



**REPUBLIC OF LEBANON**  
**MINISTRY OF PUBLIC HEALTH**

# **List of Requirements for the registration of Biosimilar products according to CTD format**

## **List of Requirements for the registration of Biosimilar products according to CTD format**

### **Module 1: Administrative information**

- 1.1 Cover letter/application form/proposed summary of product characteristics/labeling and package insert leaflet.**
- 1.2 Trade name**
- 1.3 Generic name**
- 1.4 Expiry date**
- 1.5 Other trade names of the similar product**
- 1.6 Pharmaceutical form**
- 1.7 Name of manufacturing company**
- 1.8 Name of active substance manufacturer (if different from above)**
- 1.9 Agent in Lebanon: Name and Address**
- 1.10 Marketing status at country of origin and other countries**
- 1.11 Reference medicinal product (RMP) – The innovator Name, Approval at EMA/FDA**
- 1.12: Labeling product information**

### **Module 2: Common technical document summaries**

- 2.1. Table of contents of Modules 2 – 5.**
- 2.2. Introduction.**
- 2.3. Quality overall summary.**
- 2.4. Pre-clinical overview:**
- 2.5. Clinical overview.**
- 2.6. Pre-clinical summary.**
  - 2.6.1. Pharmacology written summary.**
  - 2.6.2. Pharmacology tabulated summary.**
  - 2.6.3. Pharmacokinetics written summary.**
  - 2.6.4. Pharmacokinetics tabulated summary.**
  - 2.6.5. Toxicology written summary.**
  - 2.6.6. Toxicology tabulated summary.**
- 2.7. Clinical summary:**
  - 2.7.1. Summary of biopharmaceutical studies and associated analytical methods.**
  - 2.7.2. Summary of clinical pharmacology studies.**
  - 2.7.3. Summary of clinical efficacy.**
  - 2.7.4. Summary of clinical safety.**
  - 2.7.5. Literature references.**
  - 2.7.6 Synopses of individual studies.**

### **Module 3: Quality**

- 3.2.S. Active substance(s).**
  - 3.2.S.1. General information**
    - 3.2.S.1.2. Structure**
    - 3.2.S.1.3. General properties**

- 3.2.S.2. Manufacture of active substance(-s):**
  - 3.2.S.2.1. Manufacturer(s).**
  - 3.2.S.2.2. Description of manufacturing process and process controls.**
  - S.2.S.2.3. Control of materials**
  - 3.2.S.2.4. Controls of critical steps and intermediates.**
    - 3.2.S.2.4.1 Critical steps**
    - 3.2.S.2.4.2 Intermediates**
  - 3.2.S.2.5. Process validation and/or evaluation.**
  - 3.2.S.2.6. Manufacturing process development.**
  - 3.2.S.3. Characterization of active substance(-s).**
    - 3.2.S.3.1. Elucidation of structure and other characteristics.**
    - 3.2.S.3.2. Impurities.**
  - 3.2.S.4. Control of active substance(s).**
    - 3.2.S.4.1. Specification.**
    - 3.2.S.4.2. Analytical procedures.**
    - 3.2.S.4.3. Validation of analytical procedures.**
    - 3.2.S.4.4. Batch analyses**
    - 3.2.S.4.5. Justification of specification.**
  - 3.2.S.5. Reference standards or materials.**
  - 3.2.S.6. Container/closure system.**
  - 3.2.S.7. Stability**
    - 3.2.S.7.1. Stability summary and conclusions.**
    - 3.2.S.7.2. Post-approval stability protocol and stability commitment.**
    - 3.2.S.7.3. Stability data**
- 3.2.P. Finished medicinal product**
  - 3.2.P.1. Description and composition of the finished medicinal product**
  - 3.2.P.2. Pharmaceutical development**
    - 3.2.P.2.1. Composition of the finished medicinal product**
      - 3.2.P.2.1.1. Active substance(s).**
      - 3.2.P.2.1.2. Excipients.**
    - 3.2.P.2.2. Medicinal product.**
      - 3.2.P.2.2.1. Formulation development.**
      - 3.2.P.2.2.2. Overages.**
      - 3.2.P.2.2.3. Physicochemical and biological properties.**
  - 3.2.P.2.3 Manufacturing process development**
  - 3.2.P.2.4. Container/closure system.**
  - 3.2.P.2.5. Microbiological attributes.**
  - 3.2.P.2.6. Compatibility**
- 3.2.P.3. Manufacture of the finished medicinal product**
  - 3.2.P.3.1. Manufacturer(s)**
  - 3.2.P.3.2. Batch formula**
  - 3.2.P.3.3. Description of manufacturing process and process controls.**
  - 3.2.P.3.4. Controls of critical steps and intermediates.**
  - 3.2.P.3.5. Process validation and/or evaluation.**
- 3.2.P.4. Control of excipients**
  - 3.2.P.4.1. Specifications**
  - 3.2.P.4.2. Analytical procedures.**
  - 3.2.P.4.3. Validation of analytical procedures.**
  - 3.2.P.4.4. Justification of specifications.**

- 3.2.P.4.5. Excipients of human or animal origin.
- 3.2.P.4.6. Novel excipients.
- 3.2.P.5. Control of finished medicinal product
  - 3.2.P.5.2. Analytical procedures.
  - 3.2.P.5.3. Validation of analytical procedures.
  - 3.2.P.5.4. Batch analyses.
  - 3.2.P.5.5. Characterization of impurities.
  - 3.2.P.5.6. Justification of specification(s).
- 3.2.P.6. Reference standards and materials.
- 3.2.P.7. Container closure system.
- 3.2.P.8. Stability
  - 3.2.P.8.1. Stability summary and conclusion
  - 3.2.P.8.2. Post-approval stability protocol and stability commitment
  - 3.2.P.8.3. Stability data
- 3.2.A. Appendices:
  - 3.2.A.1. Facilities and equipment.
  - 3.2.A.2. Adventitious agents safety evaluation.
    - 3.2.A.2.1 For non-viral adventitious agents
    - 3.2.A.2.2 For viral adventitious agents
- 3.3. Literature references.

## **Module 4: Safety (nonclinical study reports)**

- 4.2.1. Pharmacology
  - 4.2.1.1. Primary pharmacodynamics
- 4.2.2. Pharmacokinetics:
  - 4.2.1.1. Primary pharmacodynamics
- 4.2.3. Toxicology
  - 4.2.3.1. Single-dose toxicity.
  - 4.2.3.2. Repeated dose toxicity.
  - 4.2.3.6. Local tolerance
  - 4.2.3.7. Other toxicity studies.
- Immunogenicity profile

## **Module 5: Efficacy (clinical study reports)**

- Protocol
- Recruitment details
- Informed consent document(s)
- Clinical trial site information
- Eligibility criteria
- 5.3. Clinical study reports:
  - 5.3.1. Reports of biopharmaceutical studies.
  - 5.3.2. Reports of studies pertinent to pharmacokinetics using human biomaterials
  - 5.3.3. Reports of human pharmacokinetic studies.
  - 5.3.4. Reports of human pharmacodynamic studies
  - 5.3.5. Reports of efficacy and safety studies.
- Statistics
- 5.3.6. Reports of post-registration experience.

**Testing of immunogenicity**

**5.4. Literature references.**

## **6. Pharmacovigilance plan**

**6.1 Pharmacovigilance plan (track and trace)**

**6.2 Recall plan**

**6.3 Plan for adverse reactions (ADR) reports**

**6.4 Plan to ensure quality of the product (defect, final formulation package)**

**6.5 Bar-coding method**

**6.6 Post approval stability protocol and stability commitments**

