Introduction

Vedolizumab, a gut-selective, humanised, monoclonal α4β7 integrin antibody, is available as an intravenous (IV) formulation to adult patients (pts) with moderately to severely active ulcerative colitis (UC) or Crohn’s disease. We present the phase 3 results on a new subcutaneous (SC) formulation for maintenance treatment in UC.

Methods

A randomised, double-blind, double-dummy, placebo-controlled, phase 3 trial (NCT02611830) assessed vedolizumab SC as maintenance treatment in adult pts with active UC. An open-label induction with vedolizumab IV (300 mg) was administered at Weeks (Wks) 0 and 2, with disease evaluation at Wk 6. Pts with a clinical response at Wk 6 (complete Mayo score reduction of ≥3 points and ≥30% from baseline [Wk 0] plus reduction in rectal bleeding subscore of ≥1 point or absolute subscore of ≤1 point) were randomised (2:1:1) to receive vedolizumab SC (108 mg every 2 wks), or vedolizumab IV (300 mg every 8 wks) or placebo for up to 52 wks. The primary objective was to assess clinical remission (defined as complete Mayo score of ≤2 points and no individual subscore >1 point) with vedolizumab SC versus placebo at Wk 52. Between-group treatment effects were compared using the Cochran-Mantel-Haenszel test with stratification by study randomisation factors (concomitant corticosteroid use, Wk 6 remission status, and prior anti-TNFα failure or immunomodulator use).

Results

A total of 383 pts received open-label vedolizumab IV induction. Of those, 216 (56.4%) experienced clinical response at Wk 6 and entered the maintenance phase. At Wk 52, 46.2% of pts on vedolizumab SC vs 14.3% on placebo were in clinical remission (p<0.001). Similarly, 42.6% of vedolizumab IV pts were in clinical remission at Wk 52. Subgroup analysis showed clinical remission rates were significantly higher with vedolizumab SC vs placebo in both anti-TNFα-naïve pts (vedolizumab 53.7% vs placebo 18.9%, p<0.001) and anti-TNFα-failure pts (vedolizumab 33.3% vs placebo 5.3%, p=0.023). Injection-site reactions were mild (9.4% vedolizumab SC vs 0% placebo pts) none leading to discontinuation. Adverse event (AE) rates, including severe AEs and infections, were similar in the vedolizumab SC and IV groups. The rate of anti-vedolizumab antibodies in the vedolizumab SC group was 5.7%, consistent with 5.6% for vedolizumab IV.

Conclusions

Vedolizumab SC 108 mg every 2 wks was efficacious, generally safe and well-tolerated as maintenance therapy in UC pts following induction with vedolizumab IV 300 mg showing an efficacy and safety profile similar to that of the currently available IV formulation.