

## Letter: SARS-CoV-2 infection in two IBD patients treated with dual targeted therapy

EDITORS,

We read with interest the review by Al-Ani addressing the management of IBD patients during the current COVID-19 pandemic.<sup>1</sup> Since its beginning, the wide spread SARS-CoV-2 infection has represented a major concern for IBD patients and their physicians, due to the unknown implications of immunomodulatory therapies on the course of the infection. However, earliest experiences from the SECURE-IBD registry already suggested that comorbidities, increasing age and chronic corticosteroid use—but not anti-TNF treatment—were the main factors associated with unfavourable outcomes.<sup>2</sup> Furthermore, a prospective Italian study showed that active IBD was associated with worse outcomes in patients with SARS-CoV-2 infection.<sup>3</sup> In the last work from the SECURE-IBD registry, Ungaro and colleagues showed that chronic corticosteroids, mesalazine (mesalamine) and thiopurines—but not biologics of any class—correlated with an increased risk of severe COVID-19.<sup>4</sup> Comprehensively, these lines of evidence support the idea that, in this era of SARS-CoV-2 pandemic, IBD control should probably be prioritised over theoretical risks of more severe COVID-19 and complications associated with biologics.

In the last few years, dual targeted therapy (DTT) has been selectively used in complex IBD patients.<sup>5</sup> Whether DTT might be associated with an increased risk of SARS-CoV-2 infection or more severe COVID-19 manifestations, compared to biologic monotherapy, is unknown. In our clinic, 11 patients are currently receiving DTT. Here, we report two patients with Crohn's disease (CD) treated with DTT who tested positive for SARS-CoV-2. Both discontinued biologic therapy while positive and resumed it after seroconversion. The first patient is a 49-year-old woman treated with adalimumab (last administration November 11th) and vedolizumab (last infusion November 3rd). She tested positive for SARS-CoV-2 on November 12th. She developed fever (maximum temperature 38°C), arthralgias and mild respiratory insufficiency requiring transient domiciliary oxygen therapy. Her symptoms resolved after 9 days; she tested negative at the second swab, on December 3rd (duration of positivity: 21 days). The second patient is a 36-year-old woman receiving adalimumab (last administration November 5th) and vedolizumab (last administration November 11th). She tested positive for SARS-CoV-2 on November 13th. She was asymptomatic at the time and developed

no respiratory symptoms afterwards; however, after 2 weeks, she had diarrhoea, possibly related to active IBD or gastrointestinal manifestations of COVID-19. She finally tested negative, at her second swab, on December 7th (duration of positivity: 25 days).

Both patients had viral positivity duration longer than 20 days, compared to the median reported in the general population (12 days).<sup>6,7</sup> One patient developed respiratory symptoms, while the other only had gastrointestinal symptoms. Neither required hospitalisation and did not have severe complications of COVID-19. Based on these data, we cannot exclude that DTT might increase the risk of contracting the infection or prolong the duration of viral positivity by reducing virus clearance. However, the overall mild course of disease is reassuring and does not suggest that combination of biologics is associated with worse outcomes in IBD patients.

### ACKNOWLEDGEMENTS

*Declaration of personal interests:* The authors declare the following conflict of interests: Giuseppe Privitera received consultancy fees from Alphasigma. Daniela Pugliese received speaker fees from AbbVie, MSD, Takeda and Janssen, Pfizer. Franco Scaldaferrri: advisory board for Abbvie, Janssen, MSD, Sanofi, Takeda. Alessandro Armuzzi: consulting and/or advisory board fees from AbbVie, Allergan, Amgen, Biogen, Bristol-Myers Squibb, Celgene, Celltrion, Ferring, Gilead, Janssen, Lilly, MSD, Mylan, Pfizer, Samsung Bioepis, Sandoz, Takeda; lecture and/or speaker bureau fees from AbbVie, Amgen, Biogen, Ferring, Gilead, Janssen, MSD, Mitsubishi-Tanabe, Nikkiso, Pfizer, Sandoz, Samsung Bioepis, Takeda; and research grants from MSD, Pfizer, Takeda.

### LINKED CONTENT

This article is linked to Al-Ani et al papers. To view these articles, visit <https://doi.org/10.1111/apt.15779> and <https://doi.org/10.1111/apt.16297>

### FUNDING INFORMATION

This work was not supported by any financial contribution.

Giuseppe Privitera<sup>1</sup>

Daniela Pugliese<sup>2</sup>

Franco Scaldaferrri<sup>2</sup>

Alessandro Armuzzi<sup>1,2</sup> 

AP&T correspondence columns are restricted to letters discussing papers that have been published in the journal. A letter must have a maximum of 500 words, may contain one table or figure, and should have no more than 10 references. It should be submitted electronically to the Editors via <http://mc.manuscriptcentral.com/apt>.

<sup>1</sup>Dipartimento Universitario di Medicina e Chirurgia  
Traslationale, Università Cattolica del Sacro Cuore, Rome, Italy

<sup>2</sup>CEMAD – IBD UNIT - Unità Operativa Complessa di Medicina Interna e Gastroenterologia, Dipartimento di Scienze Mediche e Chirurgiche, Fondazione Policlinico Universitario "A. Gemelli"  
IRCCS, Rome, Italy  
Email: [alessandro.armuzzi@policlinicogemelli.it](mailto:alessandro.armuzzi@policlinicogemelli.it)

#### ORCID

Alessandro Armuzzi  <https://orcid.org/0000-0003-1572-0118>

#### REFERENCES

1. Al-Ani AH, Prentice RE, Rentsch CA, et al. Review article: prevention, diagnosis and management of COVID-19 in the IBD patient. *Aliment Pharmacol Ther.* 2020;52:54-72.
2. Brenner EJ, Ungaro RC, Geary RB, et al. Corticosteroids, but not TNF antagonists, are associated with adverse COVID-19 outcomes in patients with inflammatory bowel diseases: results from an international registry. *Gastroenterology.* 2020;159:481-491.e3.
3. Bezzio C, Saibeni S, Variola A, et al. Outcomes of COVID-19 in 79 patients with IBD in Italy: an IG-IBD study. *Gut.* 2020;69:1213-1217.
4. Ungaro RC, Brenner EJ, Geary RB, et al. Effect of IBD medications on COVID-19 outcomes: results from an international registry. *Gut.* 2020. [Epub ahead of print]. <https://doi.org/10.1136/gutjnl-2020-322539>
5. Privitera G, Onali S, Pugliese D, et al. Dual Targeted Therapy: a possible option for the management of refractory inflammatory bowel disease. *J Crohns Colitis.* 2020. [Epub ahead of print]. <https://doi.org/10.1093/ecco-jcc/jjaa149>
6. Lin A, He Z-B, Zhang S, Zhang J-G, Zhang X, Yan W-H. Early risk factors for the duration of severe acute respiratory syndrome coronavirus 2 viral positivity in patients with coronavirus disease 2019. *Clin Infect Dis.* 2020;71:2061-2065.
7. Young BE, Ong SWX, Kalimuddin S, et al. Epidemiologic features and clinical course of patients infected with SARS-CoV-2 in Singapore. *JAMA.* 2020;323:1488-1494.