2022. HUBBLE

Phase 2/VDZ/ paediatric IBD

Pharmacokinetics, Safety and Efficacy of Intravenous Vedolizumab in Paediatric Patients with Ulcerative Colitis or Crohn's Disease: Results from the Phase 2 HUBBLE Study

Phase 2, dose-ranging, trial evaluating safety and efficacy of VDz in paediaatric population. Patients with moderate-severe UC or CD and body weight over 10kg were randomized by weight to receive low (<30kg=100mg, ≥30kg=150mg) or high (<30kg=200, ≥30kg=300mg) at w0,2,6 and 14.

Primary endpoint: Pharmacokinetic parameters (area under the serum concentration curve, average concentration, observed serum concentration at the end of the dosing interval).

Results:

- In almost all indication and weight groups, area under the concentration curve and average concentration increased 2 fold from low to high dose.
- W14, clinical responseoccurred in 40% and 69.2% of UC and 33.3% and 63.6% in CD in both weight goups.
- Clinical responders with UC had higher trough concentration vs non responders, this trend was not observed in CD

Conclusion:

Vedolizumab exposure increased in an approximate dose-proportional manner. No clear dose–response relationship was observed in this limited cohort. No new safety signals were identified.

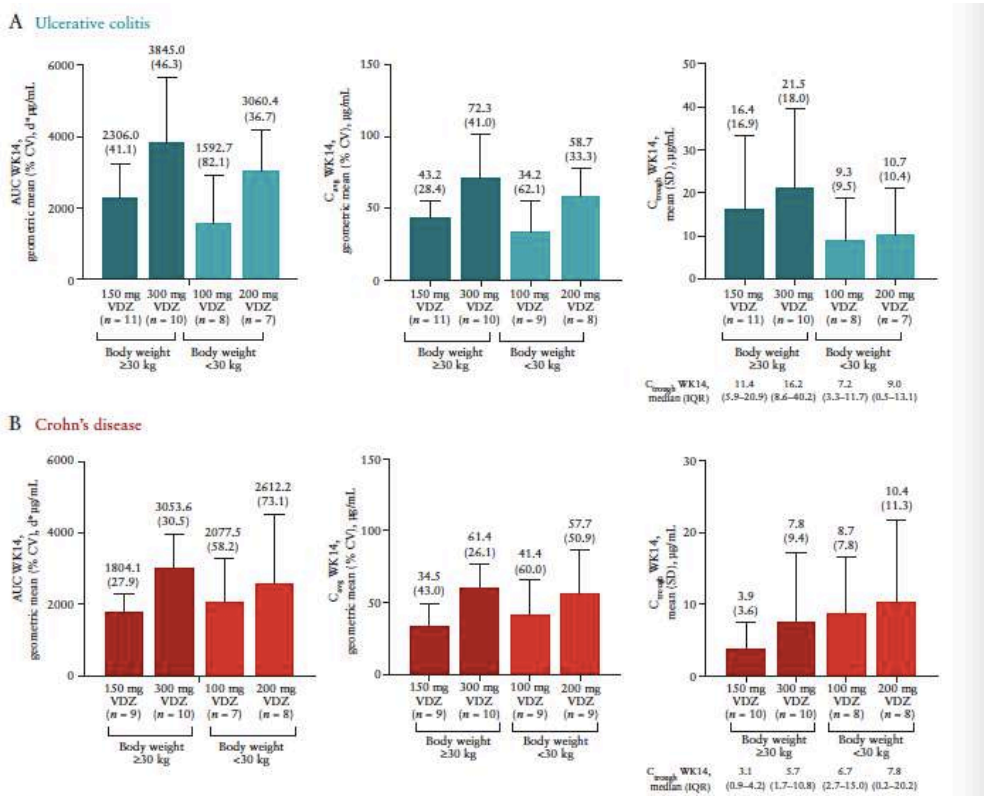

Figure 2. Pharmacokinetic parameters of VDZ AUC, C_{avg} and C_{trough} at Week 14 in patients with [A] ulcerative colitis and [B] Crohn's disease [pharmacokinetic analysis set]. $N = 88$; one patient was randomized but not treated. The pharmacokinetic analysis set was defined as all patients who received at least one dose of VDZ and had at least one measurable concentration of VDZ. AUC, area under the serum concentration curve; C_{avg}, average concentration; C_{trough}, observed serum concentration at the end of the dosing interval; CV, coefficient of variation; IQR, interquartile range; SD, standard deviation; VDZ, vedolizumab; WK, Week.

Hyams JS et al. J Crohns Colitis. 2022; 16:1243-1254