

INTERNATIONAL CONFERENCE ON HARMONISATION OF TECHNICAL  
REQUIREMENTS FOR REGISTRATION OF PHARMACEUTICALS FOR HUMAN USE

**ICH HARMONISED TRIPARTITE GUIDELINE**

**EVALUATION AND RECOMMENDATION OF PHARMACOPOEIAL  
TEXTS FOR USE IN THE ICH REGIONS ON**

**POLYACRYLAMIDE GEL ELECTROPHORESIS**

**GENERAL CHAPTER**

**Q4B ANNEX 10(R1)**

Current *Step 4* version  
dated 27 September 2010

*This Guideline has been developed by the appropriate ICH Expert Working Group and has been subject to consultation by the regulatory parties, in accordance with the ICH Process. At Step 4 of the Process the final draft is recommended for adoption to the regulatory bodies of the European Union, Japan and USA.*

**Q4B Annex 10(R1)  
Document History**

Code	History	Date
Q4B Annex 10	Approval by the Steering Committee under <i>Step 2</i> and release for public consultation.	11 June 2009
Q4B Annex 10	Approval by the Steering Committee under <i>Step 4</i> and recommendation for adoption to the three ICH regulatory bodies.	29 October 2009

**Current *Step 4* version**

Q4B Annex 10(R1)	Integration of the Health Canada Interchangeability Statement under Section 4.5 after approval by the Steering Committee.	27 September 2010
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**EVALUATION AND RECOMMENDATION OF PHARMACOPOEIAL TEXTS  
FOR USE IN THE ICH REGIONS**

**ON**

**POLYACRYLAMIDE GEL ELECTROPHORESIS GENERAL CHAPTER**

**ICH Harmonised Tripartite Guideline**

Having reached *Step 4* of the ICH Process at the ICH Steering Committee meeting  
on 29 October 2009, this guideline is recommended for  
adoption to the three regulatory parties to ICH

*(This annex was revised -R1- to include the Interchangeability Statement from  
Health Canada on September 27, 2010)*

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**EVALUATION AND RECOMMENDATION OF PHARMACOPOEIAL TEXTS FOR  
USE IN THE ICH REGIONS**

**ON**

**POLYACRYLAMIDE GEL ELECTROPHORESIS GENERAL CHAPTER  
Q4B ANNEX 10(R1)**

**1. INTRODUCTION**

This annex is the result of the Q4B process for the Polyacrylamide Gel Electrophoresis General Chapter.

The proposed texts were submitted by the Pharmacopoeial Discussion Group (PDG).

**2. Q4B OUTCOME**

**2.1 Analytical Procedures**

The ICH Steering Committee, based on the evaluation by the Q4B Expert Working Group (EWG), recommends that the official pharmacopoeial texts, the Section in Ph.Eur. 2.2.31. Electrophoresis entitled *Sodium Dodecyl Sulphate Polyacrylamide Gel Electrophoresis (SDS-PAGE)*, JP General Information 23. SDS-Polyacrylamide Gel Electrophoresis, and USP <1056> Biotechnology-derived Articles – Polyacrylamide Gel Electrophoresis, can be used as interchangeable in the ICH regions.

**2.2 Acceptance Criteria**

The texts evaluated did not contain acceptance criteria.

**3. TIMING OF ANNEX IMPLEMENTATION**

When this annex is implemented (incorporated into the regulatory process at ICH *Step 5*) in a region, it can be used in that region. Timing might differ for each region.

**4. CONSIDERATIONS FOR IMPLEMENTATION**

**4.1 General Consideration**

When sponsors or manufacturers change their existing methods to the implemented Q4B-evaluated pharmacopoeial texts that are referenced in Section 2.1 of this annex, any change notification, variation, and/or prior approval procedures should be handled in accordance with established regional regulatory mechanisms pertaining to compendial changes.

**4.2 FDA Consideration**

Based on the recommendation above, and with reference to the conditions set forth in this annex, the pharmacopoeial texts referenced in Section 2.1 of this annex can be considered interchangeable. However, FDA might request that a company demonstrate that the chosen

method is acceptable and suitable for a specific material or product, irrespective of the origin of the method.

#### **4.3 EU Consideration**

For the European Union, regulatory authorities can accept the reference in a marketing authorisation application, renewal or variation application citing the use of the corresponding text from another pharmacopoeia as referenced in Section 2.1, in accordance with the conditions set out in this annex, as fulfilling the requirements for compliance with the Ph. Eur. Chapter 2.2.31. on the basis of the declaration of interchangeability made above.

#### **4.4 MHLW Consideration**

The pharmacopoeial texts referenced in Section 2.1 of this annex can be used as interchangeable in accordance with the conditions set out in this annex. Details of implementation requirements will be provided in the notification by MHLW when this annex is implemented.

#### **4.5 Health Canada Consideration**

In Canada, any of the pharmacopoeial texts cited in section 2.1 of this annex and used in accordance with the conditions set out in this annex can be considered interchangeable.

### **5. REFERENCES USED FOR THE Q4B EVALUATION**

- 5.1** The PDG Stage 5B sign-off document: *Japanese Pharmacopoeial Forum*, Volume 9, number 1 (January 2000).
- 5.2** The pharmacopoeial references for Polyacrylamide Gel Electrophoresis General Chapter for this annex are:
  - 5.2.1** *European Pharmacopoeia* (Ph. Eur.): 6<sup>th</sup> Edition (official in January 2008), Electrophoresis (reference 01/2008:20231);
  - 5.2.2** *Japanese Pharmacopoeia* (JP): The JP General Information 23. SDS-Polyacrylamide Gel Electrophoresis as it appears in the Japanese Pharmacopoeia Fifteenth Edition (March 31, 2006, The Ministry of Health, Labour and Welfare Ministerial Notification No. 285);
  - 5.2.3** *United States Pharmacopeia* (USP): <1056> Biotechnology-derived Articles – Polyacrylamide Gel Electrophoresis official in USP 32, May 1, 2009.