prediction-accuracy of calprotectin progressively increased from AUC = 0.62 for 24-months, through 0.67 for 12-months, 0.76 for 6-months and up to AUC = 0.81 for three-months’ flare prediction. Time-restricted analysis for VCE also showed a stronger short-term 6 months prediction accuracy (AUC = 0.83, p = 0.0001). Patient tolerability of intensive small-bowel VCE monitoring was excellent.

Conclusions: Calprotectin strongly predicts short-term (3 months) risk of flares in patients with small-bowel CD. In contrast, VCE accurately predicts both short-term but also long-term risk of disease exacerbation, and is safe and tolerable after small-bowel patency has been established. A worst-segment LS < 350 (or cumulative LS < 450) may be the clinically relevant target scores for small-bowel mucosal healing. A randomised controlled trial has been launched to investigate proactive interventional strategy based on this predictive algorithm.

Our assay was a better independent predictor of staying long-term on infliximab (p = 0.056) than any other clinical or biological patients’ characteristics.

Conclusions: An assay-based in vitro test for functional blockade of TNFα (CD62L shedding) provides an excellent long-term (3–5 years) independent predictor of infliximab response in inflammatory bowel disease patients. Testing patients at the beginning of the infliximab maintenance phase could help therapeutic decision making to avoid complications, hospitalisation and surgeries.

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Preoperative serum vedolizumab levels do not predict postoperative outcomes in inflammatory bowel disease (IBD)

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Background: It is unknown whether patients with IBD undergoing abdominal surgery after biologic drug exposure are at increased risk of postoperative complications. Prior studies on the association of preoperative vedolizumab (VEDO) use and postoperative outcomes in IBD have been conflicting. Serum levels of anti-TNF drugs are a surrogate for biologic effect on inflammatory mechanisms and have been correlated with postoperative outcomes. In a similar fashion, we sought to clarify associations between serum VEDO levels and postoperative outcomes in IBD.

**Methods:** IBD patients on VEDO, with serum drawn within 7 days before surgery, were identified. Serum VEDO levels were measured by investigators blinded to clinical outcomes using the homogenous mobility shift assay (Prometheus Laboratories Inc.). Patients were divided into 2 groups according to serum levels: Group 1 (undetectable VEDO levels; ≤1.8 μg/ml) and Group 2 (detectable serum VEDO levels; >1.8 μg/ml). To assess whether a higher level of VEDO affected outcomes, Group 2 was further divided into high and low levels as determined by median detectable serum level. Postoperative outcomes, including the Comprehensive Complication index (CCI)), within 30 days of surgery were collected prospectively.

**Results:** The study cohort of 48 patients had a median age of 31 (range, 14–65) years and included 21 (44%) males. Indications for surgery were ulcerative colitis (n = 25;52%), Crohn’s disease (n = 20;42%) or indeterminate colitis (n = 3;6%). Index procedures included subtotal colectomy (n = 21;44%), small bowel/ileoacolic resection (n = 11;