

Title:
Effectiveness and safety of switching to adalimumab biosimilar ABP 501 in Crohn's disease.

Authors:
Angelo Viscido, Giovanni Latella

DOI: 10.17235/reed.2020.7232/2020

Link: [PubMed \(Epub ahead of print\)](#)

Please cite this article as:
Viscido Angelo, Latella Giovanni. Effectiveness and safety of switching to adalimumab biosimilar ABP 501 in Crohn's disease.. Rev Esp Enferm Dig 2020. doi: 10.17235/reed.2020.7232/2020.



This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Accepted Article

CC 7232

Effectiveness and safety of switching to adalimumab biosimilar ABP 501 in Crohn's disease

Angelo Viscido and Giovanni Latella

Gastroenterology Unit. Department of Life, Health and Environmental Sciences. University of L'Aquila. L'Aquila, Italy

Authors' contributions

The article was conceived and written by Angelo Viscido. Giovanni Latella was involved in the writing and revision of the letter. All authors gave their final approval.

Correspondence: Angelo Viscido

e-mail: angelo.viscido@univaq.it

Keywords: Adalimumab. Biosimilar. ABP 501. Crohn's disease.

Dear Editor,

We read with great interest the article "Effectiveness and safety of adalimumab biosimilar ABP 501 in Crohn's disease: an observational study" by Ribaldone et al., which was recently published in your journal (1). The authors report the first real-life study of the adalimumab biosimilar ABP 501 in Crohn's disease (CD). The study investigated the short-term effectiveness and safety of ABP 501 in 87 patients with CD, 25 patients naïve to adalimumab and 62 switched from the adalimumab originator. A meaningful proportion of CD patients treated with ABP 501 showed clinical benefit with a satisfactory safety profile until the end of follow-up (1).

We would like to remark on the concept that a biosimilar, e.g. ABP 501, is guaranteed to be interchangeable with its originator by the European Medicines Agency (EMA). However, while the use of a biosimilar in naïve patients is generally accepted, a "forced switch" to a biosimilar in a patient successfully treated with the originator can be a matter of concern for many clinicians (2). ABP 501, like all the other biosimilars approved by EMA, underwent a rigorous step-wise demonstration of its similarity with the originator (2). First, *in vitro* assays demonstrated that ABP 501 has similar physicochemical properties and pharmacological activity respect to the originator

(3,4). Second, *in vivo* studies demonstrated similarity in the pharmacokinetics features (5). Finally, clinical randomized controlled studies demonstrated a similar efficacy, safety and immunogenicity (1,2). It is noteworthy that all the EMA approved biosimilars underwent the same step-wise rigorous controls.

In conclusion, switching from the originator to its biosimilar, whatever the type, is acceptable for both naïve and non-naïve patients because this approach is safe, efficacious and leads to a significant cost saving for the health care system.

References

1. Ribaldone DG, Caviglia GP, Pellicano R, et al. Effectiveness and safety of adalimumab biosimilar ABP 501 in Crohn's disease: an observational study. *Rev Esp Enferm Dig* 2020;112:195-200. DOI: 10.17235/reed.2020.6693/2019
2. Fiorino G, Caprioli F, Daperno M, et al. Use of biosimilars in inflammatory bowel disease: a position update of the Italian Group for the Study of Inflammatory Bowel Disease (IG-IBD). *Dig Liver Dis* 2019;51:632-9. DOI: 10.1016/j.dld.2019.02.004
3. Liu J, Eris T, Li C, et al. Assessing analytical similarity of proposed amgen biosimilar ABP 501 to adalimumab. *BioDrugs* 2016;30:321-38. DOI: 10.1007/s40259-016-0184-3
4. Velayudhan J, Chen YF, Rohrbach A, et al. Demonstration of functional similarity of proposed biosimilar ABP 501 to adalimumab. *BioDrugs* 2016;30:339-51. DOI: 10.1007/s40259-016-0185-2
5. Kaur P, Chow V, Zhang N, et al. A randomised, single-blind, single-dose, three-arm, parallel-group study in healthy subjects to demonstrate pharmacokinetic equivalence of ABP 501 and adalimumab. *Ann Rheum Dis* 2017;76:526-33. E-pub: Jul 27th, 2016. DOI: 10.1136/annrheumdis-2015-208914