees include

- Admission to full scientific program
- Congress Kit
- Access to exhibition and posters area
- Certificate of attendance

Cancellation and refund

- Cancellations must be sent in writing to incams@mzevents.it
- The amount equal to 80% of the fee paid will be refunded for cancellations received by 1st September 2026.
- Until 15 October 2026 a refund of 50% of the fee will be granted.
- After 15 October 2026 no refunds will be issued.
- All refunds will be paid in Euros after the congress.



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SAVE THE DATE

MSACL 2027

Translating pre-clinical research to clinical patient care

ADD TO CALENDAR

26 September – 1 October 2027

Hôtel Bonaventure · Montréal, Québec

Discovery, translation & implementation of practical applications of mass spectrometry & related technologies to patient care.

KEY DATES

20 Jan 2027	Proposals due: short courses, workshops, discussions, practical training, award nominations
17 Mar 2027	Early bird rates end for exhibit booths and industry workshops
21 Apr 2027	Podium abstracts due; early poster abstracts & educational grant review opens
14 Jul 2027	Early bird registration ends
6 Aug 2027	Final poster abstract deadline

ABSTRACT TOPICS INCLUDE

- Clinical chemistry
- Toxicology & drug monitoring
- Endocrinology
- Precision medicine
- Newborn screening
- Microbiology & infectious disease
- Proteomics
- Metabolomics
- Lipidomics
- Glycomics
- Spatial omics
- Data science

MSACL Mass Spectrometry & Advances in the Clinical Lab

SHORT COURSES : NETWORKING :
ORAL & POSTER SESSIONS : EXHIBITS

msacl.org
SCAN FOR DETAILS



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