

Biologics Comparability Assessment and Regulatory Strategy Training Course

13 – 17 June 2027
Muscat

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Ref: 2060_251198 **Date:** 13 – 17 June 2027 **Location:** Muscat **Fees:** 5700 Euro

Overview

Biologics Comparability Assessment and Regulatory Strategy Training Course is a one-week course for CMC, analytical, quality, manufacturing, and regulatory functions who leave with a Biologics Comparability Evidence File. Participants connect manufacturing change assessment, critical quality attributes, analytical comparability, functional characterization, stability evidence, and regulatory strategy through ICH Q5E principles. Agile Leaders Training Center presents biologics comparability assessment and regulatory strategy.

Who Should Attend

- Functions responsible for CMC change assessment and lifecycle submissions
- Teams responsible for analytical development, characterization, and method suitability
- Quality functions responsible for change control and product-quality evidence
- Process and manufacturing functions responsible for site, scale, equipment, or formulation changes
- Regulatory functions responsible for evidence strategy and authority interactions

The course assumes participants evaluate biological-product or manufacturing data at work and leaves biosimilar development, routine release testing, and laboratory method execution outside its scope.

Departments and Industries

The course supports departments and industries that govern biological products through manufacturing changes.

- Biopharmaceutical CMC and regulatory affairs functions
- Analytical development and product characterization teams
- Quality assurance, change control, and technical operations
- Biotechnology manufacturing and contract development organizations
- Advanced-therapy, vaccine, and therapeutic-protein organizations

Learning Objectives

By the end of this course, participants will be able to:

- Analyze manufacturing changes and product-knowledge risks
- Prioritize critical quality attributes and evidence tiers
- Evaluate structural, functional, impurity, and stability data
- Apply statistical methods to pre-change and post-change comparisons
- Build justified nonclinical and clinical bridging decisions
- Develop a comparability protocol and regulatory evidence file

Course Agenda

Day 1: Frame the Comparability Exercise

- ICH Q5E Comparability Principles Map
- Manufacturing Change Impact Assessment Matrix
- Product and Process Knowledge Evidence Map
- Critical Quality Attribute Risk-Ranking Method
- Pre-Change and Post-Change Lot Selection Plan

Day 2: Design the Analytical Evidence

- Structural Characterization Evidence Matrix
- Biological Function and Potency Assay Strategy
- Product-Related Substance and Impurity Comparison Grid
- Analytical Method Suitability Decision Tree
- Stability and Degradation-Pathway Comparison Plan

Day 3: Evaluate Comparability Data

- Quality Attribute Acceptance-Criteria Rationale
- Tiered Statistical Comparison Method
- Lot Variability and Reference-Range Analysis
- Difference Signal and Clinical-Relevance Assessment
- Residual Uncertainty and Evidence-Gap Register

Day 4: Build the Regulatory Strategy

- Quality-to-Nonclinical Evidence Escalation Model
- Clinical Bridging Decision Framework
- Comparability Protocol Structure and Governance
- Regulatory Interaction Question-and-Evidence Pack
- Comparability Assessment Report Traceability Matrix

Day 5: Practice Comparability Decisions

- Suggested Exercise: Classify a Manufacturing Change
- Suggested Exercise: Rank Critical Quality Attributes
- Suggested Exercise: Interpret an Analytical Difference
- Suggested Exercise: Defend a Bridging Decision
- Capstone Exercise: Present a Biologics Comparability Evidence File

Practical Exercises

The course uses suggested activities to turn manufacturing-change scenarios into traceable comparability decisions.

- Suggested activity: map a site-transfer or scale change to affected process parameters and quality attributes.
- Suggested activity: evaluate structural, functional, impurity, and stability results against a documented evidence strategy.
- Suggested activity: decide whether residual uncertainty requires additional quality, nonclinical, or clinical evidence.
- Suggested activity: assemble a protocol, report structure, and regulator-question response pack.

FAQs

Who suits biologics comparability assessment training, and what does it assume?

Biologics comparability assessment training suits professionals who already evaluate biological-product, process, analytical, quality, or regulatory evidence and need a structured method for manufacturing-change decisions.

How does biologics comparability assessment differ from biosimilar development training?

Biologics comparability assessment compares a manufacturer's product before and after a process change, while biosimilar development compares a proposed product with an external reference product.

When can analytical comparability support a manufacturing change?

Analytical comparability can support a change when structural, functional, impurity, stability, process, and method evidence adequately addresses the identified product-quality risks and residual uncertainty.

When does a biologics comparability exercise need bridging evidence?

Bridging evidence becomes relevant when quality data cannot resolve differences or their possible implications for safety and efficacy; the extent is justified case by case.

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What belongs in a biologics comparability protocol?

A biologics comparability protocol states the change, risk rationale, attributes, lots, methods, acceptance approach, statistical plan, stability evidence, decision rules, governance, and reporting path.

Conclusion

Participants take a Biologics Comparability Evidence File back to their organization. It links change risk, quality attributes, analytical results, uncertainty, bridging decisions, and regulatory documentation. The file changes disconnected studies into a traceable assessment route with defined evidence, decision rules, responsibilities, and review points.