

Merola, J. F. and McInnes, I. B. (2023) Questions about the BE COMPLETE trial - Authors' reply. *Lancet*, 401(10392), p. 1927. (doi: 10.1016/S0140-6736(23)00965-0)

The material cannot be used for any other purpose without further permission of the publisher and is for private use only.

There may be differences between this version and the published version. You are advised to consult the publisher's version if you wish to cite from it.

https://eprints.gla.ac.uk/301536/

Deposited on 12 July 2023

Enlighten – Research publications by members of the University of Glasgow
http://eprints.gla.ac.uk

Invited Correspondence

Reply to Correspondence on 'Bimekizumab in patients with active psoriatic arthritis and previous inadequate response or intolerance to tumour necrosis factor-a inhibitors: a randomised, double-blind, placebo-controlled, phase 3 trial (BE COMPLETE)'

Joseph F. Merola & Iain B. McInnes

Harvard Medical School, Brigham and Women's Hospital, Boston, MA, USA (JF. Merola MD); College of Medical Veterinary and Life Sciences, University of Glasgow, Glasgow, UK (Prof IB. McInnes FRCP).

Corresponding Author: Iain B. McInnes, iain.mcinnes@glasgow.ac.uk, MVLS College Office, Wolfson Medical School Building, University of Glasgow, University Avenue, Glasgow, G12 8QQ; +44 (0)1413303362.

Word Count: 285/400 Reference Count: 6

We thank our colleagues for their interest in the phase 3 BE COMPLETE study which demonstrated the efficacy and tolerability of bimekizumab in people with psoriatic arthritis (PsA) with prior inadequate response or intolerance to tumour necrosis factor-a inhibitors.¹

The correspondents raise the issue of adverse events. In both BE COMPLETE and its sister study BE OPTIMAL,² we describe increased rates of fungal infection compared with placebo, commensurate with previously reported rates in PsA trials of bimekizumab and indeed lower than those reported in psoriasis trials of bimekizumab.^{3,4} We continue to monitor fungal infection rates and severity closely in ongoing extension studies. Whilst it will be important to assess the effect of comorbidities on fungal infections, we point out that neither well-controlled cardiometabolic syndrome nor diabetes were excluded from these trials.^{1,2}

Regarding immunogenicity, assays for anti-drug antibodies (ADAb) and neutralising antibodies (NAb) were conducted in both studies to consider pharmacokinetics, safety, and efficacy by ADAb and NAb subgroups, as well as by methotrexate use.

We agree on the importance of increased diversity in clinical trials in psoriatic disease. Underrepresentation of minoritised racial groups has also been noted in trials of other inflammatory disease states and connective tissue diseases. This is often due to the populations attending trial centres, which may not represent the diversity in the general population. Racial diversity may also vary in the populations of different countries recruiting to multi-centre trials. Going forward it will be important to confirm the efficacy and tolerability of bimekizumab across more diverse, representative patient populations, in clinical trials as well as in real-world studies. In line with this, UCB Pharma has committed to increasing community engagement and greater diversity in clinical trial recruitment, to advance health equity.

References

1. Merola JF, Landewé R, McInnes IB, et al. Bimekizumab in patients with active psoriatic arthritis and previous inadequate response or intolerance to tumour necrosis factor-a inhibitors: a randomised, double-blind, placebo-controlled, phase 3 trial (BE COMPLETE). *Lancet* 2023; **401**: 38–48.

- 2. McInnes IB, Asahina A, Coates LC, et al. Bimekizumab in patients with psoriatic arthritis, naive to biologic treatment: a randomised, double-blind, placebo-controlled, phase 3 trial (BE OPTIMAL). *Lancet* 2023; **401**: 25–37.
- 3. Coates LC, McInnes IB, Merola JF, et al. Safety and efficacy of bimekizumab in patients with active psoriatic arthritis: Three-year results from a phase IIb randomized controlled trial and its open-label extension study. *Arthritis Rheumatol* 2022; **74:** 1959–70.
- 4. Thaçi D, Vender R, de Rie MA, et al. Safety and efficacy of bimekizumab through 2 years in patients with moderate-to-severe plaque psoriasis: longer-term results from the BE SURE randomized controlled trial and the open-label extension from the BE BRIGHT trial. *Br J Dermatol* 2023; **188**: 22–31.
- 5. Strait A, Castillo F, Choden S, et al. Clinical Trials in Rheumatoid Arthritis Have Inadequate Racial/Ethnic, Gender and Age Diversity: A Systematic Review [abstract]. *Arthritis Rheumatol* 2019; **71** (suppl 10).
- UCB Pharma. Diversity in Clinical Trials: UCB Strategy. 2022. https://www.ucb.com/sites/default/files/2022-11/UCB White Paper Diversity in Clinical trials 2.0.pdf (accessed 3 February 2023).

Author Disclosures

JFM is a consultant and/or investigator for AbbVie, Amgen, Biogen, BMS, Dermavant, Eli Lilly, Janssen, LEO Pharma, Pfizer, Novartis, Regeneron, Sanofi, Sun Pharma, and UCB Pharma.

IBM has received consulting fees and honoraria from AbbVie, AstraZeneca, BMS, Boehringer Ingelheim, Cabaletta, Causeway Therapeutics, Celgene, Evelo, Janssen, Lilly, MoonLake, Novartis, and UCB Pharma; Research support from BMS, Boehringer Ingelheim, Celgene, Janssen, Novartis, and UCB Pharma.