



### Overview

### Highlights

- International Regulatory Updates Ph. Eur., USP, ChP and more
- Implementation and Validation of Alternative/Rapid Microbiological Methods
- Current developments in Endotoxin and Pyrogen Testing
- Optimisation in Environmental Monitoring
- Digitization and Automation of Microbiological Testing (Sterility, Endotoxin and more)

### Background

Microbiological quality assurance and control has become increasingly important with the growing role of biological drugs. Whether in relation to the need for faster methods to meet short product shelf lives, or in relation to the challenging testing for viral contamination, which was not relevant for many traditional chemical products. New approaches to pyrogen testing in the context of 3R initiatives or the problem of DNA and RNA residues in the area of analysis also influence daily work in the field of pharmaceutical microbiology. As a result, the microbial control concept applied and described in the dossier of products and the compliance to the filed microbial control concepts inspected during official Health Authority inspections is increasingly becoming the focus of regulatory authorities. The annual European Microbiology Conference provides a platform for all interested parties to keep up to date with the current challenges and share knowledge and experience with colleagues.

#### **Target Audience**

This conference is of interest to professionals in microbiology from

- Pharmaceuticals and Biopharmaceutical Companies
- Academic Research Institutions
- Government Agencies
- Contract Laboratories

#### who are involved in

- Contamination Control
- Monitoring
- Validation
- Quality Affairs
- Regulatory Affairs
- Research and Development

#### **Moderators**

#### Dr Sven M. Deutschmann,

Roche, Chairman of the ECA Pharmaceutical Microbiology Working Group

#### Dr Michael Miller,

Microbiological Consultants LLC

#### Axel H. Schroeder,

Administration Manager, Pharmaceutical Microbiology Working Group

### Social Event | 20 May









On 20 May 2025, you are cordially invited to a social event.

This is an excellent opportunity to share your experiences with colleagues from other companies in a relaxed atmosphere.

## PART 1 REGULATORY UPDATES AND PHARMACOPOEIA DEVELOPMENTS

### The European Pharmacopoeia Unveiled: Recent Milestones and Future Directions

Dr Emmanuelle Charton, EDQM

- Bidding Farewell to the Rabbit Pyrogen Test: A New Era in Safety Testing
- The Future of Bacterial Endotoxin Testing
- Embracing Rapid Microbiological Methods

### Potential Certification System for the Validation and Comparability of RMM

Dr Solène Le Maux, EDQM

- Context and development
- Principles of a potential certification system
- Stakeholder perspectives and feedback

### USP Bioburden, Microbial Control and Sterility Assurance Topic Updates

Marsha Steed, USP Expert Group

#### USP Rapid Microbiological Methods Updates Dr Peter Nissen, NovoNordisk, USP Microbiology Expert Group

### The Pyrogen/Endotoxin Test and Sterility/Microbial Test in Chinese Pharmacopeia

Dr Qing He, Chinese National Institutes for Food and Drug Control, Pharmacology Division

- Chinese Pharmacopeia (ChP) in general
- The pyrogen/endotoxin test in ChP
- The sterility/microbial test in ChP

### Recent Direction of Microbiological Methods toward the nineteenth Edition of Japanese Pharmacopoeia

Dr Yutaka Kikuchi, Chiba Prefectural University of Health Sciences, Department of Nutrition Faculty of Healthcare Sciences

- Overview of microbiological methods
- Rapid Microbial Methods
- Monocyte-Activation Test

### Live Biotherapeutic Products and their Regulatory Framework in Europe and Serbia with a Focus on Microbiological Quality Assurance

Dr Milanka Setina, Biological Drug Quality Assessor, Medicines and Medical Devices Agency of Serbia

- Overview of Live Biotherapeutic Products (LBPs) and their unique role in healthcare
- European regulatory landscape for LBPs
- Regulatory perspectives on LBPs in Serbia
- Key microbiological quality considerations: purity, and contamination control

### Inspection of Microbiological Quality Control Laboratories - Expectations and Findings

Dr Rainer Gallitzendörfer, GMP Inspector

- Overview of the legal framework in the EU
- Inspections why, what and how
- Lab tour expectations and typical findings



### PART 2 ENVIRONMENTAL MONITORING

### Contact News - Validating Contact Plates Methodology?

Karola Schühle, PharmaMedia Müller

- Possible pitfalls in contact sampling
- Detection of micro-organisms
- Impact of human handling
- Disinfectant residues

# Lessons Learned from the Implementation of an Automated EM System at a Single Temperature Niels Visschers & Jeroen van Wiik, MSD

- Global implementation of automated EM system (3P) using single temperature
- Equipment qualification and method validation strategy-Challenges/opportunities and lessons learned of the equipment qualification will be discussed
- Detailed approach on statistical parameters for method validation,
   e.g. numbers replicates, selection of strains, etc.

# Advances in Microbial Identification Technologies: Focus on the BioMerieux VITEK MS Prime for Field Strains and Molds

Melanie Braun and Marius Pfister, Labor LS

- Results and findings of a recent comprehensive identification study with the VITEK MS Prime
- Identification of molds with the VITEK MS Maldi ToF an alternative to microscopic and molecular biological identification?
- LS-pedia The step towards a comprehensive service offering scientific information, know-how and microbiological identification

### scientific information, know-now and inicrobiologic

**ALTERNATIVE AND RAPID METHODS** 

### Hands-On Learning on Performing Statistical Calculations for Quantitative and Qualitative Rapid Method Validation Criteria

Dr Michael Miller, Microbiology Consultants

- Understand available statistical models for demonstrating comparability
- Match the appropriate statistical models with data sets shared by the presenter
- Perform the analyses and conclude whether the data demonstrate comparability

### From traditional to Rapid Method in Sterility Testing: Keep Control of your Digitalized Data

Nicolas Lelievre, Merck

PART 3

- Traditional method: example of digitalization and data traceability all along the testing process
- Rapid method: shorten your time to result while complying with data integrity requirement".

### Evaluation of an Alternative Microbiological Technique Based on Microcalorimetry

Nathalie Vendur, Roche

- Feasibities studies e.g. impact of different growth media on the TTR
- Product-specific evaluation studies
- LOD-evaluation

### Mycobacteria techno Roadmap from Sanofi Vaccine Dr Thierry Bonnevay, Sanofi

- Generalities on Mycobacteria, regulations and Mycobacteria, history of mycobacteria testing,
- Limitations of Ph.Eur. Method 2.6.2 Mycobacteria and their validation, all alternative than microbiological culture to Mycobacteria testing,
- NAT: development validation of NAT Mycobacteria, conclusion and perspectives

### Validation of a new Solid Phase Cytometry (SPC) for Rapid Sterility Testing in Pharmaceuticals

Silvia Scotti, Eurofins,

- Pauline Silberreiss, Redberry
- Advantage of rapid sterility testing with SPC
- Applicability of Red One™ technology (solid-phase cytometry) for a 4-day alternative sterility test
- Evaluation of criteria against pharmacopoeial standards, including a comparability study with the compendial 14-day method 14-day method

### Sterility Testing of a Cell Based Product with new Development of Solid Phase Cytometry (ScanRDI)

Dr Hans Joachim Anders, Novartis

- Starting point validation of a cell-based product with pre-enrichment culture a short method introduction
- Open topics before implementation
- Improvements regarding system setup (tablet, pictures)
- Direct detection without pre-enrichment Overview of Cell burst method with Scan RDI
- Design and result



### PART 4 ENDOTOXIN AND PYROGEN TESTING

### Automating Endotoxin Testing in a GMP Environment with the PyroTec® PRO

Ole Siebenmorgen, Roche

- Why did we decide to implement an automated system for endotoxin testing?
- How was the implementation strategy?
- What is our experience with routine testing in a GMP environment?

# Advancing Pyrogen Testing for Vaccines with Inherent Pyrogenicity: Development of the Reporter Cell-Based Monocyte Activation Test (MAT) Sijai Yi, MSD

- An overview of the novel reporter cell-based MAT method and its advantages
- Validation of the reporter cell line as an effective MAT testing system for detecting a wide range of endotoxin and non-endotoxin pyrogens
- Case study review from MSD:
  - Qualification of a product-specific MAT method for vaccines with inherent pyrogenicity
  - Development of pass/fail specification strategies for MAT methods applicable to vaccines with inherent pyrogenicity

### Overcoming High Viscosity in MAT product-Specific Validations

Dr Eva Kritikou, MAT Research

- Monocyte activation testing of highly viscous products
- Temperature modifications during or after cell incubation
- Product incubation duration adjustments
- pH alterations
- Alternatives for product-specific validation testing

#### Impact of LPS Mutants on Endotoxin Masking: Influence of Detection Systems and Sample Matrices Dr Bernhard Illes, Microcoat Biotechnology

- Introduction to LPS mutants
- Understanding the effect of LPS structures (mutants) on the mechanism of LER
- Comparison of endotoxin detection of LPS mutants in different assay systems (LAL, rFC and MAT)
- LER investigations of different LPS mutants in DP and sample matrices

### PART 5 GENERAL MICROBIOLOGICAL DEVELOPMENTS

### Validation/Verification of Biological Methods (MLT, Sterility, BET, Assays)

Dr Jelena Novaković Jovanović, Galenika

- Are all methods employed in biological laboratory validated using same principle?
- Suitability test for microbiological methods
- Validation of BET testing
- Validation of bioassays
- How to overcome challenges in validation/verification process

### Benefits of Digitization in Sterility Testing" *Katharina Schlereth, Labor LS*

- Integration of the isolator in laboratory information management systems (LIMS)
- Digitization of testing process and integration into LIMS
- Risk Reduction by digitization



### Speakers



Dr Hans Joachim Anders Quality Team Lead Analytical Science & Technology Microbiology, Novartis



Melanie Braun Head Microbiological Services, Labor LS



Thierry Bonnevay Sanofi



Dr Emmanuelle Charton Head of Division B in the European Pharmacopoeia department, (EDQM)



Dr Qing He Research Fellow Pharmacology Division, Chinese National Institutes for Food and Drug Control



Dr Bernhard Illes Project Leader Endotoxin Services, Microcoat Biotechnologie GmbH



Dr Yukata Kikuchi Professor of Department of Nutrition, Faculty of Healthcare Sciences, Chiba Prefectural University of Health Sciences



Dr Eva Kritikou MAT Research



Nicolas Lelievre Regional Application & Commercial Tactics Manager, Merck



Dr Solène Le Maux Scientific Programme Manager, European Directorate for the Quality of Medicines and Health-Care (EDQM)



Dr Michael Miller President, Microbiology Consultants LLC



Dr Peter Nissen Senior Principal Scientist, Microbiology, USP Microbiology Expert Group/ NovoNordisk



Dr Jelena Novaković Jovanović QC Manager, Biological Department, Galenika



Marius Pfister Specialist Manager of Microbiological Service, Labor LS



Katharina Schlereth Head of Department, Labor LS



Karola Schühle Head Research and Development, PMM - Pharma Media Müller



Silvia Scotti Senior Project Manager - Innovation Projects, Eurofins



Dr Milanka Setina Pharmaceutical Quality Assessor, Medicines and Medical Devices Agency of Serbia



Ole Siebenmorgen QC Technology Expert Microbiology, Roche



Pauline Silberreiss Research Scientist, Redberry



Marsha Steed Sterility Assurance Expert Sr. Consultant/CEO/ Founder, USP Microbiology Expert Group/ Steed MicroBio LLC



Natalie Vendur Roche



Niels Visschers Sr. Specialist MSD Global Center of Expertise Microbiology & AVA, MSD



Jeroen van Wiik MSD



Dr Sijia Yi Associate Principal Scientist, MSD

### European Microbiology Conference | 20-22 May 2025

#### Date

Tuesday, 20 May 2025, 09.00 – 17.30 h (Registration and coffee 08.30 - 09.00 h) Wednesday, 21 May 2025. 09.00 – 17.30 h Thursday, 22 May 2025, 09.00 – 17.00 h

All times mentioned are CEST

#### Venue

Austria Trend Parkhotel Schönbrunn Hietzinger Hauptstr. 10-14 1130 Wien

Tel.: +43 (1) 878 08 0 parkhotel.schoenbrunn@austria-trend.at

#### Accommodation

CONCEPT HEIDELBERG has reserved a limited number of rooms in the conference hotel. You will receive a room reservation form/POG when you have registered for the course. Reservation should be made directly with the hotel. Early reservation is recommended.

### **Conference Language**

The official conference language will be English.

### Fees (per delegate plus VAT)

ECA Members EUR 2,290 APIC Members EUR 2,390 Non-ECA Members EUR 2,490 EU GMP Inspectorates EUR 1,245

The conference fee is payable in advance after receipt of invoice. VAT is reclaimable.

It includes conference documentation, dinner on 20 May, lunch on all three days and all refreshments.

#### Organisation and Contact

ECA has entrusted Concept Heidelberg with the organisation of this event.

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#### For questions regarding content:

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#### For questions regarding organisation:

Manuela Luckhaupt (Organisation Manager) at +49(0)62 21/84 44 66 or at luckhaupt@concept-heidelberg.de.

#### Presentations/Certificate

The presentations for this event will be available for you to download and print before and after the event. Please note that no printed materials will be handed out on site and that there will not be any opportunity to print the presentations on site. After the event, you will automatically receive your certificate of participation.

#### Registration

You can register either by using the QR code, by e-mail or online at www.microbiology-conference.org.

