



## Letter to the Editor

# New Promising Combo Therapy in Inflammatory Bowel Diseases Refractory to Anti-TNF Agents: Cyclosporine Plus Vedolizumab

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We read with great interest the recent paper by Tal Engel *et al.* who provided a systematic review of the efficacy and safety of vedolizumab [VDZ] in inflammatory bowel disease [IBD] reported by real-world studies.<sup>1</sup> The review confirmed a rate of clinical remission varying between 22 and 25% at week 6 with an increase up to week 14 and during the maintenance phase. It is also well known that in patients exposed to anti-tumour necrosis factor [anti-TNF] drugs, the rate of remission is lower than in anti-TNF naïve patients. Therefore, combining VDZ with a rapid-onset drug is necessary in severely active disease refractory to anti-TNF agents. Cyclosporine is an effective 'rescue therapy' which may serve as a rapidly acting 'bridge' to maintenance therapy with slowly acting agents such as thiopurines in patients with severe ulcerative colitis [UC]. However, the incidence of relapse is high after cyclosporine is discontinued and the occurrence of drug-related side effects is also significant, limiting the long-term use of the drug.<sup>2</sup> Recently, Buer *et al.* published their first experiences with the novel combination therapy VDZ and anti-TNF- $\alpha$ , which seems to have a comparable safety profile to therapy with anti-TNF- $\alpha$  and immunomodulators.<sup>3</sup> VDZ was registered in Hungary in 2016. Here, we report our experiences with the use of combined cyclosporine and VDZ therapy in active IBD that had failed to respond to anti-TNF therapy. Six of 106 VDZ-treated patients (four colonic Crohn's disease [CD], two UC) diagnosed with moderate-to-severe IBD requiring rescue therapy received intravenous cyclosporine of 4 mg/kg for 5 days following oral treatment for a mean of 69 days before initiating VDZ. Late initiation of VDZ therapy was due to the waiting time of the evaluation process. Cyclosporine levels were closely monitored and adjusted if needed. Mean values of CD activity index and partial Mayo score were 276 and 8 respectively at the beginning of cyclosporine therapy. Three patients received a concomitant immunomodulator and three showed azathioprine intolerance. Combination therapy was effective as induction in all cases and cyclosporine was discontinued after a mean of 130 days. Side-effects of cyclosporine occurred in one patient leading to discontinuation of the drug after induction. After the induction phase of VDZ, one patient underwent colectomy because of severe CD. Colonoscopy

after VDZ induction showed mucosal healing in one patient, significant regression in one patient and moderate regression of mucosal inflammation in three patients. On the basis of our data we consider that combination cyclosporine and VDZ therapy is a beneficial and safe option in moderately-to-severely active IBD with colonic localization. This combination can result in a faster onset of action with a more potent efficacy on maintenance of remission with a significantly lower cost than a combination of anti-TNF agents with VDZ.

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## Conflict of Interest

The authors have no conflict of interest to declare.

## Author Contributions

KS: data extraction and drafting of the manuscript; TM and KF: data analysis, drafting and supervision of the manuscript. All authors reviewed and approved the final version of the manuscript.

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