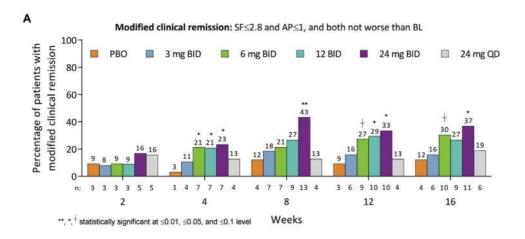
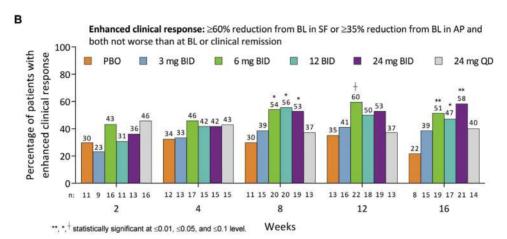
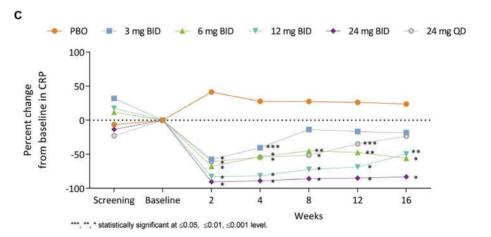
S016 Oral presentations







Abstract OP022 – Figure. Proportion of patients with (A) modified clinical remission; (B) enhanced clinical response; (C) mean change in hsCRP over time. Modified clinical remission was analysed in patients with SF  $\geq$  4, AP  $\geq$  2.0 at BL.

## **OP023**

A phase 3b open-label multicentre study (VERSIFY) of the efficacy of vedolizumab on endoscopic healing in moderately to severely active Crohn's disease (CD)

S. Danese<sup>1\*</sup>, B. Feagan<sup>2</sup>, W. Sandborn<sup>3</sup>, J.-F. Colombel<sup>4</sup>, S. Vermeire<sup>5</sup>, S. Jones<sup>6</sup>, K. Brennan<sup>6</sup>, J. Bornstein<sup>7</sup>

<sup>1</sup>Humanities University, IBD Center, Humanitas Clinical and Research Center, Rozzano, Milan, Italy, <sup>2</sup>University of Western Ontario, Robarts Clinical Trials, London, Ontario, Canada, <sup>3</sup>University of California, Inflammatory Bowel Disease Center, Division of Gastroenterology, San Diego, USA, <sup>4</sup>Icahn School of Medicine at Mount Sinai, Department of Gastroenterology, New York, NY, USA, <sup>5</sup>University Hospitals Leuven, Department of Gastroenterology and Hepatology, Leuven, Belgium, <sup>6</sup>Europe Development Centre, Takeda

R&D, London, UK, <sup>7</sup>Takeda Pharmaceuticals International Co., Cambridge, MA, USA

Background: Vedolizumab (VDZ) is a gut-selective humanised immunoglobulin G1 monoclonal antibody that prevents the trafficking of T-lymphocytes into the gastrointestinal submucosa by antagonising the interaction of alpha4beta7 integrin with its ligand, mucosal addressin cell adhesion molecule 1 (MAdCAM-1).¹ VDZ has demonstrated statistically significant differences in clinical remission from placebo in patients (patients) with moderately to severely active Crohn's disease (CD),² but endoscopic healing was not previously assessed. The present study evaluated the effect of VDZ on endoscopic remission and healing in patients with CD.

Methods: Patients with moderately to severely active CD (≥3 months; CD Activity Index [CDAI] 220-450; Simple Endoscopic Score for CD [SES-CD] ≥7; ≥1 mucosal ulceration on centrally read endoscopy) who had previously experienced treatment failure with corticosteroids, immunomodulators, and/or at least one tumour necrosis factor-alpha (TNF) antagonist were enrolled. Patients received VDZ 300 mg intravenously at weeks 0, 2, 6, and then every 8 weeks for 26 weeks, followed by a 26-week treatment extension period. The primary endpoint was endoscopic remission (SES-CD ≤4) at week 26, assessed by centrally read ileocolonoscopy. Key secondary endpoints included endoscopic response (SES-CD ≥50% reduction from baseline) and complete endoscopic healing (absence of ulcerations) at week 26. Subgroup analyses stratified by TNF antagonist exposure status were performed for all endpoints and by disease severity for endoscopic remission only.

Results: Of the 101 patients enrolled, 55% had previously failed at least one TNF antagonist (TNF-F), and 46% were categorised as having severe endoscopic activity at entry (SES-CD score of >15). Endoscopic remission rates at week 26 were 12% overall, 20% in TNF antagonist naïve (TNF-N), and 6% in TNF-F patients, respectively (Table 1). Endoscopic remission at week 26 was achieved in 17% of patients with moderate endoscopic activity (SES-CD score of 7–15) compared with 7% of patients with severe disease. Endoscopic response and complete endoscopic healing rates at week 26 are shown in Table 1.

Table 1. Endoscopic outcomes at week 26 by TNF antagonist status.

	Overall (N=101)	TNF-N (n=46)	TNF-F (n=55)
Endoscopic remission, %	12	20	6
Endoscopic response, %	25	28	22
Complete endoscopic healing, %	15	24	7

Abbreviations: TNF, tumour necrosis factor alpha; TNF-F, TNF antagonist failure; TNF-N; TNF antagonist naïve.

Conclusions: VDZ demonstrated the ability to induce endoscopic remission and healing in a refractory population. TNF-N patients were more likely to achieve endoscopic remission and healing than those with previous treatment failure to a TNF antagonist.

## References

- Soler D, et al. The binding specificity and selective antagonism of vedolizumab, an anti-α4β7 integrin therapeutic antibody in development for inflammatory bowel diseases. J Pharmacol Exp Ther, 2009:330;864--75, 330.
- Sandborn WJ, et al. Vedolizumab as induction and maintenance therapy for Crohn's disease. N Engl J Med, 2013;369:711–21.

## **OP024**

## Long-term safety and efficacy of the anti-MAdCAM monoclonal antibody SHP647 for the treatment of Crohn's disease: the OPERA II study

G.R. D'Haens<sup>1\*</sup>, W. Reinisch<sup>2</sup>, S.D. Lee<sup>3</sup>, D. Tarabar<sup>4</sup>, E. Louis<sup>5</sup>, M. Kłopocka<sup>6</sup>, J. Klaus<sup>7</sup>, S. Schreiber<sup>8</sup>, D.I. Park<sup>9</sup>, X. Hébuterne<sup>10</sup>, F. Cataldi<sup>11</sup>, A. Banerjee<sup>12</sup>, K. Gorelick<sup>13</sup>, W.J. Sandborn<sup>14</sup> <sup>1</sup>Academic Medical Centre, Amsterdam, The Netherlands, <sup>2</sup>Medical University of Vienna, Vienna, Austria, 3University of Washington, Seattle, USA, 4Clinic of Gastroenterology and Hepatology, Military Medical Academy, Belgrade, Serbia, 5University Hospital CHU of Liège, Liège, Belgium, 6Nicolaus Copernicus University, Collegium Medicum in Bydgoszcz, Bydgoszcz, Poland, <sup>7</sup>Universitatsklinikum Ulm, Ulm, Germany, 8University Hospital Schleswig-Holstein, Christian-Albrechts-University, Kiel, Germany, 9Kangbuk Samsung Hospital, Sungkyunkwan University, Seoul, South Korea, 10 Université de Nice Sophia Antipolis, Hôpital de l'Archet, Nice, France, <sup>11</sup>Shire, Lexington, USA, <sup>12</sup>Pfizer, Cambridge, USA, <sup>13</sup>Zymo Consulting Group, Newtown Square, USA, 14University of California San Diego, La Jolla, USA

Background: Despite available treatments, patients with Crohn's disease (CD) often experience symptoms and complications of uncontrolled intestinal inflammation. SHP647 is a fully human  $IgG2\kappa$  anti-MAdCAM monoclonal antibody, in development for induction and maintenance of remission in patients with CD and ulcerative colitis. OPERA II was a 72-week, multicentre, open-label, phase 2 extension study (NCT01298492), designed to assess the long-term safety and efficacy of SHP647 in patients with moderate to severe CD.

Methods: Included patients had completed 12 weeks' treatment (placebo or 22.5 mg, 75 mg or 225 mg s.c. SHP647) in OPERA I (NCT01276509), or had a clinical response (≥3-point decrease in Harvey Bradshaw Index [HBI] score) to 225 mg SHP647 in the open-label study, TOSCA (NCT01387594). Patients received SHP647 (75 mg, s.c.) every 4 weeks from baseline to week 72, and were followed up monthly for a further 6 months. Dose deescalation to 22.5 mg owing to intolerance/AEs, or escalation to 225 mg owing to clinical deterioration/poor response, was allowed as judged by the investigator. Primary endpoints were frequency of AEs, AEs leading to withdrawal and SAEs. HBI scores were used to define remission (score <5) and assessed as exploratory efficacy measures.

Results: In total, 268 patients (mean age 36.5 years; 56.3% women) were enrolled and entered the treatment period; 149 completed the study. Mean ± SD HBI score at OPERA II baseline was 4.9 ± 3.01. A total of 1150 and 461 AEs were reported during the treatment and follow-up periods, respectively. The most common treatmentrelated AEs during treatment were nasopharyngitis (5.6%), arthralgia (6.0%), and headache (5.2%). No patient experienced progressive multifocal leukoencephalopathy. Eighty patients experienced SAEs; these were considered treatment-related in 10 patients. Among patients who had AEs leading to discontinuation (n =54) the most common AE was CD flares. Two patients died: one (75 mg) of multiple organ failure after postoperative aspiration following a resection of the terminal ileum. The second (225 mg) died of metastatic neoplasm of unknown primary, with adenocarcinoma identified on cytology. Neither death was considered drug-related. HBI remission and response rates showed no unexpected decay over time (Figure 1).