



Managing knowledge  
during the product lifecycle

# ICH Q11 Training Course

Approaches to developing process and  
drug substance understanding

20 – 21 November 2012, Budapest, Hungary

## SPEAKERS:

**Karl Metzger**  
*gmPlan, Germany*

**Filipe Neves**  
*Hovione, Portugal*

**Tom Sam**  
*MSD, The Netherlands*

**Márcio Temtem**  
*Hovione, Portugal*

**Francois Vandeweyer**  
*Janssen Pharmaceutica, Belgium*

**Elmar Wenzel**  
*Freelance Consultant, Germany*

## PROGRAMME:

- Key principles of the new ICH Q11 Guidance
- Manufacturing process development
- Knowledge management and quality risk management during the product lifecycle
- Process validation and design space
- Information about process development to be provided in the CTD



# ICH Q11 Training Course

20 – 21 November 2012, Budapest, Hungary

## Objectives

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This training course highlights the key **principles of the new ICH Q11 Guideline**. You will get to know the essential aspects and approaches of process development and drug substance understanding described in the new Guidance such as

- How to link material attributes and process parameters to drug substances CQAs
- How to apply the concept of Design Space
- How to submit relevant information from manufacturing process development in the CTD format

Two practical workshops on **Quality Risk Management** and **Process Development** ideally complement the contents of the lectures.

## Background

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A company can choose to follow different **approaches in developing a drug substance**: a “traditional” or an “enhanced” approach whereas these two approaches are not mutually exclusive. The traditional approach is characterised by defined set points and operating ranges for process parameters and the drug substance control strategy is typically based on demonstrating the process reproducibility and on testing to meet established acceptance criteria.

In an **enhanced approach**, risk management and more extensive scientific knowledge are used to select process parameters and unit operations that impact critical quality attributes (CQAs) for evaluation in further studies to establish any design space(s) and control strategies applicable over the lifecycle of the drug substance.

A **greater understanding** of the drug substance and its manufacturing process can provide the basis to enhance the degree of **regulatory flexibility**.

In this way the new ICH Q11 Guideline is to be seen in connection with ICH Q8 (Pharmaceutical Development), Q9 (Quality Risk Management) and Q10 (Pharmaceutical Quality Systems).

## Target Audience

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This training course is designed for all scientists, and persons involved in R&D departments of API manufacturers. Furthermore, the session will be of interest to personnel from production, quality assurance, quality control and regulatory affairs.

## Programme

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### The new ICH Q11 Guidance on Development and Manufacture of Drug Substances – an overview

- Goals and scope of the new Guidance
- Fundamentals and key principles of API process development
- The concept of design space
- Control strategy
- Process validation and evaluation
- Submission requirements in the CTD
- ICH Q8, Q9, Q10 – how do they work together with ICH Q11?

### Manufacturing Process Development – General Principles and Process Development Tools

- Drug substance quality link to drug product
- Process development tools
- Critical quality attributes (CQAs)
- Linking material attributes and process parameters to drug substance CQAs
- Design space(s) and real-time release testing

### How to submit Process Development Information via the CTD

- Where and how to submit development related information in the CTD - specific suggestions for
  - quality risk management and process development
  - CQAs
  - Design Space
  - Control strategy
- Where to include summaries and detailed information

### Knowledge Management during the Lifecycle of a Product

- Knowledge management/prior knowledge and development studies
- Systematic approach to manage knowledge throughout the lifecycle
- Prior Knowledge and Development Studies

### Quality Risk Management

- Quality risk management and informal risk management processes
  - Risk management
  - Risk assessment
  - Risk control
- Quality risk management and cost saving measures
- A formal risk register as part of Quality risk management
- Key attributes of a good risk assessment

### Workshop “Quality Risk Management”

During this Workshop you will learn more about how to perform criticality analyses of syntheses and processes. You will receive relevant information on how to implement this concept into practice.

### Workshop “Process Development”

In this Workshop you will discuss relevant aspects of process development considering operating limits and determining the Design Space.

### Process Validation and Design Space in early Development

- Points to consider regarding
  - number and complexity of the process being validated
  - level of process variability
  - process knowledge available
- Product related and process related impurities
- Process variability, variability of material attributes and the design space

### Approaches to developing a Control Strategy

- Development of meaningful parametric, attribute and procedural controls
- Considerations in developing a control strategy
  - Possible downstream factors impacting the quality of the drug substance
  - Implementation of control points for specific CQAs
  - Submission of control strategy information



### Social Event

On 20 November 2012, 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

#### **Karl Metzger**, *gmPlan GmbH, Germany*

Karl Metzger is Managing Partner of gmPlan GmbH. He was formerly Management responsible for the Welding's integrated Management System and deputy QP for APIs.

#### **Filipe Neves**, *Hovione, Portugal*

Filipe Neves is Group Leader (Inhalation department) in the R&D – Drug Product Development group at Hovione FarmaCiencia SA, Loures, Portugal.

#### **Tom Sam**, *MSD, The Netherlands*

Tom Sam is Head Global CMC Regulatory Affairs MSD, Oss, The Netherlands

#### **Dr Márcio Temtem**, *Hovione, Portugal*

Dr Márcio Temtem holds a position as Process Development Engineer in the Particle Design Discipline at Hovione where he is technically involved in the development of Spray drying processes, Solid dispersions and milling technologies.

#### **Francois Vandeweyer**, *Janssen Pharmaceutica, Belgium*

Francois Vandeweyer held several Senior Manager responsibilities (sGMP Auditor – Release – Quality Systems) within Janssen Pharmaceutica. Currently he is Director Global Compliance EMEA/AP for Johnson & Johnson.

#### **Elmar Wenzel**, *Freelance Consultant, Germany*

Mr Wenzel was formerly head of API production at the Plankstadt site of AstraZeneca, now Corden Pharma. He is now freelance consultant.

### GMP Certification Programme

This course is recognised within the GMP Certification Programme. By attending selected seminars, the participant can acquire an additional certificate. We offer the following modules:

- ECA Certified Validation Manager
- ECA Certified QA Manager
- ECA Certified API Production Manager
- ECA Certified Quality Control Manager
- ECA Certified Technical Operations Manager
- ECA Certified Computer Validation Manager
- ECA Certified Regulatory Affairs Manager
- ECA Certified Microbiological Laboratory Manager
- ECA Certified Sterile Production Manager
- ECA Certified Biotech Manager
- ECA Certified Pharmaceutical Development Manager

On the internet at [www.gmp-compliance.org](http://www.gmp-compliance.org) you will find a text explaining which seminars are recognised for which certificates. Or you send an e-mail to [info@gmp-compliance.org](mailto:info@gmp-compliance.org) or a fax to +49-6221- 84 44 64 with the request for information about the GMP Certification Programme. We will then send you our brochure on the topic.

## Easy Registration

 **Reservation Form:**  
**CONCEPT HEIDELBERG**  
P.O. Box 10 17 64  
69007 Heidelberg  
Germany

 **Reservation Form:**  
+ 49 6221 84 44 34

 **e-mail:**  
info@concept-heidelberg.de

 **Internet:**  
www.gmp-compliance.org



+ 49 6221 84 44 34

Reservation Form (Please complete in full)

**ICH Q11 Training Course,**  
20-21 November 2012, Budapest, Hungary

Mr.  Ms.

Title, first name, surname

Company

Department

**Important: Please indicate your company's VAT ID Number**

**Purchase Order No, if applicable**

Street/P.O. Box

City

Zip Code

Country

Phone/Fax

E-Mail (please fill in)

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

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CONCEPT HEIDELBERG  
P.O. Box 101764  
Fax +49 (0) 62 21/84 44 34  
  
D-69007 Heidelberg  
GERMANY

### 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 2 weeks prior to the conference 10 %
    - until 1 week prior to the conference 50 %
    - within 1 week 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 cancellation 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)

### Date

Tuesday, 20 November 2012, 09.30 h – 18.00 h  
(Registration and coffee 9.00 h – 09.30 h )  
Wednesday, 21 November 2012, 09.00 h – 15.15 h

### Venue

Hilton Budapest WestEnd  
Váci út 1-3  
1062 Budapest, Hungary  
Phone +36 1 288 5500  
Fax +36 1 288 5588

### Fees

ECA Members € 1,590.- per delegate plus VAT  
APIC Members € 1,690.- per delegate plus VAT (does not Include ECA Membership).  
Non-ECA Members € 1,790.- per delegate plus VAT  
EU GMP Inspectorates € 895.- per delegate plus VAT  
The fee is payable in advance after receipt of invoice and includes conference documentation, social event and dinner on the first day, lunch on both days and all refreshments. VAT is reclaimable.

### Accommodation

CONCEPT 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 (specially negotiated rate: single room € 125,- per night incl. breakfast). Reservation should be made directly with the hotel not later than 8 October 2012. Early reservation is recommended.

### Registration

Via the attached reservation form, by e-mail or by fax message. Or you register online at [www.gmp-compliance.org](http://www.gmp-compliance.org).

### Conference language

The official conference language will be English.

### Organisation and Contact

CONCEPT HEIDELBERG  
P.O. Box 10 17 64  
D-69007 Heidelberg, Germany  
Phone +49 (0) 62 21/84 44-0  
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#### For questions regarding content:

Dr Gerhard Becker (Operations Director) at  
+49 (0) 62 21 / 84 44 65, or per e-mail at  
[becker@concept-heidelberg.de](mailto:becker@concept-heidelberg.de).

#### For questions regarding reservation, hotel, organisation etc.:

Ms Susanne Ludwig (Organisation Manager) at  
+49 (0) 62 21 / 84 44 44,  
or per e-mail at [ludwig@concept-heidelberg.de](mailto:ludwig@concept-heidelberg.de).