



Abstract P110 Figure 1 Model schematic CDAI, Crohn's disease activity index

UK clinical guidelines, consisting of sequences of immunomodulator followed by biologic upon relapse ('step-up' treatment), 2) targeted therapy guided by PredictSURE, whereby patients identified as high-risk receive sequences of anti-TNF biologic treatment followed by other biologic classes upon relapse ('top-down' treatment), figure 1. Parameters were informed by patient data from PredictSURE clinical studies and the literature.

Results Top-down treatment guided by PredictSURE resulted in an incremental cost-effectiveness ratio (ICER) of £7,179 per quality-adjusted life year (QALY), with £1,852 incremental costs and 0.258 incremental QALYs vs. standard of care generated over a 15-year time horizon. Additional costs relating to earlier biologic use were offset by reductions in the costs of flares, hospitalisations and surgery. Incremental QALYs were driven by increased time spent in remission and improved quality of life from reduced flares and surgery. The model was most sensitive to the time horizon, rates of mucosal healing on top-down vs. step-up therapy, the costs of hospitalisation and the costs and quality of life in the severe disease health state.

Conclusion Modelling shows that upfront use of biologic guided by PredictSURE could substantially improve clinical outcomes for high-risk patients by increasing remission rates and reducing flares, surgery and treatment escalations. The ICER for PredictSURE was well below the £20-£30 k/QALY threshold used by the UK National Institute for Health and Care Excellence (NICE). Top-down treatment guided by PredictSURE would not only represent a treatment paradigm shift for CD patients but would also be a highly cost-effective use of resources in the UK National Health Service.

Introduction This study evaluated corticosteroid and antibiotic prescribing during the first 12 months of first-line biologic therapy in patients with ulcerative colitis (UC) initiated on vedolizumab (VDZ) compared with patients initiated on anti-tumour necrosis factor- α (anti-TNF) agents.

Methods A multicentre, retrospective observational study was conducted in six United Kingdom secondary care centres. Eligible consenting patients were aged ≥ 18 years at initiation, without primary fistulising disease or acute severe disease. Patients were matched for age, gender, Montreal classification of disease extent and steroid use at initiation.

Results The study included 56 patients initiated on VDZ and 56 patients initiated on anti-TNF (table 1). During the overall 12 month post-initiation observation period, patients initiated on VDZ and anti-TNF were prescribed a median of 1.0 (interquartile range [IQR] 0.0–4.8) and 2.0 (IQR 0.0–7.8; Mann-Whitney U test $P=0.16$) courses of corticosteroids, respectively. During the post-initiation maintenance period (week 14 to month 12), 37% (95% confidence interval [CI] 24%–49%; $n=52$) of patients initiated on VDZ and 57% (95%CI 44%–70%; $n=53$; $\chi^2 P=0.039$) of patients initiated on anti-TNF received at least one course of corticosteroids. During the overall 12 month post-initiation observation period, patients initiated on VDZ and anti-TNF were prescribed a median of 0 (range 0–4) and 0 (range 0–2; Mann-Whitney U test $P=0.42$) courses of antibiotics, respectively. During the post-initiation maintenance period, 11% (95%CI 3%–19%; $n=56$) of patients initiated on VDZ and 16% (95%CI 6%–26%;

P111 STEROID AND ANTIBIOTIC PRESCRIBING RATES IN UK PATIENTS WITH ULCERATIVE COLITIS ON VEDOLIZUMAB VS ANTI-TNF

¹Gareth Parkes*, ²Ayesha Akbar, ³Ian Beales, ⁴Martin Buckley, ⁵Said Din, ⁶Tom Creed, ⁷Nikolas Plevris, ⁸Niamh Hogan, ⁸Nicola Heggs, ⁸Simon Meadowcroft, ⁹Mike Wallington, ⁶Aileen Fraser. ¹The Royal London Hospital, London, UK; ²St. Mark's Hospital, London, UK; ³Norfolk and Norwich University Hospital, Norwich, UK; ⁴Mercy Hospital, Cork, Ireland; ⁶Bristol Royal Infirmary, Bristol, UK; ⁵Royal Derby Hospital, Derby, UK; ⁷Western General Hospital, Edinburgh, UK; ⁸Takeda UK, London, UK; ⁹OPEN VIE, Marlow, UK

Abstract P111 Table 1 Characteristics at initiation of first-line biologic

Characteristics at initiation	VDZ (n=56)	Anti-TNF (n=56)
Age (years), mean (standard deviation)	46.8 (16.9)	45.7 (17.5)
Female, n (%)	25 (45%)	25 (45%)
Disease duration (years), median (IQR)	6.9 (3.1–13.6)	4.7 (1.8–14.9)*
Montreal classification, n (%)	5 (9%)	5 (9%)
E1	29 (52%)	29 (52%)
E2	22 (39%)	22 (39%)
E3		
On corticosteroids	31 (55%)	31 (55%)

*Mann-Whitney U-test $P=0.27$