

#### Speakers



**Ib Alstrup** Danish Medicines Agency (DMA)



**Victor Bechmann** Kuatro group, Denmark



**Dr Philipp Fey** Boehringer Ingelheim, Germany



**Kevin Françoisse** Ellion x Sagacify, Belgium



**Torsten Kneuss** Bayer, Germany



**Veit Mengling** d-fine, Germany



**Stefan Münch** Körber Pharma Consulting, Germany



**Dr Rolf Roth** Merck Healthcare, Germany



**Yves Samson** Kereon, Switzerland



Dr Torsten Schmidt-Bader moveproTEC Compliance

& Innovation Advisory, Germany Dr jörg Stüben

Boehringer Ingelheim International, Germany



**Gitte Bjørg Windfeldt** Novo Nordisk, Denmark



**Daniel Wolf** Ulm University Medical Center, Germany



GMP Certification Programme Certified Computer Validation Manager

# Annex 22 / Al Conference 2025

With a 1 Day Pre-Conference Course on Basics of AI

4 and 5-6 November 2025 | Copenhagen, Denmark



#### Highlights

- The brand new draft of EU GMP Guide Annex 22 ,Artificial Intelligence
- What Questions to expect during an Inspection?
- How to apply GxP Regulations to AI (Artificial Intelligence) and ML (Machine Learning)
- Which Validation Approach is applicable to AL/ML Systems?
- What are typical Risks and Opportunities?
- What are the (current) Limitations of AI/ML Applications?
- Case Studies from:
  - Boehringer Ingelheim
  - Kuatro
  - Merck
  - Novo Nordisk

#### Programme: Pre-Conference Course on Basics of Al

# Objectives

What can you expect in the Pre-Conference Course?

- Get to know the basics of AI (Artificial Intelligence) and ML (Machine Learning),
- Learn about the importance of data and models,
- Risk management and validation; how should these classic pharmaceutical topics be considered and applied in the context of AI and
- What are the applications and limitations in the GxP environment? Learn about the current state of development.

# Background

In addition to the general public, the topic of artificial intelligence now also has the healthcare industry in its grip. In order to assess and apply the technology in a meaningful way, it is important to understand the basics. What technologies is AI based on? What is the significance of data - data quality - data availability and models? The pre-training course offers you a first introduction to the topic.

# Target Audience

The pre-conference is aimed at managers and interested parties from the pharmaceutical industry, suppliers and service companies who want to find out about the basics of AI and its possible applications in the pharmaceutical environment.

## Programme

Introduction to Artificial Intelligence (AI)

- History of Al
- Types of AI
- Current situation
- Real life examples

Introduction to Machine Learning (ML)

- Technological basics
- Different learning / training methods
- Example use cases

#### Data and Models

- Classification of data and models
- Regulators' thinking in the context of data and models
- Data quality considerations and challenges
- Data handling practices: Splitting, selection and synthetization
- Model version management and model updates

#### Generative Al

- Introduction to Large Language Models (LLM)
- Tailoring LLMs for your business case
- Typical risks when using LLMs
- Performance evaluation and validation strategies for LLMs

#### Risk Management for AI/ML

- Basics of a ML Risk and Control Framework
- Applying QRM to development and operation of AI applications
- Using hazard clusters to guide the risk process

#### Validation Approaches

- Maturity: Increasing autonomy and transferring control
- Governance: Developing and operating AI solutions in GxP-regulated areas
- Lifecycle approach and Good Machine Learning Practice (details)

#### AI / ML in Pharma, Biotech, and Medical Devices

- Challenges for the Life Science industry
- The GAMP<sup>®</sup> perspective on AI/ML
- The EU AI Act and its impact on the Life Science industry



#### Programme: Annex 22 / Al Conference 2025

# Objectives

- You will gain an overview of the current state of regulatory development with regard to the use of AI in the pharmaceutical industry
- You will be able to better assess the possibilities and limitations of this technology
- You will learn the prerequisites for establishing AI projects in the company
- Case studies from pharmaceutical companies will show you possible areas of application for AI

## Background

Since ChatGPT, Bard, Midjourney and others, artificial intelligence (AI) has reached the general public. Opinions fluctuate between absolute euphoria and the evocation of the downfall of humanity. The foundations of AI were laid many years ago and can now be realised on a large scale thanks to the massive computing power available.

The topic has also found its way into the pharmaceutical and medical technology industry. The drafts published by the EU Commission on 7 July 2025 for the new version of EU GMP Annex 11 on computerised systems and the new Annex 22 on AI will also be dedicated to this Topic.

The first applications have now been established in pharmaceutical companies. The interesting question is whether and how this technology is compatible with pharmaceutical regulations, specifications and the expectations of the authorities. Several case studies will look at various possible applications.

# Target Audience

The conference is aimed at managers and interested parties from the pharmaceutical industry, suppliers and service companies who decide on the use of AI and (want to) qualify and operate AI applications in a GxP environment.

### Programme

#### Overview of AI in GxP: Capabilities & Opportunities

- General introduction
- (Very) brief introduction to AI & ML
- Drivers (for using AI & ML in pharma)
- Regulations and guidances

#### AI Limitations and Areas of Concern

- Current situation
- What do you need to watch out for?
- What are the risks?

Current regulatory Situation – the new EU GMP Guide Annex 11 and Annex 22 - and Expectations in the Context of an Inspection

#### Inspection Readiness

- Overview of supporting processes: data management, risk management, change management
- Have documentation ready provide reasoning and justifications
- How to setup mock inspections successfully

# Aspects of AI Adoption "with and beyond Regulations"

- Regulations and the degree of freedom
- What you may want to consider
- Examples and evaluation criteria

# Interactive Presentations

#### AI in Imaging: An Interactive Introduction with Real-World Examples

- Understand each key step in building an AI model for imaging: data preparation, training, pre-training, testing, and explainability
- Learn through a real-world example: cancer diagnosis and prognosis based on CT scans
- Explore what's next: opportunities and risks of using large pre-trained multimodal AI models
- Engage actively: think, ask, discuss your participation shapes the session
- Leave with a clear understanding of how AI can support your own imaging challenges

#### Basics of Prompt Engineering

- Introduction to ChatGPT and current Large Language Models
- Overview of prompt engineering
- Prompt techniques
  - Zero-shot prompting, few-shot prompting
  - Chain-of Thought
  - Tree of Thought (ToT)
  - Reverse Engineering Prompting
  - Example use cases

# Case Studies

Artificial Intelligence (AI) for Discrepancy Managemen

#### Using AI in Pharmaceutical Manufacturing

- Approach for implementation
- Use of AI in Pharmaceutical Manufacturing
- Using AI for visual GMP Inspections

#### AI Coding Agents

- Overview: Evolution of AI coding agents
- State-of-the-Art: Current capabilities and limitations
- Use Cases: Beyond coding
- Outlook & Transfer: Future vision and imaging agent capabilities

Al Deviation Assistant – Enhancing Deviation Workflows

- Deviation management challenges in pharma
- AI-powered solution: Knowledge Graph / LLM RAG
- Key features, benefits, and impact
- Demo and use cases

# Case Studies

Validating LLMs for GMP: A Framework for Document-Centric Use Cases

- Risk-based validation strategies for LLM-based systems
- Defining appropriate performance metrics for mixed-content data
- Human-in-the-loop controls to ensure accuracy and compliance
- Considerations for traceability, auditability, and change management

Learning from the Banking Sector: Transfer of AI-based Inspection Tools into GxP regulated Environment

- How we can learn from other industries: Conducting AI-based compliance audits in the banking & insurance sector (example: DORA regulation)
- Goal: The way to systematic and GDPR-compliant document checks without language barrier
- Solution: Fast-track AI-supported inspections of quality management systems in GMP systems
- Why auditors are still mandatory: Checking the implementation status of written standards
- AI never sleeps: Failure-free creation of risk-based compliance inspection reports
- Verification versus GMP validation: The limitations of AI tools in GxP practice

#### Speakers Pre-Conference Course on Basics of AI and Annex 22 / AI Conference 2025



#### Ib Alstrup GxP IT Medicines Inspector Danish Medicines Agency (DKMA)

With a background as a software designer and tester, Ib has specific focus and large experience in inspection of validation and operation of computerised systems throughout the GxP areas. He is a co-writer of the new PIC/S guide on Data Integrity and holds a B.Sc. in Electronic Engineering.



#### Victor Bechmann Kuatro group, Denmark

Victor is an experienced pharmacist from the phar-

maceutical industry, having worked with production as both validation consultant and project manager, delegate QP and most recently as Head of Quality. Currently AI Validation Lead – GxP Sr. Consultant.



#### Dr. Philipp Fey Boehringer Ingelheim, Germany

During his PhD, Philipp focused on developing and

applying Artificial Intelligence in Tissue Engineering, Biomedicine, and Biophysics. Currently at Boehringer Ingelheim, he is responsible for process and validation management for the global quality management system, with a particular emphasis on interfaces and the integration of AI in GxP environments.



Kevin Françoisse, Ellion x Sagacify, Belgium

Kevin Françoisse is an entrepreneur and AI expert with over a decade of experience helping organiza-

tions leverage artificial intelligence to automate complex operational processes. As CEO and co-founder of Sagacify, he leads a team of 30 AI engineers focused on delivering impactful, custom AI solutions - including intelligent agents - for industries such as pharma, insurance, and logistics.



#### Torsten Kneuss, Bayer, Germany

Since October 2020 he is, as a Quality Product Steward Medical Devices and Head of Project Office Medical Devices, responsible for devices and combinati-

on products within Bayer AG.



Veit Mengling

d-fine, Germany

Veit Mengling works as a Senior Consultant at d-fine Pharma & Healthcare. His focus is on supporting complex digitalisation and transformation projects.



#### Stefan Münch

Körber Pharma Consulting, Germany

Stefan Münch, Vice President of Validation and Qualification, is responsible for the validation and quali-

fication services of Körber Pharma Consulting. He has more than 25 years of experience in software development (MES) and consulting for the pharmaceutical industry. Furthermore, Mr. Münch is actively engaged in GAMP D-A-CH for many years and member of the steering committee.



#### Dr Rolf Roth

Merck Healthcare, Germany

Rolf holds dual roles as Head of Data Science and AI

for Global Healthcare Operations and Principal Technical AI Lead for the Healthcare sector at Merck KGaA, Darmstadt, Germany. His team develops AI solutions and delivers trainings across Healthcare Manufacturing, Development, Supply Chain, and Quality.



#### Yves Samson, Kereon, Switzerland

Yves joined the industry where he served as project and site engineer automation. In 2002, he founded Kereon AG. He is member of GAMP<sup>®</sup> Europe Steering

Committee, co-founder and chairman of GAMP<sup>®</sup> Francophone and edited the French version of GAMP<sup>®</sup> 4 / 5. Membership: ECA 'DI & IT Compliance Group'.

#### Conference language

The official conference language will be English.

#### Organisation and Contact

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

CONCEPT HEIDEL BERG

P.O. Box 10 17 64 69007 Heidelberg, Germany Phone +49(0)62 21/84 44-0 Fax +49(0)62 21/84 44 34 info@concept-heidelberg.de www.concept-heidelberg.de

#### For questions regarding content please contact:

Dr Andreas Mangel (Operations Director) at +49(0)62 21/84 44 41, or at mangel@concept-heidelberg.de.

For questions regarding organisation please contact: Mr Rouwen Schopka (Organisation Manager) at

+49(0)62 21/84 44 13, or at schopka@concept-heidelberg.de.

## Social Event



On the first day of the Annex 22 / AI Conference 2025 (5 November), 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.

# Speakers (cont.)



Dr Torsten Schmidt-Bader moveproTEC Compliance & Innovation Advisory, Germany

Dr Torsten Schmidt-Bader is Managing Director at moveproTEC and a GMP/GDP lead auditor and compliance advisor. Since 2010 he has been supporting the life science industries and pharma logistic providers with GDP implementation.



#### Dr Jörg Stüben Boehringer Ingelheim International, Germany

Joerg has a long track record of leading cross functional large compliance critical projects. In his current function of heading the RIM group at BI he is heavily involved in data management and analytics. He is co-founder of the GAMP D-A-CH Special Interest Group (SIG) AI and member of the GAMP D-A-CH Steering Committee.



Gitte Bjørg Windfeldt, Novo Nordisk, Denmark

Gitte is an AI Validation & Compliance Strategic Expert in Novo Nordisk A/S. She is responsible for the foundation for validation and compliance of AI in Manufacturing,

and an Advisor on AI compliance in GxP across the value chain. She has 20+ years of experience working in the pharmaceutical industry and holds a PhD in Statistics.



#### Daniel Wolf,

Ulm University Medical Center, Germany

Daniel Wolf conducts research in the area of artificial intelligence in medical imaging. His focus is on deep

learning algorithms to support radiologists in diagnosis and prediction based on image data.

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	Annex 22 / Al Conference 2025	🗆 5-6 November 2025, Copenhagen, Denmark		Company	Purchase Order Number, if applicable	Country		
Reservation Form (Please complete in full)	Pre-Conference Course on Basics of Al	🗆 4 November 2025, Copenhagen, Denmark	Title, first name, surname	Department	Important: Please indicate your company's VAT ID Number	City ZIP Code	Phone / Fax	E-Mail (Please fill in)
If the bill-to-address deviates from the specifica- tions on the right, please fill out here:					CONCEPT HEIDELBERG	F.O. DOX 101704 Fax +49 (0) 62 21/84 44 34	D-69007 Heidelberg GERMANY	

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 2 weeks prior to the conference 50 %, - Cancellation until 2 weeks prior to the conference 50 %, - Cancellation until 2 weeks prior to the conference 20 %, terms and conditions

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Dates & Venue

Pre-Conference Course on Basics of AI

Tuesday, 4 November 2025, 09.00 – 17.00 h CET (Registration and coffee 08.30 h - 09.00 h CET)

#### Annex 22 / AI Conference 2025

Wednesday, 5 November 2025, 09.00 h - 18.00 h CET (Registration and coffee 08.30 h - 09.00 h CET) Thursday, 6 November 2025 2025, 08.30 h – 16.30 h CET

# Venue

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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 caseyoud on oritappear at the event without having informed us, you will have to pay the full registration from the you have not made the payment yet. Only after we have received your reayment, you are entitled to participate in the conference (receipt of payment, will not be confirmed)! (As of July 2022). German law shall apply. Court of jurisdiction is Heideberg.

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Radisson Blu Scandinavia Hotel Amager Boulevard 70 2300 Copenhagen S, Denmark Phone: +45 3396 50 00 E-Mail: guest.copenhagen@radissonblu.com

#### Fees (per delegate plus VAT) Fees Pre-Conference Course on Basics of AI

ECA Members € 1,090 | APIC Members € 1,190 Non-ECA Members € 1,290 | EU GMP Inspectorates € 645 The conference fee is payable in advance after receipt of invoice and includes conference documentation, lunch and all refreshments. VAT is reclaimable.

#### Fees Annex 22 / AI Conference 2025

ECA Members € 1,990 | APIC Members € 2,090

Non-ECA Members € 2,190 | EU GMP Inspectorates € 1,095 The conference fee is payable in advance after receipt of invoice and includes conference documentation, social event including dinner on the first day, two lunches and all refreshments. VAT is reclaimable.



#### Save money and book both courses:

We will offer you a discount of € 400 if you book both training courses.

The conference fee is payable in advance after receipt of invoice and includes conference documentation, lunch on all conference days, social event including dinner on November, 5th, and all refreshments. VAT is reclaimable.

#### 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 conference. Reservation should be made directly with the hotel. Early reservation is

recommended.

#### Registration

Via the attached reservation form, by e-mail or by fax – or search and register directly at www.gmp-compliance.org under the numbers 22081 (Pre-Conference Course on Basics of AI), 22082 (Annex 22 / AI Conference 2025), 22083 (Pre-Conference Course on Basics of AI + Annex 22 / AI Conference 2025).

#### Presentations/Certificate

The presentations will be made available to you prior to the Live Online Training as PDF files. After the event, you will automatically receive your certificate of participation.