

12th International Conference on **Genomics and Molecular Biology**
&
12th European Biosimilars Congress

April 15-17, 2019 Berlin, Germany

Biosimilars: Stability and quality considerations

Nariman A El-Ragehy, Maha A Hegazy, G Abdel Hamid and Samia Ali Tawfik
Cairo University, Egypt

Statement of the Problem: Biosimilars are biological medicinal products that contain a version of the active substance of an already authorized original biological medicinal product (reference medicinal products). They shall demonstrate similarity to the reference medicinal products in terms of quality characteristics, biological activity, safety, efficacy and stability.

Aim: The aim of this review is to discuss the relevant analytical reports that are concerned with the assessment of proposed products and reference products biosimilarity.

Findings: The approval of biosimilars is a highly regulated, complicated and detailed process. The European Medicines Agency (EMA), The United States (US) Food and Drug Administration (FDA) guidance documents stipulate that biosimilar manufacturers shall perform a series of extensive similarity assessments to demonstrate biosimilarity to the reference product, and ultimately gain regulatory approval or licensure.

Conclusion & Significance: Establishment of biosimilarity shall be based on the totality of evidence, through non-clinical and clinical studies. An increased awareness is needed to confirm that not only clinical studies can be used as an important tool in the development of biosimilars but also the analytical and stability evaluation is more sensitive in similarity assessment.

Samia.ali@pharma.cu.edu.eg