

Lab Data Integrity

Meeting FDA & EU Concerns

Part 1: Establishing the Controls for Ensuring Laboratory Data Integrity, 13 - 14 April 2015, Barcelona, Spain

Part 2: Self Inspections and Audits to Confirm Effective Data Integrity Controls, 14 - 15 April 2015, Barcelona, Spain

SPEAKERS:

Dr Christopher Burgess Burgess Analytical Consultancy, UK

Dr Bob McDowall

McDowall Consulting, UK

PROGRAMME:

- Laboratory Data & Results
 - EU and US GMP Requirements
 - FDA Guidance Documents
 - Inspection Findings: 483 and Warning Letters
- Dealing with Mistakes before they become Falsification or Fraud
- Principles of Data Generation
 - Integrity Issues
 - Security Issues
- Requirements for Raw Data Integrity for
 - Paper Records
 - Hybrid Systems
 - Electronic Systems incl. ELNs
- Audit of Analytical Records
- Data Transformation: How to Identify and Handle Transcription Errors
- Collation and Reporting of Results
- Archiving



Lab Data Integrity (Part 1 & Part 2)

13-15 April 2015, Barcelona, Spain

Objectives

These two new courses have the following objectives:

Course 1:

The learning objectives are firstly, understand the data integrity requirements of a GMP regulated laboratory in Pharmaceutical organisations and contract labs and secondly, how laboratory personnel can ensure compliance and be able to defend their positions. Records generated by three processes will be taken through the presentations and workshops: paper only with records maintained in a laboratory notebook or controlled sheets, hybrid system with signed paper records with underlying electronic records and an electronic system using electronic signatures.

Course 2:

The auditing course will develop the understanding of what is required for a data integrity audit of a laboratory computerized system and then develop the principles, based on workshops and discussions, of how to audit hybrid and electronic laboratory systems The scope of auditing a system for data integrity will be developed during the course along with a risk based prioritisation of the key areas to focus audit attention on. The attendees will audit one computerized system and then feedback the audit findings to the laboratory manager and business process owner.

Note that this course will focus only on hybrid and electronic systems and will not consider paper-based data integrity.

Background

Data Integrity is currently a major concern with both the FDA and European Regulatory Agencies. Several FDA warning letters and EU GMP inspections have highlighted major data integrity failures at companies globally. The regulatory concern has been responded by the FDA issuing Compliance Program Guide (CPG) 7346.832 that covers Pre-Approval Inspections. This document became effective in May 2012 after Agency inspectors received training in data integrity where they focus on computer systems and not the paper output. The CPG objective 3 covers the laboratory data integrity audit. Furthermore in August 2014, the FDA issued Level 2 guidance on their web site about the sharing of login credentials for computerized systems and the use of test injections for testing into compliance.

In Europe, the UK's MHRA in December 2013 gave notice to regulated users to begin conducting data integrity audits of their own systems and those of their suppliers from the beginning of 2014. Similar to the FDA, European Inspectors have also undergone training in data integrity. The UK has also gone further by writing to the major suppliers of chromatography data system software re-

questing copies of the application and documentation to that the MHRA can understand how they operate and how falsification could occur.

As the regulators are tightening their inspection approaches it is important that managers, supervisors and users in regulated GMP laboratories understand the issues around data integrity.

Course 1 focuses on three types of record that can be found in analytical laboratories working to GMP: paper, hybrid computerized system and electronic workflows with electronic signatures. Through presentations, workshops and discussions attendees are taken through the process from analysis to generation of results to understand data integrity issues.

Course 2 takes the principles from the earlier course and develops them to enable attendees to be able to conduct effective internal audits or self-inspections of either hybrid or electronic systems in compliance with EU GMP Chapter 9. This is achieved mainly via a series of interlinked workshops with a few presentations. This course will focus only on hybrid and electronic systems.

Target Audience

These courses will be of significant value to:

- Managers and scientists from Quality Control and Analytical Development Laboratories wanting to understand the data integrity and audit process
- Quality Assurance personnel
- Contract Research Organisation and Contract Manufacturing Organisation laboratory and QA personnel
- Auditors (internal and external) responsible for assessing laboratory quality and data integrity

Social Event

On Monday, 13 April 2015 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 Course 1: Establishing the Controls for Ensuring Laboratory Data Integrity

13 - 14 April 2015, Barcelona, Spain

EU and FDA GMP Regulations Impacting Laboratory Data and Results

- EU GMP requirements
- FDA GMP requirements
- FDA Guidance documents OOS, Inspection of QC labs
- Inspection findings 483 and warning letters
- Defining data integrity, "complete data" and "raw data"

Principles for the Generation of Data

- Observational tests and instrument tests
- Training of staff
- Qualified analytical instruments and validated software
- Integrity issues
- Security issues

WORKSHOP I: Generation of Data

- What are the requirements for raw data integrity?
- Three scenarios covering
 - a paper system
 - a hybrid system
 - a client server electronic system

Recording of Data

- Paper based systems
- Hybrid systems with paper printouts and electronic records
- Stand alone systems containing only electronic records
- Networked systems containing only electronic records

WORKSHOP II:

Recording of Data

- Audit of an analytical record
- Scenarios covering paper based record, a hybrid system and an electronic system

Transforming Data

- Converting laboratory data to information
- Identifying and handling errors on paper as well as electronic systems
- Calculations performed manually and by computer programs
- Issues with truncation and rounding of numbers
- Integrity and security issues of the records generated during transformation

WORKSHOP III:

Data Transformation

- Using Excel correctly
- Data from printout transcription, rounding, truncation

Collation and Reporting Results

- Calculating the reportable value and comparison with the specification
- Paper processes versus electronic processes
- Linkage with out of specification investigations (OOS)

Key Learning Points and Final Discussion

End of Course 1 / Registration for Course 2

Programme Course 2: Self Inspections and Audits to Confirm Effective Data Integrity Controls

14 - 15 April 2015, Barcelona, Spain

Introduction to Course 2 & Key Learning Points from Course 1

- Data integrity concerns of regulators:
- FDA warning letter and EU non-compliance concerns about data integrity
- FDA Compliance Program Guide 7346.832 for PAI
- MHRA requirement for self inspections to focus on data integrity
- Role of management in ensuring data integrity
- Key learning points from Course 1

WORKSHOP I:

Identifying the Laboratory Controls to Audit for Electronic and Hybrid Systems

- Group work with facilitated discussion to take the data integrity cycle and establish the controls required at each stage
- This establishes what could be covered in a data integrity audit

WORKSHOP II:

Risk Assessment and Prioritisation

The data integrity cycle with the audit objectives developed in Workshop I will be applied to one of three systems (hybrid and electronic systems) to obtain a risk based approach to auditing

WORKSHOP III:

FDA Key Laboratory Data Integrity Concerns

- Using some real FDA warning letters the teams will cross check that the output of Workshop II is congruent with the FDA concerns around laboratory
- Attendee validation of an updated audit list

Pulling it All Together

- Based on many years of the teaching team's laboratory experience, presentation of their top 10 non-compliances based on FDA and EU regulations and audit experience will be given
- There will be an opportunity to discuss and compare the output from Workshop III against this knowledge base and experience

WORKSHOP IV:

Preparing for the Data Integrity Audit

- Based on the selected scenario the attendees will determine the preparation needed for a laboratory audit
- Feedback and discussion with the teaching team

WORKSHOP V:

Observations and Findings During a Laboratory Audit and Planning the Closing Meeting

- Each teams will be provided with an audit of a laboratory with observations
- Teams will determine if there are any data integrity non-compliances with the regulations and laboratory procedures
- Teams will determine if any observations are findings (non-compliances) and grade the severity of each one
- Prepare for the closing meeting with the Head of the Laboratory and the business process owner of the systems

WORKSHOP VI:

Feedback to the Auditees

- Teams will present the audit conclusions and the findings to the Head of the Laboratory and the business process owner of the systems
- Discussion with the auditees of the findings

Review of the Course and Key Learning Points

Speakers



Dr Christopher Burgess

Burgess Analytical Consultancy, Barnard Castle, UK

He is a Chartered Chemist and has more than 38 years experience in the pharmaceutical industry initially with Glaxo in Quality Assurance and Analytical R&D and then 20 years in interna-

tional consultancy. He is a "Qualified Person" in the European Union and a member of the European QP Association advisory board. He has been appointed to the United States Pharmacopoeia's Council of Experts 2010 to 2015 and is a visiting professor of the University of Strathclyde's School of Pharmacy and Biomedical Sciences (SIPBS). In addition, he is the chairman of the ECA Analytical Quality Control Group and a member of the Executive committee of European Compliance Academy. He is also a member of the USP Expert Panel on Validation and Verification entrusted to revise General Chapters <1224>, <1225> and <1226>.



Dr Bob McDowall

McDowall Consulting, Bromley, Kent, UK Analytical chemist with over 40 years experience including 15 years working in the pharmaceutical industry; Principal of McDowall Consulting, UK for over 20 years. He has been involved with the validation of computerised sys-

tems for over 25 years and is the author of a book on the validation of chromatography data systems. Bob is the writer of the Questions of Quality (LC-GC Europe) and Focus on Quality (Spectroscopy) columns and is a member of the Editorial Advisory Boards of several Journals.

Practical Statistical Tools for Analytical Laboratories

On 16-17 April 2015, i.e. on Thursday to Friday of the same week, there will be another ECA GMP Education Course in Barcelona about "Practical Statistical Tools for Analytical Laboratories".

This course will cover the following topics:

- (Normal) Distribution of Data and its Parameters
- Calculation and Evaluation of Precision Levels
- Trending of Data
- Design of Experiments (DoE) / Principles and the Investigation of Robustness
- Comparison of Data & Accuracy
- Calibration Models, Linear and non-Linear
- Performance Requirements for Impurity Procedures and Quantitation Limits

Speakers:

Dr Christopher Burgess, Burgess Analytical Consultancy, UK Dr Joachim Ermer, Sanofi, Germany

The courses "Lab Data Integrity", 13-15 April 2015, will be an ideal precursor to the Course "Practical Statistical Tools for Analytical Laboratories", 16-17 April 2015. Further information about this course can be received at www.gmp-compliance.org.

Participants who register simultaneously for both courses or all three courses will receive a 350€ discount (not valid for EU GMP Inspectorates).

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 to receive the specially negotiated rate for the duration of your stay. Reservation should be made directly with the hotel. 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 and Contact

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

CONCEPT HEIDELBERG P.O. Box 10 17 64 D-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:

Dr Günter Brendelberger (Operations Director) at +49-62 21 / 84 44 40, or per e-mail at brendelberger@concept-heidelberg.de.

For questions regarding reservation, hotel, organisation etc.:

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

What are The ECA Foundation and the ECA Academy?

The European Compliance Academy Foundation (ECA Foundation) is an independent professional organisation chaired by a Scientific Advisory Board with members from the pharmaceutical industry and regulatory authorities. The ECA Foundation's goal is to support to the Pharmaceutical Industry and Regulators to promote the move towards a harmonised set of GMP and regulatory guidelines by providing information and interpretation of new or updated guidances. The ECA Academy offers professional basic and advanced education (training) programmes. All services offered by the ECA Academy and with regard to ECA Academy Memberships are solely managed by Concept Heidelberg (a leading European training and information services provider). The ECA Foundation is conceptual sponsor of the ECA Academy.

How Do You Become a Member of ECA?

By participating in one of the ECA Academy Conferences or Courses you will automatically become a ECA Academy Individual Member for two years - free of charge. More information about ECA Academy can be obtained on the Website http://www.gmp-compliance.org

What Are the Benefits of ECA?



During the membership, you enjoy a € 200,- discount on the regular participation fee of any European Conference or Course presented by the ECA Academy. In addition you will receive the GMP Guideline Manager Software with a large number of guidelines, e.g. EC Directives, FDA Guidelines, ICH Guidelines.

Lufthansa is Mobility Partner for all ECA Events



As an ECA course or conference attendee, you will receive **up to 20% discounted travel fares** (according to availability). And as

Lufthansa German Airlines offers a comprehensive global route network linking major cities around the world you will most likely be able to benefit from these special prices and conditions.

And this is how it works: Once you registered for a course or conference you will receive a link together with your registration confirmation. Opening that link will take you to the Mobility Partner Program website where you can enter a code in the "Access to Event Booking" area you will also receive. This will take you into an online booking platform* that will automatically calculate the discount offered or provide you with an even better offer if another promotional fare is available.

We look forward to welcoming at one of our next events – and we already wish you a pleasant flight!

*Please note: You may have to enable pop-ups on the Mobility Partner Program website – other-wise the booking platform window will not open.

GMP Certification Programme

This seminar is recognised within the GMP Certification Programme. By attending selected seminars, the participant can acquire an additional certificate. We offer the following certification 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
- ECA Certified GMP Auditor
- ECA Certified GDP Compliance 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.

Reservation Form (Please complete in full)

If the bill-to-address deviates from the specifications on

, please fill out here:	 □ Lab Data Integrity (Part 1 AND Part 2) □ 13 - 15 April 2015, Barcelona, Spain □ Lab Data Integrity (Part 1 only), 13 - 14 April 2015, Barcelona, Spain □ Lab Data Integrity (Part 2 only), 14 - 15 April 2015, Barcelona, Spain □ Practical Statistical Tools for Analytical Laboratories, 16 - 17 April 2015, Barcelona, Spain 	arcelona, Spain arcelona, Spain s, 16 - 17 April 2015, Barcelona, Spain
	— □ Mr. □ Ms.	
	——————————————————————————————————————	
	— Company	Department
	Important: Please indicate your company's VAT ID Number	PO Number if applicable
CONCEPT HEIDELBERG P.O. Box 101764	Street/P.O. Box	
Fax +49 (0) 62 21/84 44 34	Ürv	Zin Code
D-69007 Heidelberg		
GERMANY	Phone/Fax	

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 nor 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)

CONCEPT HEIDELBERG reserves the right to change the materials, in 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 not be responsible for discount airfare penalties or other costs incurred due to a cancellation.

Tems of payment: Payable without deduce.

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 weeks prior to the conference 50 % -within 1 week prior to the conference 100 9

E-Mail (please fill

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 they?/www.gmp-compliance.org/eca_privacy.thml). 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.

Date Course 1: Establishing the Controls for **Ensuring Laboratory Data Integrity**

Monday, 13 April 2015, 09.00 h - 18.00 h (Registration and coffee 08.30 h - 09.00 h) Tuesday, 14 April 2015, 08.30 h - 12.30 h

Date Course 2: Self Inspections and Audits to **Confirm Effective Data Integrity Controls**

Tuesday, 14 April 2015, 13.30 h - 18.00 h (Registration and coffee 13.00 h - 13.30 h) Wednesday, 15 April 2015, 08.30 h - 16.00 h

Venue

Barceló Sants Placa dels Paisos Catalans, s/n Estació de Sants 08014 Barcelona, Spain +34 93 503 53 00 Phone Fax +34 93 490 60 45

Fees (per delegate plus VAT)

Course 1: Establishing the Controls for Laboratory Data Integrity

ECA Members € 1,290 APIC Members € 1,390 Non-ECA Members € 1,490 EU GMP Inspectorates € 745

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

Course 2: Self Inspections and Audits to **Confirm Effective Data Integrity Controls**

ECA Members € 1,290 APIC Members € 1,390 Non-ECA Members € 1,490 EU GMP Inspectorates € 745 The conference fee is payable in advance after receipt of invoice and includes conference documentation, lunch on the second day and all refreshments. VAT is reclaimable.

If you book both courses simultaneously, the fee for each course reduces as follows:

ECA Members € 1,090 APIC Members € 1,190 Non-ECA Members € 1,290 EU GMP Inspectorates € 645

If you register for the ECA Education Course "Practical Statistical Tools for Analytical Laboratories (16 to 17 April 2015) at the same time, you will receive a 350 € discount. This is not valid for EU GMP Inspectorates.