



Applying GLP regulations in today's working environment

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Globalisation and its consequences

Test facilities operate on global level

- Harmonisation of processes throughout the entire company
- Avoid double functions
- Global and local documents (e.g. SOPs)

→ **OECD Principles provide a framework for implementation of a national compliance program**

→ **Are a little dated, but still applicable**

→ **Allow different interpretations/variations of GLP due to national legal requirements**



Different interpretations – example I

Study plan approval

- OECD allows individual countries to determine whether Sponsor or Facility Management need to sign
 - » *The study plan should also be approved by the test facility management and the sponsor, if required by national regulation or legislation in the country where the study is being performed.*
- FDA
 - » *The date of approval of the protocol by the sponsor and the dated signature of the study director.*
- Switzerland
 - » *8.1 The study plan should be approved by dated signature of the study director and verified for GLP compliance by QA personnel... The study plan should also be approved by test facility management.*



Different interpretations – example II

Archiving

- OECD Advisory Document Nr. 15 Establishment and Control of Archives that Operate in Compliance with the Principles of GLP
 - » Retention periods should be, and in some countries are, defined by regulatory (receiving) authorities.
- FDA
 - » 5 years after results are submitted for research or marketing permit
 - » 2 years after termination if not submitted
- Switzerland
 - » The following should be retained in the archives for at least ten years after study completion ...



Different interpretations – example III

Computer validation

- OECD
 - » Consensus Document Nr. 10: The application of the principles of GLP to computerized systems
 - » Computerized systems should be developed, validated and operated in a way which is in compliance with the GLP Principles.
- FDA
 - » Guidance for Industry: 21 CFR Part 11; Electronic Records; Electronic Signatures Validation
- Switzerland
 - » Guidance: AGIT Publications



And now?

So ...

- **There are differences within GLP interpretations due to national legislation**
- **Continuous challenge in a fast developing environment**
 - Prerequisites change
 - Discussions needed for equal treatment

But ...

- **Test facilities provide individual solutions**
- **Receiving agency speaking: Data generated under a GLP program is of sufficient quality and integrity for the intended use**



GLP – GCP: An Interface or What about human plasma samples?



Questions arise in 2001

- Q** *Es handelt sich um folgende CPMP Dokument: "note for guidance on the investigation of bioavailability and bioequivalence", from 26. Juli 2001; Paragraph 3.4 "chemical analysis" now states: "the bioanalytical part of bioequivalence trials should be conducted according to the applicable principles of GLP" Wie interpretiert man diese Satz? [..]*
- A** Die bei der CPMP verlangte Durchführung der analytischen Untersuchungen zu Bioäquivalenzprüfungen unter GLP Grundsätzen wurde offensichtlich ohne Beizug von GLP Fachleuten formuliert. Es handelt sich hier ja um Analysen von humanem Material und deshalb nicht um nicht-klinische Prüfungen, womit eine Unterstellung unter die GLP Grundsätze prinzipiell durch diese nicht abgedeckt ist. Andererseits muss festgehalten werden, dass Untersuchungen zur Bioäquivalenz dazu dienen, die Anwendbarkeit von Sicherheitsprüfungen, welche mit einem Originalpräparat gemacht wurden, auf ein zweites Präparat mit derselben Aktivsubstanz zu übertragen. [...] Die IKS hat in diesem Sinne ja auch bereits klinisch-chemisch / analytische Prüfeinrichtungen auf ihre GLP Konformität hin inspiziert, in der Meinung, dass analytische Untersuchungen zur Pharmakokinetik beim Menschen dazu beitragen, die Extrapolation der Sicherheitsdaten von den präklinischen Modellen auf den Menschen zu gewährleisten. Eine Unterstellung derartiger analytischer Untersuchungen (zu Pharmakokinetik oder zu Bioäquivalenz) unter die Grundsätze der GLP ist aus diesem Blickwinkel heraus als sinnvoll zu bezeichnen.



And again I ...in 2003

Q *Wie ist die Haltung der Behörden zur BARQA Guideline “Good Clinical Laboratory Practice” (GCLP), die im März 2003 veröffentlicht wurde?*

Sollen nun alle analytischen Labors, die Proben von klinischen Studien auswerten, nach dieser Guideline arbeiten, auch wenn sie keine Proben von Bioäquivalenz-Studien bearbeiten?

A Offiziell wurde das Dokument: BARQA Guideline “Good Clinical Laboratory Practice” (GCLP) nicht zur Kenntnis genommen. Der laboranalytische Teil von klinischen Prüfungen unterliegt nicht der GLP. Dies ist im Gesetz noch nicht geregelt. Die GLP-Behörde darf solche Prüfungen nicht inspizieren.
Empfehlung: 2 - 3 Studien/Jahr im Bereich der toxikologischen Prüfungen durchführen. Bei einer Inspektion durch die Behörde wären zu wenige toxikologische Studien zu inspizieren und aus diesem Grund würden auch klinische Prüfungen inspiziert.



And again II ...in 2006

- Q** *The introduction of the Clinical Trials Directive means that the bioanalysis of clinical samples is expected to be conducted to standards equivalent to GLP. Are you able to recommend a suitable compliance statement for such studies that are run in a GLP compliant facility?*
- A** Diese Aussagen sind grundsätzlich im Widerspruch zur GLPV und zu den OECD Principles on GLP, in welchen der Geltungsbereich eindeutig auf nicht-klinische Studien beschränkt wird. Die oben erwähnten Leitlinien werden von den jeweiligen Behörden im Moment nicht konsequent umgesetzt. Es gibt jedoch auch in der Schweiz Prüfeinrichtungen, welche neben präklinischen auch klinische Proben unter GLP-Bedingungen analysieren. Die Schweizer GLP-Überwachungsbehörden sehen im Moment keine Notwendigkeit, bei einer solchen Studie ein spezielles „GLP Compliance Statement“ zu formulieren, solange die Studie auch wirklich zu 100% unter GLP-Bedingungen durchgeführt wurde.



And again III ...in 2008

Q *Bioanalytik in GLP Labors mit Humanplasma aus GCP Prüfungen:*

- a) *Was muss regulatorisch beachtet werden?*
- b) *Wird das GLP Labor von einer GCP Behörde inspiziert?*

A a) Bioanalytische Untersuchungen mit Humanplasma in einem GLP-Umfeld sind in Prüfeinrichtungen anzusiedeln, welche auch Tierplasmaanalysen im Rahmen von sicherheitsrelevanten tierexperimentellen Studien durchführt. Regulatorisch/organisatorisch gilt es von der Prüfeinrichtung primär zu entscheiden, ob die Untersuchungen/Abläufe mit Humanplasma ebenfalls unter GLP erfolgen. Falls, ja gelten die selben Richtlinien und Abläufe wie für die Analysen mit Tierplasma.

b) Nein, wird in der Praxis von Swissmedic (Bereich Bewilligungen) nicht durchgeführt.



Over and over again IV ...in 2009

- Q** *GLP/GCP: Bereits im Jahr 2003 wurde in der Behördendiskussionsrunde das Thema Good Clinical Laboratory Practices besprochen (...). In der Zwischenzeit sind die folgenden beiden Dokumente zum gleichen Thema herausgegeben worden: World Health Organization (...) MHRA (...). Richtlinien zu den Schnittstellen zwischen GLP und GCP sind für die pharmazeutische Industrie von grosser Wichtigkeit. Welche Bedeutung hat vor allem das WHO Dokument für Swissmedic?*
- A** Swissmedic participated on the EMEA „ad hoc GLP inspectors working group for requesting and reporting GLP inspections for centrally authorised products“, which was held in London on 28 April 2009, and which was discussing interfaces between GLP and GCP. Generally, WHO documents are accepted by Swissmedic, and hence the indicated document is under discussion within between the GCP and GLP departments within Swissmedic. However, the present document will particularly require discussions on the OECD GLP-WG level so that a harmonized approach can be taken. ...



Over and over again V ...

See Q and A 1 November 2011



Definitions

Good Laboratory Practice (GLP) is a quality system concerned with the organisational process and the conditions under which **non-clinical** health and environmental safety studies are planned, performed, monitored, recorded, archived and reported. (OECD GLP Guideline).

Good Clinical Practice (GCP) is an international ethical and scientific quality standard for designing, conducting, recording and reporting trials that involve the **participation of human subjects**. Compliance with this standard provides public assurance that the **rights, safety and well-being of trial subjects** are protected, consistent with the principles that have their origin in the Declaration of Helsinki. (ICH GCP Guideline E6)



Regulations I

FDA Guidance for Industry – Population Pharmacokinetics (1999):

- ... A population PK study should be conducted according to current GCP and GLP standards. (p. 11)
- The sampling strategy and the recording of samples should be part of good clinical practice and the handling of samples be part of good laboratory practice.

CPMP Note for Guidance on Investigation of Bioavailability and Bioequivalence (2001):

- ... The bioanalytical part of bioequivalence trials should be conducted according to the applicable principles of GLP.
- This guideline was replaced by ...



Regulations II

EMA GUIDELINE ON THE INVESTIGATION OF BIOEQUIVALENCE (1 Aug 2010)

- 4.1.7 Bioanalytical methodology
 - » The bioanalytical part of bioequivalence trials should be performed in accordance with the principles of Good Laboratory Practice (GLP). However, as human bioanalytical studies fall outside the scope of GLP, the sites conducting the studies are not required to be monitored as part of a national GLP compliance programme.



Regulations III

EMA Guideline on bioanalytical method validation, Feb 2012

- 3. Legal basis
 - » The validation of bioanalytical methods and the analysis of study samples for clinical trials in humans should be performed following the principles of Good Clinical Practice (GCP). ...



National procedures – e. g. MHRA

- Q** *Our laboratory performs analysis of samples from clinical and pre-clinical studies. Should we work to GLP (Good Laboratory Practice) or GCP (Good Clinical Practice)?*
- A** If a facility is performing clinical analysis in support of clinical trials and non-clinical regulatory studies, then the facility will need to ensure that the requirements of GLP and GCP are met. There is a degree of overlap between the two standards and if the facility is already operating in compliance with the principles of GLP, it is likely that the facility will also be meeting many of the GCP requirements. However, there are some important aspects within GCP that will need to be considered, such as patient safety, confidentiality and consent. ...



Draft: Reflection paper on guidance for laboratories that perform the analysis or evaluation of clinical trials samples

- *To date no detailed guidance has been produced which outlines the expectations of national monitoring authorities with respect to the analysis or evaluation of samples collect as part of a clinical trial. In the absence of guidance, some laboratories apply the principles of good laboratory practice when conducting clinical analysis.*
- *This reflection paper is designed to provide guidance to laboratories and other facilities that perform the analysis or evaluation of samples collected as part of a clinical trial. [...] Inspectors are encouraged to consider the scope and focus of existing quality systems before performing GCP laboratory inspections in order to avoid duplication of effort.*



Answers

Now:

- GLPO defines scope:
 - » The ordinance applies to non-clinical studies of substances, preparations and objects (test items)
 - human plasma samples are out of scope for GLP
- Clinical Trials Unit
 - » Certificate für interlaboratory testing

Future:

- Reflection Paper:
 - » Facilities analyzing human and non-clinical plasma samples should comply with both regulations.
- GCP/GLP joint inspections?



Meet the new Swissmedic inspectors



The new team ...

Elisabeth Klenke – Head

Claudine Faller - Deputy

Tania Cavaliero

Adrian Huber

Lisa Fischer

Jörg Putzke (Observer)

Joseph Gut (Observer)



**Thank you for your
attention!**

Questions?