

- Interactive Workshops
- Discussion of failures from the participants' own daily practice

Handling Failures in Sterile Manufacturing

Deviation Management – Failure Investigation – CAPA:
How to do it GMP-compliant?

5-6 October 2010, Heidelberg, Germany

Speakers:

Dr Manfred Berchtold

*Novartis Pharma Stein AG,
Switzerland*

Dr Klaus Haberer

*Compliance Advice and Services
in Microbiology, Germany*

Programme:

- Deviation Management as an Integral Part of Quality Management - Regulatory Requirements
- Definitions
- Failures in Sterile Manufacturing - Types of Failure - How are Failures Recognized?
- How to Deal with Failures / Deviations?
- Risk Management in Failure Investigation
- Case Studies
- Workshops

Handling Failures in Sterile Manufacturing

5-6 October 2010, Heidelberg, Germany

Learning Objectives

- You learn to systematically find deviations and failures in the manufacture of sterile medicinal products, to evaluate them and to handle them in a GMP-compliant way.
- Case studies are used to demonstrate the evaluation and handling of real-life deviations and failures found in daily routine.
- In workshops, you discuss and work out autonomous solution strategies for failures occurred in sterile manufacture.
- You can discuss failures and deviations from your own daily practice with speakers and colleagues.

Background

In sterile manufacture and in the microbiological laboratory, a large number of failures and deviations can occur. The GMP requirements expect that failures and deviations are recognised and dealt with in a systematic way. In this process, the impact on the product has to be assessed, and measures have to be taken to remedy these deficiencies and to avoid them in the future.

In daily routine, it is often difficult to identify the failure causes unambiguously and to take systematic avoidance measures.

This course will familiarise you with the regulatory requirements and introduce you to the essentials of failure handling. The emphasis is on the independent handling of failures and deviations in your everyday work. In case studies, successful strategies from practice are presented to you, in workshops you independently work out solution approaches to failures and deviations typically occurring in a sterile manufacturing site under different scenarios.

Target Group

The event is directed at all those working in the field of sterile manufacturing, e.g. people from

- Production
- QA
- QC
- Qualification / Validation

who have to manage failures and deviations.

Programme

Welcome / Introduction

- What delegates expect from the course

Deviation Management as an integral Part of Quality Management - Regulatory Requirements

- EU GMP Annex I
- FDA Aseptic Guide
- FDA Guidance for Industry 'Quality Systems Approach to Pharmaceutical cGMP Regulations'
- ISO 9000 series
- ICH Q10

Definitions

- Deviation
- OOS, OOE, OOL, OOT
- Alert/Action Level; Target Value
- MDD (Microbial Data Deviation)
- Failure Investigation
- CAPA

Failures in sterile manufacturing: Types of failures / How are failures recognized?

- Contamination routes
 - Product stream
 - Penetration of barriers
 - Environmental protection failure
 - Handling errors
 - Failures in removal of microorganisms
- Failure recognition
 - Monitoring excursions
 - Failure of IPC or release tests
 - Adverse events on the market
 - Media fills
 - Audits /inspections

How to deal with failures / deviations?

- Principles
- Detection
- Evaluation / Risk analysis
- Investigations
- Corrective actions
- Preventive actions



Picture: Heipha Dr. Müller GmbH

Real Life Case Studies

In different case studies, the speakers present actual cases of deviations/failures from daily practice to you. They explain the approaches to each of these examples and show you the measures that have been taken.

- Description of the Case
- Detection of the failure
- Preliminary risk analysis
- Discussion of the content of investigations
- Results of the investigations
- Risk analysis
- Discussion of corrective measures
- Discussion of preventive measures
- Outcome of the real case

Cases presented, e.g.:

- Repeated isolation of spore formers in the grade A environment
- 164 Positive units in a media fill
- Cases of positive sterility tests
- Unusual microorganisms in environmental monitoring
- Contamination in an isolator

Apart from this, you have the opportunity to discuss failures and deviations found in your own company with the speakers and your fellow participants. Please send a brief description of the failure/deviation to mangel@concept-heidelberg.de.

Risk Management in Failure Investigation

- Interpretation of the results
- Risk recognition
- Available Tools
- Suitable and non-suitable tools
- Application of tools

Workshops

The participants independently work on different cases from practice and discuss the chosen solution with the colleagues and speakers. Participants can also contribute their own examples to the workshops and talk about them with their colleagues.

Workshops among other things on:

- Failures in a Media Fill
- Failures in environmental monitoring
- Failures in sterility tests

Speakers

Dr Manfred Berchtold

Novartis Pharma Stein AG, Stein, Schweiz



Manfred Berchtold studied biology and did a doctorate in microbiology at the University of Ulm, Germany. After that, he was a lecturer and researcher at the Institute of Microbiology and Vinology of the University of Mainz. Since 2001, he has been working in QA/Microbiology (sterile forms) at Novartis Pharma in Stein, Switzerland.

Currently, he is a team leader and among other things responsible for media fills, environmental monitoring, product releases, deviation handling and rapid microbiology.

Dr Klaus Haberer

Compliance Advice and Services in Microbiology GmbH, Cologne, Germany



Klaus Haberer studied Biology and Biochemistry at the Universities of Tübingen and Cologne. From 1983 to 1986, Head of Microbiological Quality Control at Hoffmann-La Roche AG, Grenzach, Germany. From 1986 to 1999 Head of Microbiological Quality Control and later Director Microbiology Global Quality Operations at Hoechst Marion Roussel AG in Frankfurt, Germany. Beginning from 1999: Managing Director of Compliance Advice and Services in Microbiology GmbH at Cologne, Germany, his own consulting company with microbiological laboratory service. Dr. Haberer is working as an expert in a number of international committees, e.g. of European Pharmacopoeia, ISO, and PDA.

Social Event

On 5 October 2010, 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)

- ☐ **Handling Failures in Sterile Manufacturing**, 5-6 October 2010, Heidelberg, Germany
- ☐ **Process Simulation/Media Fills**, 7-8 October 2010, Heidelberg, Germany
(Please tick)

☐ Mr.

☐ Ms.

Title, first name, surname

Company

Department

Please indicate your company's VAT ID Number

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Street/P.O. Box

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General terms and conditions

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Easy Registration



Reservation Form:
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69007 Heidelberg
Germany



Reservation Form:
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e-mail:
info@concept-heidelberg.de



Internet:
www.gmp-compliance.org

Date

Tuesday, 5 October 2010, 10.00 h – 18.00 h
(Registration and coffee 09.30 h – 10.00 h)
Wednesday, 6 October 2010, 08.30 h – 16.00 h

Venue

NH Hotel Heidelberg
Bergheimer Str. 91
69115 Heidelberg, Germany
Phone +49(0)6221/1327-0
Fax +49(0)6221/1327-100

Fees

Non-ECA Members: € 1,690,- per delegate + VAT.
ECA Members: € 1,521,- per delegate + VAT.
EU GMP Inspectorates: € 845,- per delegate + VAT.
APIC Members € 1,605,- per delegate plus VAT (does not include ECA membership).
Including: Conference documentation, lunch and dinner on the first day, lunch on the second day, all refreshments, Social event

Save up to € 400,-

If you take part both in the course “Handling Failures in Sterile Manufacturing” AND “Process Simulation/Media Fill” (6-7 October 2010, Heidelberg) the fees reduce as follows:

Non-ECA Members € 2,980.- per delegate plus VAT
ECA Members € 2,682.- per delegate plus VAT
EU GMP Inspectorates € 1,490.- per delegate plus VAT
APIC Members € 2,831.- per delegate plus VAT
(does not include ECA membership)

Accommodation

CONCEPT HEIDELBERG has reserved a limited number of rooms in the conference hotel. You will receive a room reservation form when you have registered for the event. Please use this form for your room reservation or be sure to mention “VA 6417 ECA Event” to receive the specially negotiated rate for the duration of your stay. Reservation should be made directly with the hotel not later than 7 September 2010. 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**.

Conference Language

The official conference language will be English.

Organisation

CONCEPT HEIDELBERG
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For questions regarding content:

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

For questions regarding reservation, hotel, organisation etc.:

Marion Weidemaier (Organisation Manager) at
+49-62 21/84 44 46, or per e-mail at
weidemaier@concept-heidelberg.de.

Workshops on

- Managing Interventions
- Handling a Media Fill Failure

Process Simulation / Media Fill

GMP Requirements on the Validation of
Aseptic Processes

7-8 October 2010, Heidelberg, Germany

SPEAKERS:

Colin Booth

Oxoid Ltd, UK

Natasha Pain

Lonza Biologics plc, UK

Alexandra Stärk

Novartis Pharma AG, Switzerland

PROGRAMME:

- The Essential Background
- How to Design a Media Fill
- Particular Technical Issues with Lyophilisation
- The Involvement of the Microbiology Lab
- Handling the Outputs
- Media Fills and Personnel
- Environmental Monitoring
- Identification of Contaminating Microorganisms
- Regulatory Problems

Process Simulation/Media Fill

7-8 October 2010, Heidelberg, Germany

Objectives

During this event, you will learn in lectures and workshops how to

- plan a media fill in compliance with European and US GMP requirements,
- interpret the results of a media fill and
- investigate deviations and define follow-up measures.

Background

In the aseptic processing of medicinal products, the product quality usually cannot be ensured by means of lab controls of the final product. Process validation by means of media fills is the only way to furnish proof of product safety, which is why it justly is the focus of regulatory requirements and official inspections.

A number of revised and harmonised international regulations, especially the FDA Guidance for Industry „Sterile Drug Products Produced by Aseptic Processing“, the EC-GMP-Guide Annex 1, ISO 13408 and the PIC/S Guide „Recommendation on the Validation of Aseptic Processes“, define highly detailed requirements, the implementation of which is critically examined within the framework of official inspections.

In general, the required media fills should be able to simulate both routine operation and worst-case conditions.

In practice, the question of practicability often arises. How should the requirements be interpreted and how can they be implemented even for special production processes or dosage forms?

Target Group

This Education course is directed at staff from

- Production
- Quality Assurance
- Microbiological Quality Control

who are responsible for the planning and evaluation of Process Simulation (Media fill) programmes.

It is also valuable for decision makers who have to deal with Process Simulation data within the framework of production release and aseptic process validation.

Social Event in Heidelberg



On 7 October 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.

Programme

Media Fills – The Essential Background

- Regulations affecting aseptic manufacture (Annex 1 and FDA Aseptic Guide)
- PIC/S Guide ‘Recommendations on the Validation of Aseptic Processes’
- What media fills consist of (in principle)
- Media Fills for validation
- Routine Media Fills
- Documentation requirements

Media Fills – How to Design a Media Fill

- What medium?
- How many units?
- How long?
- Interventions?
- Personnel?

Workshop

Managing Interventions

- Different kinds of interventions
- Selection of interventions for media fills
- Selection of interventions for personal qualification
- Tracking of interventions between media fills
- Assessment of interventions

This workshop involves participants in the issues to be resolved in the identification and management of interventions during media fills in order to answer the demand from the regulatory inspector – “what’s the name of the person making that intervention, please show me the evidence from media fills that she has been qualified to perform it”.

Media Fill – Particular Technical Issues with Lyophilisation

- Different kinds of simulating lyophilisation processes
- Standing times

Media Fills – The Involvement of the Microbiology Lab

- Why we use TSB
 - Limitations
 - BSE/TSE-free ?
- Problems with TSB
 - Contamination of the dehydrated medium (Bacillus)
 - Issue with Mycoplasma
 - Irradiated dehydrate (effects of irradiation on growth)
- Growth Support Checks
 - Pharmacopoeial organisms
 - Local isolates
 - Preparation of Cultures
- Incubation temperatures
- Inverting units during incubation
- Aerobic vs. anaerobic media fills
- Incubation and inspection
-

Discussion of particular issues

- Holding times
- Container / Closure integrity after Media Fills
- Holding Tanks
- Sterile APIs
- Powder Fill
- Blow-Fill-Seal

Media Fills and Personnel

- Training and qualifying personnel for aseptic manufacture through media fill
- Maintaining qualification
- Regulatory requirements

Media Fills and Environmental Monitoring

- Environmental monitoring activities during Media Fills
- Handling deviations

Media Fills and Environmental Monitoring

- Environmental monitoring activities during Media Fills
- Handling deviations

Workshop

Handling a Media Fill Failure

- Types of failures
- Evaluation of failures
- Documentation requirements

The current regulations on media fills include strict acceptance criteria. But how do out-of-specification results and failures during media fills have to be handled? Which consequences does a media fill failure have? In this workshop, the participants learn how failures have to be evaluated and which consequences they have.

Media Fill - Identification of Contaminating Microorganisms

- What the regulators expect
- Likely contaminants, unlikely contaminants !!
- Isolating contaminating micro-organisms
- Identification methods, including genetic
- Mycoplasma contamination
- What the identification tells you about the process.

Regulatory Problems with Media Fills

- What the regulators expect
- Examples from Warning Letters
- Examples from 483s

Speakers

Colin Booth

Oxoid Ltd., Basingstoke, UK

Colin Booth was the manager of Pharmaceutical Microbiology for Glaxo Wellcome Research and Development based in the UK where he was responsible for all the microbiology associated with the development of all Glaxo Wellcome new products. In 2002 he joined Oxoid Limited where he is now Vice President Science and Technology.

Natasha Pain

Lonza Biologics plc, Slough, UK

Natasha Pain is currently the QC Biochemistry Manager at Lonza Biologics. Prior to working at Lonza Natasha was the QC Microbiology Group Head for the Biopharmaceutical Centre of Excellence in Drug Discovery, UK, where her role involved environmental monitoring, product testing expertise and the evaluation of rapid microbiological test methods.

Alexandra Stärk

Novartis Pharma AG, Basle, Switzerland

After studying Hygiene Technology at the Technical University of Albstadt-Sigmaringen, Alexandra Stärk has worked since 1995 at Novartis Pharma AG in Basel/Stein. She is currently responsible for the microbiological QA and QC. She plays a key role in rapid microbiology and in microbiology for sterile production.

GMP Certification Programme

This seminar is recognised within the GMP Certification Programme for the module "Sterile production manager". By attending selected seminars, the participant can acquire an additional certificate. We offer the following certification modules:

- API (Production) Manager
- Biotech Manager
- Computer Validation Manager
- Microbiological Laboratory Manager
- Pharmaceutical Development Manager
- Pharmaceutical Engineering/Production Manager
- Quality Assurance Manager
- Quality Control Manager
- Regulatory Affairs Manager
- Sterile Production Manager
- Validation Manager

On the internet at 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 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.

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For questions regarding content:
Dr Andreas Mangel (Operations Director) at
+49-62 21 / 84 44 41, or per e-mail at
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For questions regarding reservation, hotel, organisation etc.:
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at +49-62 21 / 84 44 46, or per e-mail at
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