

# ICH Q4B Expert Working Group

International Conference on Harmonisation of Technical  
Requirements for Registration of Pharmaceuticals for Human Use



# Presentation Outline

- Short History and Overview of ICH Q4B
- The Pharmacopoeias and the Regulators
- The Q4B Process and Annex
- Interaction: Q4B Expert Working Group (EWG) and PDG
- November 2008 Meeting Outcomes and Current Activities for the Q4B EWG

# Background

- The harmonisation of specific compendial test chapters has been considered as critical by the ICH Steering Committee to attaining full utility of the ICH Q6A guideline (1998).
- Industry requested ICH SC to create an EWG to address how the regulatory authorities (3 regions) will recognise the interchangeability of harmonised pharmacopoeial chapters from Ph. Eur./JP/USP (PDG) – July 2003
- ICH SC established Q4 EWG with a scope to address 11 General Test Chapters discussed during development of ICH Q6A Guideline - November 2003
- SC approves Q4B Work Plan – April 2004

# Background (Continued)

- SC approves development of an ICH Guideline with topic specific annexes – June 2004
- Q4B EWG begins evaluating PDG harmonised text – November 2004
- Step 2 ICH Q4B Core Guideline approved by SC – June 2006
- 1st Annex (Residue on Ignition/Sulphated Ash) approved (ICH Step 2) – June 2006
- Regulatory consultation (ICH Step 3) on Core Guideline completed by each regulatory region (60-day comment period) – October 2006

# Background (Continued)

- Core Q4B Guideline reworked based on constituent comments; ICH Step 4 documents finalised for ICH signoff – November 2007
- Consist of “parent guideline” Step 4 Q4B – ERPTUIR (new title)
- “Evaluation and Recommendation Pharmacopoeial Texts for Use in the ICH regions”
- First Annex No. 1 approved at Step 4 – ROI/Sulphated Ash – November 2007
- SC approves limited expansion of scope – November 2008

# ICH Q6A-related General Chapters

Dissolution

\*Uniformity of Content

Extractable Volume

Sterility

Bacterial Endotoxins

Colour and Clarity

(per ICH SC, work will just be on "Colour")

Disintegration

\*Uniformity of Mass

Particulate Matter

Microbiological Quality

ROI/Sulphated Ash

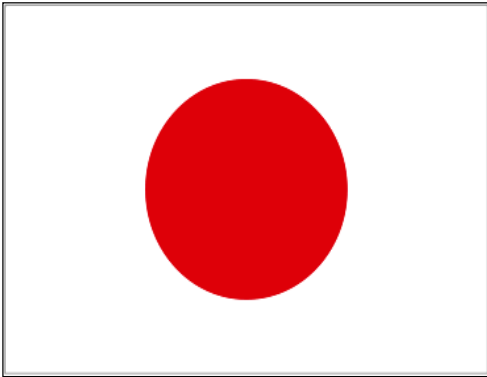
Above chapters identified as the basis of Q4B activity

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\* Combined to Uniformity of Dosage Units

# The Pharmacopoeias and the Regulators

## Different Approaches for Moving Forward



JP  
(PMDA)

Governmental



Ph. Eur.  
(EDQM)

Governmental  
Partnership



USP

Independent of  
Government  
Not for profit organisation

# The Q4B Process

## Value of the Q4B Activity

- A component of international harmonisation efforts to assist in common specifications
  - A savings in time, effort and cost
    - Industry: to globally unify testing strategies [for applications and other regulatory (compliance) needs] – one test rather than three
    - Regulators: to reduce or eliminate the need to go through a justification procedure as to the use of other compendial methods (done one time to eliminate repetitive justifications)
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# PDG Process Results in Harmonised Text

Individual Pharmacopoeial Approval & Official Publication Process

JP Version

USP Version

Ph. Eur. Version

**Challenge to regulators:** Do differences impact on the ability to achieve a result with the same accept and reject capability? Are they interchangeable?

# Q4B Process Steps

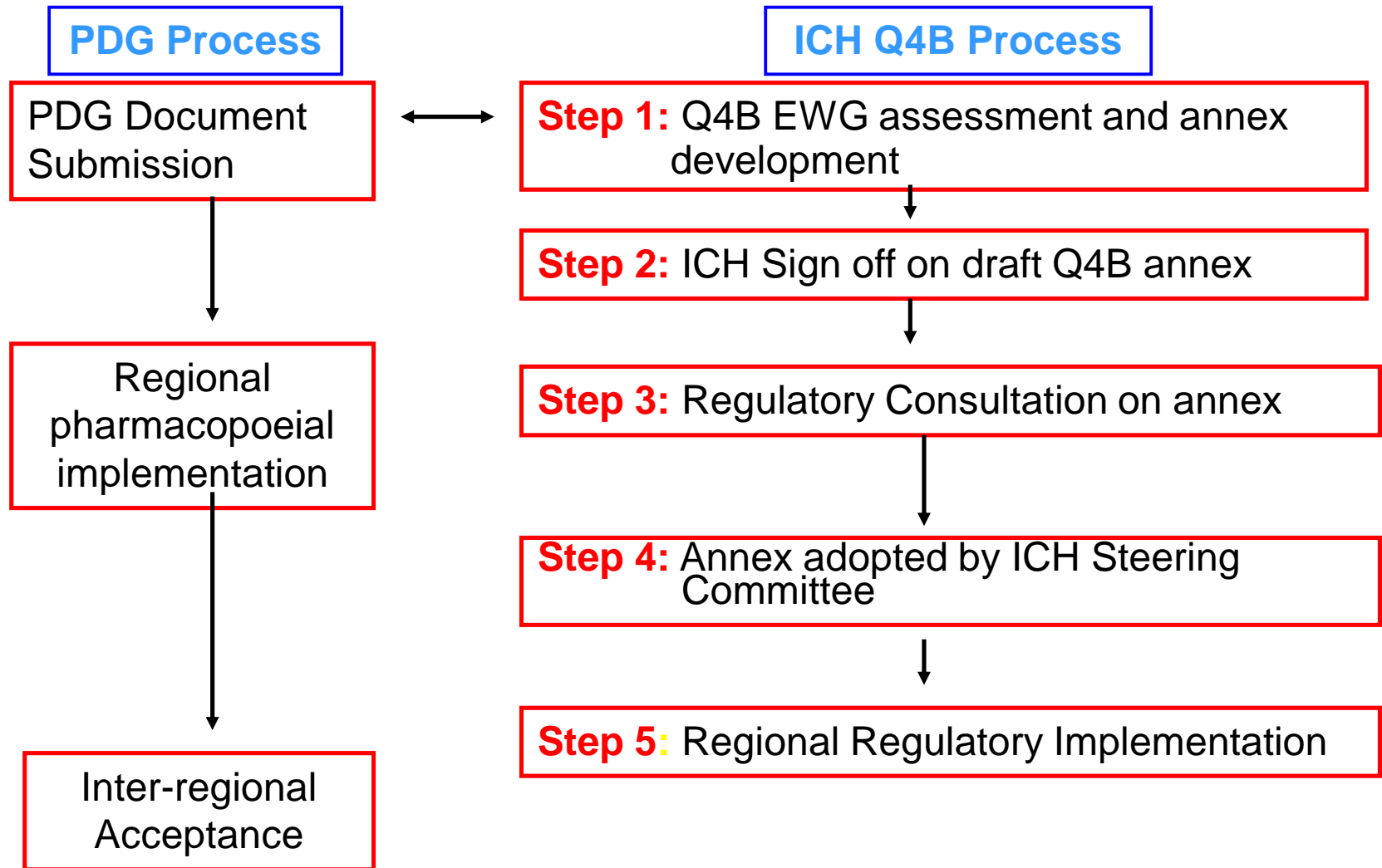
FOR EACH TOPIC:

- PDG provides to Q4B Expert Working Group:
  - PDG-harmonised text
  - JP/Ph. Eur./USP draft versions of how harmonised text will be implemented in their compendia
  - Briefing note to delineate any local differences or potential issues
  - Printing timelines to move approved pharmacopoeial text to official status
- Q4B member parties bring the documents back to their constituents for independent evaluation

# Q4B Process (continued)

- Q4B EWG reviews the evaluations
- Issues discussed within Q4B EWG for possible resolution
- Evaluation results and possible resolution mechanisms conveyed back to and/or discussed with PDG
- Once issues are resolved, Q4B EWG recommends approval (ICH Step 2) to the ICH SC
- Start of Annex process – Moving the Q4B evaluation outcome into the regulatory mechanisms for each region

# Topic Specific Annex Process



# Q4B EWG and PDG Interaction

- Dedicated time (set aside) at each formal ICH EWG meeting venue to discuss issues
- Stakeholder partnering – all parties focused to achieve interchangeability
- Direct feedback mechanisms to resolve issues
- Clear delineation of what steps are necessary for problem resolution
- Success more likely versus single, independent efforts

## Q4B Successes -- November 2007 Yokohama

Primary objectives achieved:

- Core Q4B Guideline (establishing Q4B Process)  
Completed and signed off at ICH Step 4 -- Step 5 Regional Implementation
  - Title for the Q4B Core Q4B Guideline  
***The Evaluation and Recommendation  
of  
Pharmacopoeial Texts for Use in the ICH Regions***
  - First Annex No.1 – ROI/Sulphated Ash completed  
at Step 4
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# Current Status – Q4B EWG

## ICH November 2008, Brussels

- Step 2 documents moved to Step 4 sign-off and Step 5 Regional Implementation:
  - (Annexes 4A, 4B, 4C)
  - (Annex 5 – completed but hold for sign-off)
- Additional annexes moved to Step 2 sign-off:
  - Annex 6 UDU
  - Annex 7 Dissolution Test
  - Annex 8 Sterility Test

# Limited Scope Expansion

## ICH November 2008, Brussels

Steering Committee approved addition of 5 new PDG-harmonised general chapters to the Q4B process:

1. Tablet Friability
2. Bulk and tapped density
3. Analytical Sieving
4. Capillary Electrophoresis
5. PAGE



# Current Status – Q4B EWG

ICH November 2008 Meeting, Brussels, Belgium

## *Completed Annexes to the Core Q4B Guideline*

■ #1 Residue on Ignition/Sulphated Ash

**Step 5 Regional  
Implementation**

■ #2 Extractable Volume

**Step 5 Regional  
Implementation**

■ #3 Particulate Matter

**Step 5 Regional  
Implementation**

■ #4A, 4B, 4C Microbiological Tests

**Step 5 Regional  
Implementation**

# Current Status 2009 (continued)

## *Work in Progress*

- #5 Disintegration Test .....Draft Step 4, waiting to be signed [Spring 2009]
  - #6 Dissolution Test
  - #7 Uniformity of Dosage Units
  - #8 Sterility Test
  - Bacterial Endotoxins
  - Colour
- Signed at Step 2 – Regulatory Consultation (ICH Step 3)
- Submissions awaited from PDG
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# Acknowledgements

Robert King, FDA – 1st Rapporteur and all Q4B members  
PDG member pharmacopoeias and their continuing support !

## Current Members of the ICH Q4B EWG

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