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**Biosimilars: Current market and role in oncology care****Sofia Konstantinidou, Papaspou A and Grapsa D**

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**B**iological products contain active substances coming from living cells and are usually large, complex proteins. They are used to treat many diseases such as cancer, rheumatoid arthritis, anaemia, renal failure and autoimmune diseases. However, due to their high cost, patient access is restricted, thus biosimilars came to the market. A biosimilar is defined by the United States Food and Drug Administration (FDA) as 'biological product that is highly similar to and has no clinically meaningful differences from an existing FDA-approved reference product in terms of safety, purity and potency<sup>1</sup>'. They increase treatment options, decrease healthcare costs and improve patients' access to very expensive therapies. Studies have proven that biosimilars offer significant cost savings to governments, which are

greatly needed in the healthcare sectors. Only minor differences are acceptable between biologics and their respective biosimilars. Currently, there are few biosimilars approved for cancer treatment, but as the patents of many biologics are expiring, many more are coming to the market. These include rituximab, bevacizumab, trastuzumab, marketed for indications such as lymphomas, leukaemia, lung or breast cancer. Erythropoiesis-Stimulating agents (ESAs) are widely used for chemotherapy-induced anaemia<sup>2</sup> and filgrastims for neutropenia respectively. Progression-free survival (PFS) and overall survival (OS) are usually used to measure the efficacy of biosimilars used in oncology<sup>3</sup>. The aim of this study is to provide a brief review of biosimilars, their perspectives in medical oncology and the current status of some clinical trials.

**Biography**

Sofia Konstantinidou is currently a PhD student at the Medical School, National and Kapodistrian University of Athens. She is a recipient of an Onassis Foundation Scholarship (G ZO 011-1/2018-2019) in Clinical Pharmacology-Oncology. She has participated in various conferences worldwide. She has published five articles in peer reviewed journals and one book chapter.

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