Incorporating Hematopoietic Growth Factor Biosimilars into the Treatment of Cancer: Best Practices for Oncology Pharmacists

PODCAST

Key References:

- Anand S, Al-Mondhiry J, Fischer K, Glaspy J. Epoetin alfa-epbx: a new entrant into a crowded market. A historical review of the role of erythropoietin stimulating agents and the development of the first epoetin biosimilar in the United States. Expert Rev Clin Pharmacol. 2021;14(1):1-8. doi:10.1080/17512433.2021.1863786
- Blackwell K, Semiglazov V, Krasnozhon D, et al. Comparison of EP2006, a filgrastim biosimilar, to the reference: a phase III, randomized, double-blind clinical study in the prevention of severe neutropenia in patients with breast cancer receiving myelosuppressive chemotherapy. *Ann Oncol*. 2015;26(9):1948-1953. doi:10.1093/annonc/mdv281
- Cuellar S, McBride A, Medina P. Pharmacists perspectives and considerations for implementation of therapeutic oncology biosimilars into practice. *Am J Health Syst Pharm*. 2019;76(21):1725-1738. doi:10.1093/ajhp/zxz190
- Foreman E. Biosimilars in supportive care. Curr Opin Oncol. 2020;32(4):282-288. doi:10.1097/CCO.00000000000000031
- Holcombe D. How biosimilar trends and issues in oncology can affect strategy for medical directors of purchasers, plans, and providers. *J Manag Care Med*. NAMCP Medical Directors Spotlight Guide: Biosimilars in Oncology 2021. Accessed October 28, 2021. http://jmcmpub.org/wp-content/uploads/2021/04/March2021.pdf
- Hoy SM. Pegfilgrastim-jmdb/MYL-1401H: a pegfilgrastim biosimilar. *BioDrugs*. 2019;33(1):117-120. doi:10.1007/s40259-019-00334-9
- Hoy SM. LA-EP2206: a pegfilgrastim biosimilar. *BioDrugs*. 2019;33(2):229-232. doi:10.1007/s40259-019-00348-3
- International Society of Oncology Pharmacy Practitioners. ISOPP global position on the use of biosimilars in cancer treatment and supportive care. October 4, 2019. Accessed October 31, 2021.
 - https://www.isopp.org/sites/default/files/news/files/ISOPP%20Global%20Position%20on%20the%20Use%20of%20Biosimilars.pdf
- National Comprehensive Cancer Network. NCCN clinical practice guidelines in oncology: Hematopoietic growth factors. V4.2021. May 20, 2021. Accessed October 31, 2021. https://www.nccn.org/professionals/physician_gls/pdf/growthfactors.pdf
- Yao HM, Ottery FD, Borema T, et el. PF-06881893 (Nivestym), a filgrastim biosimilar, versus US-licensed filgrastim reference product (US-Neupogen): pharmacokinetics, pharmacodynamics, immunogenicity, and safety of single or multiple subcutaneous doses in healthy volunteers. BioDrugs. 2019;33(2):207-220. doi:10.1007/s40259-019-00343-8

- Yang J, Yu S, Yang Z, et al. Efficacy and safety of supportive care biosimilars among cancer patients: A systematic review and meta-analysis. *BioDrugs*. 2019;33(4):373-389. doi:10.1007/s40259-019-00356-3
- Waller CF, Fanganna GM, Pennella EJ, et al. Randomized phase 3 efficacy and safety trial of proposed pegfilgrastim biosimilar MYL-1401H in the prophylactic treatment of chemotherapy-induced neutropenia. *Ann Hematol.* 2019;98(5):1217-1224. doi:10.1007/s00277-019-03639-5

Resources for Patients and Providers:

Biosimilars Council: A division of	https://biosimilarscouncil.org/biosimilars-toolkit/
the Association for Accessible	
Medicine	
Toolkit of resources (infographics,	
videos, whitepapers etc.) for	
patients, medical professionals,	
policymakers, and payers	
Food and Drug Administration	https://www.fda.gov/drugs/biosimilars/patient-materials
Infographics (English and Spanish)	
American Pharmacists Association	https://biosimilarscouncil.org/wp-
Patient pamphlet	content/uploads/2019/03/APhA Biosimilar Basics for Patients1.pdf
Academy of Managed Care	https://www.amcp.org/resource-center/biosimilars
Pharmacy	
Biosimilars resource center for	
health care professionals	