Tools for managing IBD in obese patients: Get JAK in the box!

Sir,

We read with interest the review article by Johnson and Loftus discussing the impact of obesity on inflammatory bowel disease (IBD) patients.^[1] The authors discussed the negative impact obesity has on therapeutic response to monoclonal antibodies in this patient population, including the "TNF Sink," resulting in lower drug trough levels and suboptimal clinical response. However, the potential beneficial rule of small molecules in these patients warrants highlighting. The first class of these molecules to be used in IBD is the JAK inhibitors tofacitinib, the pharmacokinetics of which is not affected by the patient's body weight.^[2] In a post hoc analysis of the OCTAVE clinical program, baseline body mass index (BMI) had no bearing on the proportion of patients achieving efficacy endpoints.^[3] In practice, clinicians might be limited to prescribing tofacitinib to bio-naïve patients, as its current approval is for those in whom treatment with conventional therapy and monoclonal antibodies failed.

The situation may change with the introduction of other agents of this class. Filgotinib, a highly selective JAK1 inhibitor, showed good efficacy in ulcerative colitis (UC) patients in whom conventional therapy and/or biologics failed. Data from the phase III SELECTION trial showed a favorable safety profile.^[4] Similar to filgotinib, upadacitinib showed promising results in the phase II trials in UC and Crohn's disease (CD), UACHIEVE, and CELEST.^[5,6] The impact of body weight on the pharmacokinetics of these agents is expected to be similar to tofacitinib.^[7] Other small molecules such as S1P modulators are also thought to be unaffected by body weight. In short, with the expanding therapeutic armamentarium in IBD and the move toward a personalized approach to treatment, clinicians could well consider the use of small molecules in obese IBD patients.

Financial support and sponsorship Nil.

Conflicts of interest

There are no conflicts of interest.

Hanan M. Alrammah, Hanin AlMubayedh¹, Turki AlAmeel

Department of Medicine, King Fahad Specialist Hospital, Dammam, ¹College of Clinical Pharmacy, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia

> Address for correspondence: Dr. Turki AlAmeel, P.O Box 56590, Riyadh 11564, Saudi Arabia. E-mail: talameel@gmail.com

REFERENCES

- Johnson AM, Loftus EV. Obesity in inflammatory bowel disease: A review of its role in the pathogenesis, natural history, and treatment of IBD. Saudi J Gastroenterol 2021;27;183-90.
- Singh S, Picardo S, Seow CH. Management of inflammatory bowel diseases in special populations: Obese, Old, or Obstetric. Clin Gastroenterol Hepatol 2020;18:1367-80.
- Farraye FA, Qazi T, Kotze PG, Moore GT, Mundayat R, Lawendy N, et al. The impact of body mass index on efficacy and safety in the tofacitinib OCTAVE ulcerative colitis clinical programme. Aliment Pharmacol Ther 2021;54:429-40.
- Feagan BG, Danese S, Loftus EV Jr, Vermeire S, Schreiber S, Ritter T, et al. Filgotinib as induction and maintenance therapy for ulcerative colitis (SELECTION): A phase 2b/3 double-blind, randomised, placebo-controlled trial. Lancet 2021;397:2372-84.
- Sandborn WJ, Ghosh S, Panes J, Schreiber S, D'Haens G, Tanida S, *et al.* Efficacy of upadacitinib in a randomized trial of patients with active ulcerative colitis. Gastroenterology 2020;158:2139-49.e14. Erratum in: Gastroenterology 2020;159:1192.
- Sandborn WJ, Feagan BG, Loftus EV Jr, Peyrin-Biroulet L, Van Assche G, D'Haens G, *et al.* Efficacy and safety of upadacitinib in a randomized trial of patients with Crohn's disease. Gastroenterology 2020;158:2123-38.e8.
- D'Amico F, Fiorino G, Furfaro F, Allocca M, Roda G, Loy L, et al. Patient's profiling for therapeutic management of inflammatory bowel disease: A tailored approach. Expert Rev Gastroenterol Hepatol 2020;14:765-73.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code:	Website:
	www.saudijgastro.com
	DOI: 10.4103/sjg.sjg_439_21

How to cite this article: Alrammah HM, AlMubayedh H, AlAmeel T. Tools for managing IBD in obese patients: Get JAK in the box!. Saudi J Gastroenterol 2021;27:316.

© 2021 Saudi Journal of Gastroenterology | Published by Wolters Kluwer - Medknow