

Speakers



Jacqueline Dünisch
Labor LS



Dr Anja Fritsch
Confarma



Maria Gajewi
Microcoat



Dr Andreas Karst
Haemochrom
Diagnostica



Dr Koen Marijt
MAT Research



Katrin Pauls
Lonza



Stéphanie Richard
Sanofi Pasteur



Dr Ruth Röder
Microcoat



Shabnam Solati
CTL MAT



Dr Ingo Spreitzer
Paul-Ehrlich-Institut



Dr Sandra Stoppelkamp
Universität Tübingen and
South Westphalia
University of Applied
Sciences

Monocyte Activation Test (MAT)

Hands-on Laboratory Training Course

09/10 March 2023 | Munich/Bernried, Germany



Highlights

- Explanation of the MAT principle
- Understanding pharmacopoeial requirements
- Discussion of case studies
- Hands-on experience in performing the MAT in the laboratory

Practical Laboratory Training
in small groups – max 15 participants.

Objective

This unique event is organised to gain practical experience in performing the Monocyte Activation Test. Further, it brings together industry and regulatory representatives in order to discuss the practical experiences in using MAT, the advantages, the pitfalls, the available systems as well as the regulatory experiences. The purpose is to provide the participants with guidance and support and hands on laboratory training for the implementation and use of the MAT.

Background

During recent years manifold advances have taken place to replace both, Rabbit Pyrogen Test (RPT) and in some cases the Limulus Amebocyte Lysate Test (LAL).

Some of the reasons are:

- Animal experiments have to be reduced. Especially with the current EU Regulations.
- Reduction of variance by validatable in-vitro test methods
- Get an alternative test, where the classic LAL shows some gaps, e.g. contamination of biologicals by non-endotoxin pyrogens not detectable in LAL test is not unlikely.

True In-vitro Pyrogen Tests (IVPT) have been developed in several European countries (United Kingdom, The Netherlands, Switzerland, Germany) in national and international research projects. The tests imitate the central step of human fever reaction, i.e. the activation of human monocytes by endotoxin as well as non-endotoxin pyrogens. One result of all these activities is the Monocyte Activation Test (MAT).

Following, with continuous support by the German Pharmacopoeia, the EDQM MAT Expert group was re-established and finally the MAT Monograph 2.6.30. was implemented into the European Pharmacopoeia in 2010. Meanwhile, the EDQM performed a MAT-survey to improve the MAT monograph and the BET-Guideline 5.1.10. and the Rabbit Pyrogen Test (RPT) monograph, 2.6.8. have been revised to clarify the prioritisation of the MAT compared to the RPT (especially in regards to the EU directive 2010/63). However, there are still open questions how MAT can be applied in a routine lab for release testing. The meeting will give guidance for proper use of MAT and strengths and weaknesses will be discussed.

Target Audience

This course is addressed to all persons of

- pharmaceutical manufacturers
- biopharmaceutical companies
- medical device manufacturers
- contract laboratories
- tissue establishments
- authorities

who are involved in Endotoxin and Pyrogen Testing in development, IPC or release.

Programme

Pyrogens – Fever Inducing Agents and the Principal of the Monocyte Activation Test

- What are pyrogens
- Diversity of pyrogens
- Activation of the human immune system through TLRs stimulation
- Detection of cytokines using the MAT

MAT - a Compendial Test Method

- Explanation of European Pharmacopoeia 2.6.30
- International status of MAT

Pyrogen Testing - Fever in an Animal's Body

- History of the Rabbit Pyrogen Test
- Pharmacopoeial requirements
- Regulatory requirements and animal welfare (EU-Directive 2010/63/EU)
- Field of application
- Future of pyrogene detection

Hands-on Training in the Laboratory

- Experimental set-up and preparation of samples (e.g., stimulation of cells)
- Loading of cells on assay plate

Background to Available Monocyte Activation Tests Part 1

- MAT from MAT Research
- HaemoMAT®
- CTL-MAT

Multiple Read-out of Cytokines

- Available multiple read-out platforms
- Case study: Comparison of platforms

Recap of Day 1

Hands-on Training in the Lab

- Measurement of Samples

How to Monitor Pyrogen in Vaccines According to the General Chapter 2.6.30

- Case Study 1 : Characterization of the absence of NEP
- Case Study 2 : Consistency of production in the case of product containing intrinsic pyrogen

Generic Method and Specific Product Validation of the Monocyte Activation Test

Background to Available MATs Part 2

- PyroMAT
- MAT Lonza/Sanquin

Hands-on Laboratory Results

- Presentation of the laboratory results
- Discussion of the results

Moderators

Axel H. Schroeder, Concept Heidelberg
Dr Johannes Reich, Microcoat

Speakers

Jacqueline Dünisch, Labor LS, SME Endotoxin

After completing her Master's degree in Molecular Sciences at the University of Erlangen-Nuremberg, Jacqueline joined Labor LS in 2016 and has since been in charge of endotoxin testing.

Dr Anja Fritsch, Confarma, CSO

Dr Anja Fritsch joined Confarma, Hombourg (F) in 2011 as Chief Scientific Officer. Having more than 15 years of experience in development of cell-based disease models and assays, she is responsible for cell based bioassays (development and routine) since 2011.

Maria Gajewi, Microcoat, Project Manager Endotoxin

Maria studied at the Technical University of Leipzig. After working around 4 years as scientist at University of Regensburg and Dresden she joined Microcoat Biotechnology in 2019.

Dr Andreas Karst, Haemochrom Diagnostica

Andreas Karst studied Chemistry at the University of Münster. His dissertation was at the Institute for Inorganic Chemistry of the University of Münster. He is employed by Haemochrom Diagnostica GmbH since 1997.

Dr Koen Marijt, MAT Research, Senior Immunology Scientist

The last 10 years, Koen Marijt gained experience in the field of cellular biology at Harvard Medical School, Boston USA, and immunology at the LUMC, Leiden, the Netherlands. With his experience in fundamental research he is able to develop new and superior systems to improve the monocyte activation test to such a level where it can completely make the use of animals dispensable for pyrogen testing with the highest levels of sensitivity and reliability.

Katrin Pauls, Lonza, Scientific Liason Manager

Katrin studied Biology at the University Düsseldorf. After working at the University Hospitals of Düsseldorf and Magdeburg she joined Miltenyi Biotec in 2002. From 2010 to 2017 she was employed at Merck and came to Lonza in 2017.

Stéphanie Richard, Sanofi Pasteur, Unit Manager Immunology Process Support

Stéphanie Richard studied at the University of Grenoble. She joined Sanofi Pasteur in 2010 as scientist. Since 2021 she is Unit Manager Immunology Process Support. She has experiences in Technological innovation – Team management – ELISA – Relocation/transfer – Continuous process improvement and more.

Dr Ruth Röder, Microcoat, Director Endotoxin Services

Ruth studied Biochemistry in Munich. She worked as a researcher at the LMU in Munich alongside her doctorate. In 2016, she joined Microcoat as a research assistant. Afterwards, she became a rest project manager and group leader at Endotoxin Services. She is currently the director of Endotoxin Services.

Shabnam Solati, CTL MAT, CEO

Shabnam studied at the Universities of Groningen and Amsterdam and has over 15 years of experience in both academics and fieldwork in the area of Monocyte Activation Testing (MAT). Having designed, produced, and commercialised a leading MAT kit, Shabnam partners with the largest pharmaceutical manufacturers globally in their transition away from in-vivo assays towards the MAT as their batch release pyrogen test."

Dr Ingo Spreitzer, Paul-Ehrlich-Institut, Deputy Head of Section 1/3, "Microbial Safety and Parasitology"

Ingo Spreitzer studied Biology at the University of Mainz, Germany, and was awarded a doctorate in 2000. Since 2001 he has been working as a scientist at the Paul-Ehrlich-Institut. In October 2004 he was appointed Deputy head of Section 1/3, "Microbial Safety and Parasitology". Duties: Pyrogen testing (rabbit and alternatives); LAL-Testing.

Dr Sandra Stoppelkamp, University Tübingen and South Westphalia

Dr Sandra Stoppelkamp (PhD) is currently working in the field of haemocompatibility and pyrogen testing of medical devices at the University Hospital Tübingen and at the University of Applied Sciences Iserlohn. She has especially gained experience in using the MAT with diverse variants in clinical settings and on medical devices.

Social Event

In the evening of the first course day, 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.

If the bill-to-address deviates from the specifications on the right, please fill out here:

Reservation Form (Please complete in full)

- Monocyte Activation Test (MAT), 09/10 March 2023, Munich/Bernried, Germany
 Low Endotoxin Recovery/Masking, 07/08 March 2023, Munich/Bernried, Germany

Title, first name, surname

Department

Company

Important: Please indicate your company's VAT ID Number

Purchase Order Number, if applicable

CONCEPT HEIDELBERG

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D-69007 Heidelberg

GERMANY

City

ZIP Code

Country

Phone / Fax

E-Mail (Please fill in)

General terms and conditions

If you cannot attend the conference you have two options:

1. We are happy to welcome a substitute colleague at any time.
2. If you have to cancel entirely we must charge the following processing fees:
 - Cancellation until 4 weeks prior to the conference 10 %
 - Cancellation until 3 weeks prior to the conference 25 %
 - Cancellation until 2 weeks prior to the conference 50 %
 - Cancellation within 2 weeks prior to the conference 100 %

CONCEPT HEIDELBERG reserves the right to change the materials, instructors, or speakers without notice or to cancel an event. If the event must be cancelled, registrants will be notified as soon as possible and will receive a full refund of fees paid. CONCEPT HEIDELBERG will not be responsible for discount/airfare penalties or other costs incurred due to a cancellation.

Terms of payment: Payable without deductions within 10 days after receipt of invoice.

Important: This is a binding registration and above fees are due in case of can-

cellation or non-appearance. If you cannot take part, you have to inform us in writing. The cancellation fee will then be calculated according to the point of time at which we receive your message.

In case you do not appear at the event without having informed us, you will have to pay the full registration fee, even if you have not made the payment yet. Only after we have received your payment, you are entitled to participate in the conference (receipt of payment will not be confirmed!) (As of January 2012).

German law shall apply. Court of jurisdiction is Heidelberg.

Privacy Policy: By registering for this event, I accept the processing of my Personal Data. Concept Heidelberg will use my data for the processing of this order, for which I hereby declare to agree that my personal data is stored and processed. Concept Heidelberg will only send me information in relation with this order or similar ones. My personal data will not be disclosed to third parties (see also the privacy policy at http://www.gmp-compliance.org/eca_privacy.html). I note that I can ask for the modification, correction or deletion of my data at any time via the contact form on this website.

Organisation and Contact

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

CONCEPT HEIDELBERG

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For questions regarding content please contact:

Mr Axel H. Schroeder (Operations Director) at

+49(0)62 21/84 44 10, or at schroeder@concept-heidelberg.de.

For questions regarding organisation etc. please contact:

Ms Isabell Helm (Organisation Manager) at

+49(0)62 21/84 44 49, or at helm@concept-heidelberg.de.

Registration

Via the attached reservation form, by e-mail or by fax message.

Or you register online at www.gmp-compliance.org.

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.

Accommodation

CONCEPT HEIDELBERG has reserved a limited number of rooms in the Hotel Marina. 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.

Fees (per delegate, plus VAT)

ECA Members € 1,890 | APIC Members € 1,990

Non-ECA Members € 2,090 | EU GMP Inspectorates € 1,045

The fee is payable in advance after receipt of invoice and includes laboratory materials, dinner on the first day, lunch on both days and all refreshments. VAT is reclaimable.



Participants of the "Low Endotoxin Recovery Laboratory Training Course" on 07/08 March 2023 in Bernried get a € 200 discount.

Venue of the Laboratory Course

Microcoat Biotechnologie GmbH

Am Neuland 3, 82347 Bernried am Starnberger See, Germany

Transfer service from Marina Hotel to Microcoat in the morning and back in the evening will be organised.

Shuttle Service from/to Munich Airport:

On 08 March at appr. 19.00 from Munich Airport to Hotel Marina.

On 10 March at appr. 16.30 h from Microcoat to Munich Airport.

Overnight Stay

Hotel Marina | Am Yachthafen 1-15

82347 Bernried am Starnberger See, Germany

Phone +49(0)8158 -9320

Email info@marina-bernried.de

Date

Thursday, 09 March 2023, 09.00 – 17.30 h

(Registration and coffee 08.30 -09.00 h)

Friday, 10 March 2023, 08.45 – 16.15 h