GMP/QMS Inspection for Foreign Sites

- GMP/QMS* inspection for foreign manufacturing facilities started since April, 2005.
  - MRA*: Document based for pharmaceuticals except sterile products and biologics
  - MOU*: Document based for Pharmaceuticals
- Number of facilities inspected (~September, 2008)
  - Pharmaceuticals: 144
  - Medical devices: 39

QMS*: Standards for Manufacturing Control and Quality Control for Medical Devices and In-vitro Diagnostic Reagents; MRA* Japan-EU Mutual Recognition Agreement (API: out of scope); MOU* Memorandum of Understanding between Japan and Australia, Germany Sweden, Switzerland)

27

On site GMP inspections for foreign facilities

By Category

Apr.2005-Sep.2008

Category	EU	North America	Central and South America	Asia	Others	Total
Sterile drugs, Biologics	30	33	0	3	0	66
Solid products	1	10	0	3	0	14
API (chemicals)	23	10	3	15	1	52
Packaging site, testing labs	1	11	0	0	0	12
Total	55	64	3	21	1	144

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Problems experienced in foreign on site inspection

- Discrepancy between Japanese Application file and actual operations in the manufacturing site
- Nonconformity to the Japanese Standards for Biological ingredients

→Insufficient concern of Japanese marketing approval holder in control of manufacturer on foreign site

29

Summary and Conclusions

- Overview of the 2005 PAL regulation changes presented.
- Challenges for implementation of the PAL with ICH guideline presented
- Challenges we face are mostly common in all regions. Hope to solve the problems with more work and international collaboration.

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ICH Draft
Supporting documentation

Topic Reference: **Q-IWG on ICH Q8/Q9/Q10**
Subject: **Questions and Answers - Vol 1**

Draft **Step 1, Version 3**
Date: **13.11.08 / after Brussels meeting**

Rapporteur: **Dr. Jean-Louis Robert**

Laboratoire National de Santé
Service Contrôle des Médicaments
BP 1102
L-1011 Luxembourg

e-mail Jean-Louis.Robert@lns.etat.lu

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48 ## 1 Introduction

49
50 This Questions and Answers document (Q&A) refers to the current working
51 procedure of the ICH Q-IWG on implementing the guidelines of Q8, Q9 and Q10
52 which have been approved by the ICH Steering committee.
53

54 **References**

55 ICH Q8	Pharmaceutical Development	approved Nov. 10 2006
56 ICH Q8(R1)	Pharmaceutical Development – Annex	approved Nov. 13 2008
57 ICH Q9	Quality Risk Management	approved Nov. 09 2006
58 ICH Q10	Pharmaceutical Quality Systems	approved Jun. 04 2008

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2 Knowledge Management

Q01: How has the implementation of ICH Q8, Q9, and Q10 changed the significance and use of knowledge management?

Q10 defines knowledge management as: 'Systematic approach to acquiring, analyzing, storing, and disseminating information related to products, manufacturing processes and components'.

Knowledge Management is not a new concept. It is always important regardless of the development approach. Q10 highlights knowledge management because it is expected that more complex information (e.g. QbD, real time data generation and monitoring systems) will need to be better captured, managed and shared.

In conjunction with Quality Risk Management, Knowledge Management can facilitate the use of concepts such as prior knowledge, development of design space, control strategy, technology transfer, and continual improvement across the product life cycle.

Q02: Does Q10 suggest an ideal way to manage knowledge?

No. Q10 does not explain how to implement knowledge management. Each company decides how to implement knowledge management, including the depth and extent of information assessment.

Q03: What are potential sources of information for Knowledge Management?

Q10 includes some examples of knowledge sources [see ICH Q10, section 1.6.1]:

- Prior knowledge
- Pharmaceutical development studies
- Technology transfer activities
- Process validation studies
- Manufacturing experience
- Innovation
- Continual improvement
- Change management activities.

Additional examples of potential sources of knowledge are

- Stability reports
- Product Quality Reviews/Annual Product Reviews
- Complaint Reports
- Adverse event reports (Patient safety)
- Deviation Reports, Recall Information
- CAPA reports
- Suppliers and Contractors
- Product history of manufacturing history
- Ongoing manufacturing processes information (e.g. trends)

Information from the above can be shared across a site or company, between companies and suppliers /contractors, products and across different disciplines (e.g. development, manufacturing, engineering, quality units).

Q04: Is an IT system required for the implementation of knowledge management with respect to ICH Q8, Q9 and Q10?

No, but IT systems can be helpful in capturing, managing and sharing complex data and information.

Q05: Will regulatory agencies expect to see a formal knowledge management approach?

No. There is no GMP requirement for a formal knowledge management system. However inspectors will expect to see that knowledge from different processes and systems has been appropriately utilised.

3 Quality by Design topics

Q01: Is it always necessary to have a Design Space, RTR testing and CS to implement QbD?

Under Quality by Design, establishing a design space or using real time release testing is not necessarily expected [ICH Q8R, step 4]. However, a control strategy is always expected regardless of the development approach, minimal or enhanced. A control strategy needs to be based on product and process understanding together with risk assessment.

3.1 Design Space

Q01: Does a set of proven acceptable ranges alone constitute a design space?

No, a combination of proven acceptable ranges (PARs) does not constitute a design space [Q8(R1), chapter 2.4.5.]. Proven acceptable ranges continue to be acceptable from the regulatory perspective but are not considered a design space [see ICH Q8(R1) section 2.4.5]. The applicant may elect to use proven acceptable ranges or design space for different aspects of the manufacturing process.

Proven acceptable ranges may lack an understanding of interactions between the process parameters and/or material attributes. PARs are often determined by one variable at a time experimentation while keeping other parameters constant, which does not reveal relationships between parameters.

Q02: Is it necessary to study multivariate interactions of all parameters to develop a design space?

No, the applicant will need to justify the choice of parameters for multivariate experimentation based on risk assessment and desired operational flexibility.

Q03: Can a design space be applicable to scale-up?

Yes, [additional details see Q8(R1) section 2.4.4]. An example is provided in the EFPIA Mock P2 document [*EFPIA Mock P2 submission on "Exemplain"*: Chris Potter*, Rafael Beerbohm, Alastair Coupe, Fritz Erni, Gerd Fischer, Staffan Folestad, Gordon Muirhead, Stephan Roenninger, Alistair Swanson, **A guide to EFPIA's "Mock P.2" Document**, Pharm. Tech. (Europe), *18*, **December 2006**, 39-44].

Q04: Can a design space be applicable to a site change?

It is possible to justify a site independent design space based on a demonstrated understanding of the robustness of the process and an in depth consideration of site specific factors, e.g. utilities, manufacturing environment, and equipment. There are region specific regulatory requirements associated with site changes that need to be followed.

Q05: Can a design space be developed for single and/or multiple unit operations?

Yes, it is possible to develop a design space for single unit operations or across a series of unit operations [see Q8(R1) section 2.4.3].

Q06: Is there a regulatory expectation to develop a design space for an existing product?

No, development of design space for existing products is not necessary unless the applicant desires to achieve a higher degree of manufacturing flexibility.

Q07: Is it possible to develop a design space for existing products?

Yes, it is possible. Manufacturing data and process knowledge can be used to support a design space for existing products. Relevant information should be utilised from e.g. commercial scale manufacturing, process improvement, CAPA and existing development data.

Typically, manufacturing operations run under narrow operational ranges in fixed equipment. Consequently, an expanded region of operation and an understanding of multi-parameter interactions may not be achievable from existing manufacturing data alone.

3.2 Real Time Release Testing

Q01: What is the difference between "real time release" and real time release testing?

The definition of real time release testing in Q8R, step 4 is 'the ability to evaluate and ensure the acceptable quality of in-process and/or final product based on process data, which typically includes a valid combination of measured material attributes and process controls.'

"Real time release" encompasses real time release testing as described above plus the quality release decision, including GMP requirements

Q02: How is batch release affected by employing real time release testing?

Batch release is the final decision to release the product to the market regardless whether RTR testing or end product testing is employed. End product testing involves performance of specific analytical procedures on a defined sample size of the final product after completion of all processing for a given batch of that product. Batch release involves an independent review of batch conformance to predefined criteria through review of testing results and manufacturing records.

Q03: Does real time release testing mean elimination of end product testing?

Real time release testing does not necessarily eliminate end product testing. For example, an applicant may propose RTR testing for some attributes only and not all. If all CQA's are addressed by in-process monitoring of parameters and/or testing of materials, then end product testing might not be needed for batch release. In addition, some product testing will be expected for certain regulatory processes such as stability studies and/or importation testing.

Q04: Is a product specification still necessary in the case of RTR testing?

Yes, product specifications [see ICH Q6a and Q6b] still need to be established and met, if tested.

Q05: When using RTR testing, is there a need for additional stability test methods?

Analytical procedures for monitoring stability need to be developed, even where RTR testing is employed [see ICH Q1a and ICH Q5c].

Q06: What is the relationship between Control Strategy and RTR testing?

RTR testing, if utilized, is an element of the Control Strategy in which tests and/or monitoring can be performed on-line rather than on the end product.

Q07: Do traditional sampling approaches apply to RTR testing?

Traditionally sampling plans for in process and end product testing involve a discrete sample size that represents the minimal sampling expectations. Generally, the use of RTR testing will include more extensive on-line/in-line measurement and an adapted sampling approach should be developed and justified.

Q08: What approaches can be taken in the event of on-line testing or on-line monitoring equipment breakdown?

As in the case of a minimal drug development approach, equipment breakdown needs to be managed in the context of a deviation under GMP. The control strategy provided in the application should include a proposal for use of alternative testing approach in the case of testing equipment failure. The alternative approach could involve use of end product testing, while maintaining an acceptable level of quality assurance, until the equipment is brought back in operation.

Q09: If RTR testing results fail or trending toward failure can end product testing be used to release the batch?

No, in principle the RTR testing results should be routinely used for the batch release decisions and not be substituted by end product testing. Any failure should be investigated. However, batch release decisions will need to be made based on the results of the investigations. In the case of failure of the testing equipment please refer to the previous question.

3.3 Control Strategy

Refer to the definition of control strategy provided in the ICH Q10 glossary:

Q10 Control Strategy definition –
'a planned set of controls, derived from current product and process understanding that assures process performance and product quality. The controls can include parameters and attributes related to drug substance and drug product materials and components, facility and equipment operating conditions, in-process controls, finished product specifications, and the associated methods and frequency of monitoring and control.'

Q01: What is the difference in a control strategy for products developed using the minimal approach vs. 'quality-by-design' approach?

Control strategies are expected irrespective of the development approach. Control strategy includes different types of control proposed by the applicant to assure compliance with specifications, such as in-process testing and end product testing. For products developed following the minimal approach, the control strategy is derived empirically and typically relies more on discrete sampling and end product testing. Under QbD, the control strategy is derived using a systematic science and risk-based approach. Testing, monitoring or controlling is often shifted earlier into the process and conducted on- or at-line. Some traditional tests may not be necessary based on demonstrated process knowledge, process control and robustness.

Q02: Are GMP requirements different for batch release under QbD?

No, The same GMP requirements apply for batch release under minimal and QbD approaches.

Q03: What is the relationship between a Design Space and a Control Strategy?

If a Design Space is developed and approved for a QbD approach, the control strategy (e.g. facility, operating condition and monitoring) also ensures that the manufacturing process is maintained within the boundaries described by the Design Space.

4 Pharmaceutical Quality System

Q01: What are the benefits of implementing a Pharmaceutical Quality System (in accordance with ICH Q10)?

The benefits are:

- Improved robustness of the manufacturing process, through facilitation of continual improvement through science and risk-based post approval change processes
- Consistency in the global pharmaceutical environment across regions
- Enable transparency of systems, processes, organisational and management responsibility
- Clearer understanding of the application of a Quality System throughout product lifecycle
- Greater assurance of consistent supply of pharmaceutical product to the patient
- Opportunity to increase trust between industry and regulators and more optimal use of industry and regulatory resources.

Q02: How does a company demonstrate implementation of PQS in accordance with ICH Q10?

A company will demonstrate the use of an effective PQS through its documentation (e.g. policies, standards), its processes, its training / qualification, its management and its performance against pre-defined Performance Indicators [see ICH Q10 glossary on 'Performance indicator'].

A mechanism should be established to demonstrate at a site how the PQS operates across the product lifecycle, in an easily understandable way for management, staff and regulatory inspectors, e.g. a quality manual, documentation, flowcharts, procedures. This can be enabled by knowledge management.

Q03: What information and documentation of the development studies should be available at a manufacturing site?

Scientific collaboration and knowledge sharing between pharmaceutical development and manufacturing is essential to ensure the successful transfer to production.

Sufficient pharmaceutical development information (e.g. supporting information on design space, chemometric model, risk assessment) should be available at the manufacturing site to ensure the understanding of the basis for the manufacturing process and control strategy, including the rationale for selection of critical process parameters and critical quality attributes. This can be enabled by knowledge management.

Q04: How is adherence to ICH Q10 in the product lifecycle assessed?

Aspects of a company's quality system can be evaluated at any point of the product life cycle via internal and external audits. Regulatory inspections will normally assess the PQS at the manufacturing site. However in the event that specific development information in relation to an application for an marketing authorisation raises issues that cannot be addressed through such an inspection it may occasionally be necessary to evaluate this at the development site. This does not preclude any regional requirements for site inspections.

Q05: Is it necessary to describe the PQS in a regulatory submission?

No, however relevant elements of the PQS, such as change control and deviation management may be described as part of the control strategy as supporting information.

Q06: Will there be ICH Q10 certification?

There will not be a specific ICH Q10 inspection and certification programme.

Q07: How should the implementation of the design space be evaluated during inspection of the manufacturing site?

Inspection should verify that manufacturing operations are carried out within the Design Space. The inspector in collaboration with the assessor where appropriate should also verify successful manufacturing operations under the Design Space and that movement within the Design Space is managed within the company's change management system [see ICH Q10, chapter 3.2.3b].

Q08: What should be done if manufacturing operations run inadvertently outside of the Design Space?

This should be handled as a deviation under GMP. For example unplanned 'one-off' excursions occurring as a result of unexpected events, such as operator error or equipment failure, would be investigated, documented and dealt with as a deviation in the usual way. The results of the investigation may contribute to the process knowledge.

Q09: Who should review and approve the Design Space?

The Design Space is proposed by the applicant and is reviewed and approved by the regulatory agency assessor [ICH Q8, chapter 2]. Information from the assessment of the design space can be shared with the inspectors to facilitate verification of its implementation at the manufacturing site.

5 ICH new quality guidelines impact on GMP inspection practices

Q01: How will product related inspections differ in an ICH Q8, Q9 and Q10 environment?

In the case of product related inspection (in particular pre-authorisation) depending on the complexity of the product and/or process there could be a need for greater collaboration between inspectors and assessors for example for the assessment of development data. The inspection would normally occur at the proposed commercial manufacturing site and there is likely to be greater focus on CQAs and CPPs.

Q02: How will system related inspections differ in an ICH Q8, Q9 and Q10 environment?

The inspection process will remain the same. However upon the implementation of ICH Q8, Q9 and Q10 inspections will have greater focus on how the PQS facilitates the use of e.g. Quality Risk Management methods, implementation of design space and change management [see ICH Q10, annex 1].

6 Software solutions

Q01: With the rapid growth of the new science and risk based quality paradigm coupled with the IWG efforts to facilitate globally consistent implementation of Q8, Q9, and Q10, a number of commercial vendors are now offering products that are being marketed as 'ICH compliant solutions' or ICH Q8, 9 & 10 Implementation software, etc. Is it necessary for a pharmaceutical firm to purchase these products to achieve a successful implementation of these ICH guidelines within their companies?

No. The ICH Implementation Working Group has not endorsed any commercial products and does not intend to do so. ICH is not a regulatory agency with reviewing authority and thus does not have a role in determining or defining 'ICH compliance' for any commercial products. While there will likely be a continuous proliferation of new products targeting the implementation of these ICH guidelines, firms will need to carry out their own evaluation of these products relative to their business needs

平成 20 年 12 月 1 日

関係　各位

ICH Quality Implementation Working Group
厚生労働省代表委員
日本製薬工業協会代表委員

「ICH Q8、Q9 及び Q10 ガイドラインの運用に関する質疑応答集（案）」に関するご意見の募集について

関係の皆様方におかれましては、日頃より、日米 EU 医薬品規制調和国際会議（ICH）の活動にご理解とご協力を賜り、誠にありがとうございます。

ICH では、平成 17 年以降、Q8：製剤開発、Q9：品質リスクマネジメント、Q10：医薬品品質システム、の各ガイドラインが採択され、また、先般のブリュッセル会議（11 月 8 日～13 日）では、Q8（R1）：製剤開発ガイドライン付属書が運営委員会において承認されました。さらに、これらのガイドラインを適切に運用するための明確でより詳細な説明を提供することを目的として Quality Implementation Working Group on Q8, Q9 & Q10（Q-IWG）が設立され、現在、種々の活動を計画し、順次実施しているところです。

今般、Q-IWG では標記の質疑応答集（Q&A）（案）を作成し、関係の皆様より広くご意見を募集することとなりました。つきましては、本案に関してご意見いただけます場合には、下記によりご提出くださいますようお願いいたします。皆様からいただいたご意見については、今後の活動における参考とさせていただきます。なお、ご提出いただいたご意見に対する個別の回答はいたしかねますので、その旨ご了承願います。

記

1. 募集期限
　平成 21 年 1 月 12 日（月）必着　（翌日以降は受け付けいたしません）

2. 提出方法
　添付の回答様式（電子ファイル）にご意見、変更案等をご記入の上、電子メールにファイルを添付して、『Q-Trio Q&A 意見』の件名で、以下の電子メ

ールアドレス宛にご提出ください。ファクシミリ、郵送及びお電話によるお問い合わせ又はご意見のご提出はお受けできかねますので、あらかじめご了承ください。

電子メールアドレス： Q-IWG@pmda.go.jp

3. ご意見をご提出いただくにあたって

ご意見は、以下の 3 つの分類に従い、Q&A 案の該当箇所を明記してご記入ください。また、それぞれのご意見・ご提案の重要度を C（重要）又は M（軽微）に区別して該当欄に記入してください。さらに、ご意見・ご提案の背景又は参考となる情報についてもご記入いただければ幸いです。なお、本 Q&A（案）は、Q8、Q9、Q10 ガイドラインにより導入された新たな概念の理解を促進し、即時実践することを目的として作成されるものであり、当該ガイドラインの改訂や追加の概念の導入を意図したものではございません。

- 記載整備に関すること

  Q&A 案で誤記や表現の間違い等があれば、ご指摘ください。変更案も併せてご記入ください。

- Q&A 案に対するご意見

  Q&A 案について、わかりにくい点や補足すべき点があれば、ご指摘ください。改善案も併せてご提案ください。

- 追加の Q&A のご要望

  追加で記載すべき Q&A があれば、ご要望の理由と Q&A の例をご提案ください。

ご意見等は日本語又は英語のいずれでご記入いただいても結構です。個人の場合は氏名・所属を、団体・法人の場合は団体名又は法人名を記載してください。なお、個人又は団体・法人の属性（名称を含む）に関する情報以外は公開することもありますので、あらかじめご了承ください。

以上

Agenda
November 2 version, 2008

JCCT[1] Presents

Workshop on Implementation of ICH[2] Q8/Q9/Q10 and Other Quality Guidelines

Co-Sponsored by APEC-LSIF[3] and ICH GCG[4]
Beijing, China
12/3-5/2008

Day 1: Wednesday, December 3, 2008

Time	Session #	Session	Topic and speaker
Moderator: Chen Xingyu, Deputy Director General, Department of International Cooperation, State Food and Drug Administration (SFDA) (China)			
8:30 am – 9:00 am		Opening remarks	• Zhang Wei, Director General, Department of Drug Registration, SFDA (China) • Wu Zhen, Deputy Commissioner, SFDA (China) • Christopher Hickey, Office of International Programs, China Office, Food and Drug Administration (FDA) (United States) (Invited)
9:00 am – 10:15 am	1	Introduction to ICH	• **Evolution of ICH:** Justina Molzon, Associate Director, International Affairs, Center for Drug Evaluation and Research (CDER), FDA (United States) ***Description:*** The evolution of ICH will be presented to illustrate the transition from focusing on the harmonization of technical requirements for submission to consistent formatting of the submission and to the current focus on the output by regulators. The consistency provided by ICH Guidelines and the Common Technical Document (CTD) has led to the development of review templates to promote good review practices. The practices may spread to non-ICH regulatory authorities as ICH instruments are used more globally. • **Susanne Keitel,** Director, European Directorate for the Quality of Medicines and Healthcare (EDQM) (Council of Europe) ***Description:*** ICH has produced an extensive series of Quality guidelines that together provide a solid framework for guiding the development, manufacture and control of pharmaceuticals. The earlier guidelines tend to provide more detailed guidance on traditional quality topics including stability (Q1), analytical validation (Q2) , impurities (Q3), test specifications (Q6) and GMPs for APIs (Q7). The development of the CTD has also been important in structuring quality information, including pharmaceutical development studies, in a consistent format within marketing applications, thereby providing a basis for enhanced regulatory communication and cooperation.
10:15 am – 10:30 am		Break	
10:30 am – 12:00 pm	2	Experience in implementing ICH Guidelines Q1-Q7	• **Regulatory Perspectives:** ○ Yoshihiro Matsuda, Ministry of Health, Labour & Welfare (MHLW) (Japan)

		(15-20 min presentation each)	○ Krishnan Tirunellai, Senior Scientific Advisor, Bureau of Pharmaceutical Sciences, Therapeutic Products Directorate (TPD), Health Canada (Canada) • **Industry Perspective:** Ling Ye, Hospira (United States) • **Panel Discussion**
12:0 pm – 1:30 pm		Lunch	
Moderator: Chi-wan Chen, Pfizer, US			
1:30 pm – 2:15 pm	3	ICH Q8/9/10 – a New Paradigm	• **Why Q8/9/10 and how they are different from Q1-Q7?** Robert Baum, Pfizer (United States) The newer suite of ICH Quality guidelines Q8/Q8R, Q9 and Q10 represent more conceptual, enabling guidelines that reflect a new harmonized vision for pharmaceutical quality.
2:15 pm – 3:30 pm	4	ICH Q8/Q8R Pharmaceutical Development	• **Regulatory Perspective:** Moheb Nasr, Office of New Drug Quality Assessment, CDER, FDA (United States) • **Industry Perspective:** Brian Withers, Abbott (United Kingdom) ***Description:*** The Pharmaceutical Development section as detailed in ICH Q8 and ICH Q8(R) provides an opportunity to present the knowledge gained through the application of scientific approaches and quality risk management to the development of a product and its manufacturing process. It is first produced for the original marketing application and can be updated to support new knowledge gained over the lifecycle of a product. The Pharmaceutical Development section is intended to provide a comprehensive understanding of the product and manufacturing process for reviewers and inspectors. ICH Q8 and ICH 8(R) also indicates areas where the demonstration of greater understanding of pharmaceutical and manufacturing sciences can create a basis for flexible regulatory approaches. The degree of regulatory flexibility is predicated on the level of relevant scientific knowledge provided.
3:30 pm – 4:00 pm		Break	
4:00 pm – 5:15 pm	4	ICH Q11 Development and Manufacture of Drug Substances	• **Overview:** Brian Withers, Johnson & Johnson (United States) • **Q8/Q8R/Q11 Panel Discussion**

[1]JCCT: US-China Joint Council on Commerce and Trade
[2]ICH: International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use
[3]APEC-LSIF: Asia-Pacific Economic Cooperation – Life Science Innovation Forum
[4]ICH GCG: ICH Global Cooperation Group

Agenda
November 2 version, 2008

Workshop on Implementation of ICH Q8/Q9/Q10 and Other Quality Guidelines

Day 2: Thursday, December 4, 2008

Time	Session #	Session	Topic and speaker
Moderator: Jacques Morénas, French Agency for the Safety of Health Products (AFSSAPS) (France) & Chairman of PIC/S			
8:30 am – 10:00 am	5	ICH Q9 Quality Risk Management	• **Regulatory Perspective:** Joe Famulare, Deputy Director, Office of Compliance, CDER, FDA (United States) • **Industry Perspective:** Stephan Roenninger, Roche (Switzerland) • **Panel discussion** ***Description:*** The manufacturing and use of a drug product, including its components, necessarily entails some degree of risk. The risk to its quality is just one component of the overall risk. It is important to understand that product quality should be maintained throughout the product lifecycle such that the attributes that are important to the quality of the drug product remain consistent with those used in the clinical studies. An effective quality risk management approach can further ensure the high quality of the drug product to the patient by providing a proactive means to identify and control potential quality issues during development and manufacturing. In addition, use of quality risk management can improve the decision making if a quality problem arises. Effective quality risk management can facilitate better and more informed decisions, can provide regulators with greater assurance of a company's ability to deal with potential risks, and can beneficially affect the extent and level of direct regulatory oversight. The purpose of ICH Q9 is to offer a systematic approach to quality risk management. It serves as a foundation or resource document that is independent of, yet supports, other ICH Quality documents and complements existing quality practices, requirements, standards, and guidelines within the pharmaceutical industry and regulatory environment. It specifically provides guidance on the principles and some of the tools of quality risk management that can enable more effective and consistent risk-based decisions, by both regulators and industry, regarding the quality of drug substances and drug products across the product lifecycle. It is not intended to create any new expectations beyond the current regulatory requirements.
10:00 am – 10:30 am		Break	
10:30 am – 12:00 pm	6	ICH Q10 Pharmaceutical Quality System	• **Regulatory Perspective:** Ian Thrussel, Senior Medicines Inspector, Medicines and Healthcare products regulatory Agency (MHRA) (United Kingdom) • **Industry Perspective:** Tobias Massa, Bristol-Myers Squibb (United States) • **Panel discussion**

			Description: ICH Q10 establishes a new ICH guideline describing a model for an effective quality management system for the pharmaceutical industry, referred to as the Pharmaceutical Quality System. ICH Q10 describes one comprehensive approach to an effective pharmaceutical quality system that is based on ISO concepts and augments existing Good Manufacturing Practice (GMP) requirement. ICH Q10 is a model for a pharmaceutical quality system that can be implemented throughout the different stages of a product lifecycle. ICH Q10 is not intended to create any new expectations beyond current regulatory requirements. Consequently, the content of ICH Q10 that is additional to current GMP requirements is optional. Throughout this guideline, the term "pharmaceutical quality system" refers to the ICH Q10 model. ICH Q10 demonstrates industry and regulatory authorities' support of an effective pharmaceutical quality system to enhance the quality and availability of medicines around the world in the interest of public health. Implementation of ICH Q10 throughout the product lifecycle should facilitate innovation and continual improvement and strengthen the link between pharmaceutical development and manufacturing activities.
12:00 pm – 1:30 pm		Lunch	
Moderator: Tobias Massa, BMS (United States)			
1:30 pm – 3:00 pm	7	Case Studies for ICH Q8/9/10	• **Case Study 1:** Vance Novak, GlaxoSmithKline (United Kingdom) • **Case Study 2:** Brian Johnson, Merck (United States?)
3:00 pm – 3:30 pm	8	Implementation of ICH Q8/9/10	• **ICH Q8/9/10 Implementation Working Group:** Jacques Morénas, AFSSAPS (France) & Chairman of PIC/S
3:30 pm- 3:45 pm		Break	
3:45 pm – 5:45 pm	8	Challenges and Opportunities in Implementing ICH Q8/9/10 (15 min presentation each)	• Jacques Morénas, AFSSAPS (France) & Chairman of PIC/S • Moheb Nasr, Office of New Drug Quality Assessment, CDER, FDA (United States) • Yukio Hiyama, Chief, Third Section Division of Drugs, National Institute of Health Sciences (Japan) • Krishnan Tirunellai, Senior Scientific Advisor, Bureau of Pharmaceutical Sciences, TPD, Health Canada (Canada) • Lu Dong, Center for Drug Evaluation (CDE), SFDA (China) • **Panel Discussion** (including regulator and industry speakers from other sessions)

Agenda
November 2 version, 2008

Workshop on Implementation of ICH Q8/Q9/Q10 and Other Quality Guidelines

Day 3: Friday, December 5, 2008

Time	Session #	Session	Topic and speaker
Moderator: Ling Ye, Hospira (United States)			
9:00 am – 10:30 am	9	Other Risk-Based Efforts in the Global Environment	• **Health Canada's Progressive Licensing Project:** Mike Ward, Manager International Programs Division, TPD, Health Canada ***Description:*** Health Canada is developing the Progressive Licensing Framework to establish a drug regulatory system for the future. This framework is intended encompass the regulation of pharmaceuticals and biologic products, including prescription and non-prescription products. The Progressive Licensing Framework is part of Health Canada's plan to modernize the regulation for health products and foods. The central concept of Progressive Licensing is that, over time, there is a progression in knowledge about a drug. This represents a fundamental shift from the idea that the pre-market assessment of a drug assures its quality, safety and efficacy. The new proposed model is that the benefit-risk profile of a drug should be evaluated throughout its life-cycle. • **FDA's Question-based Review for ANDAs:** Lawrence Yu, Office of Generic Drugs, CDER, FDA (United States) ***Description:*** Generic drugs seeking approval from the US FDA that are the subject of Abbreviated New Drug Applications (ANDAs) must meet the essentially same quality standard as innovative drugs. Accordingly, product development and quality controls must follow the same ICH guidelines. ANDA sponsors were encouraged to apply the QbD concepts and principles to generic drug development. To facilitate regulatory assessment of ANDAs that contain QbD information, US FDA's Office of Generic Drugs developed a question-based review (QbR) system that is focused on product and process design, understanding, and control. The main benefits of this QbR system are to 1) assure product quality through design and performance-based specifications, 2) facilitate continuous improvement and reduce CMC supplements through risk assessment, 3) enhance the quality of reviews through standardized review questions, and 4) reduce CMC review time when applicants submit a QOS that addresses the QbR questions. The QbR system is transforming the review of product quality into a modern, science and risk-based pharmaceutical quality assessment. This presentation will give an overview of QbR and discusses 1) why QbR is necessary, 2) what QbR is, and 3) what the impact of QbR is on ANDAs and their review. • **Influence of Excipients on QbD:** David Schoneker, International Pharmaceutical Excipients Council (IPEC) ***Description:*** Excipients are used in all pharmaceutical formulations to perform a number of different functions. In the past, excipients were merely thought of as the inactive part of a formulation and relatively unimportant from a specification