Abstract PMO-17 Figure 1 Rates of CR, CRM and CSFRM a 3 year period

Methods A consecutive cohort of 90 adult CD patients treated with VDZ were retrospectively reviewed over a 3-year period. Primary end-points were clinical response (CR) as defined by Harvey-Bradshaw Index (HBI) reduction of ≥ 3 and clinical remission (CRM) defined as HBI < 5 . Corticosteroid-free remission (CFRM) was analysed at weeks 14, 54, 106 and 162. VDZ persistence was a secondary-end point. Predictors of CR, CRM and CFRM were examined with logistic regression. Predictors of time to CR and VDZ persistence were analysed with Cox Regression. Statistical analyses were performed using Statistical Package for the Social Sciences software (SPSS Inc v.26, Chicago, IL).

Results Median age at CD diagnosis and VDZ initiation were 19 (IQR 13-28) and 28 (IQR 23-42) respectively. Concomitant corticosteroid use (42.2%), immunomodulator use (53.3%) and prior biologic exposure (63.3% Infliximab, 84.4% Adalimumab, 42.2% Ustekinumab) were high. 54.4% were exposed to 2 anti-TNF agents whilst 27.8% had 3 biologics.

Duration between CD diagnosis and VDZ initiation predicted CR at week 14 and 54 with OR=0.94 (0.89-1.00), $p=0.057$ and OR=0.92 (0.85-0.99), $p=0.037$, respectively. For every year increase in duration of disease prior to VDZ, the risk of not responding to VDZ at 14 and 54 weeks decreased by 6% and 8% respectively. Prior adalimumab use was the only significant predictor of time to CRM (HR=0.52, 95% CI [0.29,0.95], $p=0.034$) and was associated with a 50% reduction in likelihood of achieving CRM with VDZ.

The rate of VDZ persistence was 50.0%, 28.9% and 13.5% at 1, 2 and 3 years, respectively with a median duration of 12.7 months (95% CI 9.2-21.4). Colonic CD was a significant moderator of persistence and increased as compared to ileal CD (HR=0.42, 95% CI [0.22-0.83], $p=0.012$). Prior Ustekinumab was a predictor of VDZ persistence (HR=0.36, 95% CI [0.21, 0.61], $p<0.0001$) whilst every 100 unit rise of faecal calprotectin (FC) at baseline was associated with a 3% risk of VDZ cessation (HR=1.03, 95% CI 1.1,1.06), $p=0.036$).

Conclusion Late VDZ use after CD diagnosis, anti-TNF naivety, colonic disease, prior Ustekinumab use and low

baseline FC are predictors of good clinical outcome and VDZ persistence. These factors are relevant in biologic selection and sequencing decisions to tailor bespoke patient therapy.

PMO-18 **INTESTINAL FAILURE IN CROHN'S DISEASE: A SYSTEMATIC REVIEW AND META-ANALYSIS OF SURGICAL RISK FACTORS**

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Introduction Intestinal failure (IF) is a rare but serious complication of Crohn's disease (CD). However, to date, surgical risk factors remain poorly characterised and data from individual studies can be difficult to interpret or limited. We reviewed the existing literature, to identify surgical factors for IF in CD patients.

Methods According to PRISMA guidelines, a systematic review of PubMed for IF and CD was conducted through a series of advanced searches. To identify risk factors, articles related to IF and CD were analyzed according to demographics and CD characteristics, surgical characteristics, and nutritional and medical management. Study quality was assessed using the *Item Bank for Assessment of Risk of Bias and Precision for Observational Studies of Interventions or Exposures*. Where applicable, a meta-analysis with a random-effects model was performed in R. Results are presented as mean $\pm$ standard deviation.

Results 7 original articles were included with a total of 438 CD patients diagnosed with IF; 6 (85.7%) were retrospective studies and 1 was a prospective study (14.3%). The majority of studies were considered to be of low risk of bias (57.1%), and the remainder had a medium risk of bias (42.9%). From 3 or more studies, the mean age at CD diagnosis from meta-analysis was 28.2 yrs (95% CI: 24.0-32.5, $P<0.01$, $I^2=92\%$), the proportion of males was 42.7%, and the mean proportion

Abstract PMO-18 Figure 1 Meta-Analysis of Surgical Factors associated with IF

of smokers was 35.0%. The mean duration of CD diagnosis before IF and initial surgery were $38.2 \text{ yrs} \pm 10.7$ and $6.8 \text{ yrs} \pm 1.1$ respectively. From meta-analysis, the mean number of small intestinal resections per patient were 4.7 (95% CI: 3.8-5.6, $P < 0.01$, $I^2 = 84\%$) and the mean estimated length of small bowel remaining was 126.5 cm (95% CI: 102.0-151.0, $P < 0.01$, $I^2 = 94\%$) (Figure 1). The mean estimated original small intestine length was 247.7 cm and the mean proportion of ileocecal valve resections were 87.0% (95% CI: 80.0%-92.0%, $P = 0.37$, $I^2 = 0\%$) (Figure 1). A colon remnant was present in 30.0% (95% CI: 16.0%-45.0%, $P < 0.01$, $I^2 = 83\%$) and the majority of patients had a jejunostomy or ileostomy (70.0%, 95% CI: 48.0%-88.0%, $P < 0.01$, $I^2 = 91\%$). Total length of small bowel resected was $170.0 \text{ cm} \pm 63.8$, small bowel resection length per procedure was $77.5 \text{ cm} \pm 52.8$, and there was no significant difference in small bowel resection length between elective ($79.3 \text{ cm} \pm 65.9$) and emergency procedures ($118.5 \text{ cm} \pm 81.7$).

Conclusions Surgical risk factors in combination with medical and demographic factors can predispose patients to IF. However, certain surgical factors including ileocecal valve resection, presence of an ileostomy or jejunostomy, and small

bowel length $\leq 200 \text{ cm}$ could be predictive of the development of IF.

PMO-19 BARRIERS AND FACILITATORS TO CLINICAL ACTIVITY INDICES FOR IBD IN ROUTINE PRACTICE: A QUALITATIVE STUDY

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Introduction A recent national audit of biological therapies in the UK suggested that the recording of a disease activity index (Harvey-Bradshaw Index or Simple Colitis Activity index) was uncommon in routine settings.¹ Our aims were to explore the barriers and facilitators to the use of clinical instruments in hospital-based inflammatory bowel disease (IBD) outpatient services, and the reasons for lack of standardisation in outcome assessment by practitioners.

Methods We performed structured observations of real-life consultations conducted with 102 patients by 24 clinicians (14