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Background: Strategies that target the microbiome may offer an alternative therapeutic approach for Ulcerative Colitis (UC). The goal of the pilot trial was to evaluate the efficacy of a novel microbe-directed UC diet (UCD) for clinical remission, as well as use of antibiotics for dietary refractory patients as an alternative strategy for remission.

Methods: This was a prospective, single arm, open label, pilot study in patients aged 8–19, with a pediatric UC activity index (PUCAI) scores >10 on stable maintenance therapy. Patients failing to enter remission (PUCAI<10) on diet could receive a 14-day course of Amoxycillin, Metronidazole and Doxycycline (AMD), and were re-assessed on day 21. The primary endpoint was intention to treat (ITT) remission at week 6 with UCD.

Results: Twenty-four UCD treatment courses were given to 23 eligible children (mean age 15.3±2.9 years). Median PUCAI decreased from baseline 35 (30–40) to 12.5 (5–27.5) week 6 (P=0.001). Clinical remission with UCD alone was achieved in 9/24 (37.5%). Median calprotectin declined from baseline 818 (630.0–1880.0) to 592.0 (140.7–902.4) week 6. Eight patients received treatment with antibiotics after failing diet, 4/8 (50.0%) subsequently entered remission 3 weeks later.

Conclusion: The UC Diet appears to be effective for induction of remission in children with mild to moderate UC suggesting that diet could play a role in the disease. Sequential use of UCD followed by antibiotic therapy needs to be evaluated as a microbiome targeted steroid sparing strategy.

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Cost-effectiveness of venous thromboembolism prophylaxis after hospitalization in patients with Inflammatory Bowel Disease

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Background: Patients with inflammatory bowel disease (IBD) have a 2- to 3-fold greater risk of venous thromboembolism (VTE) than the general population, with increased risk during hospitalization. However, recent evidence suggests that this increased risk persists post-discharge. As such, we aimed to determine the cost-effectiveness of post-discharge VTE prophylaxis among hospitalized patients with IBD.

Methods: A decision tree was used to compare inpatient prophylaxis alone versus 4 weeks of post-discharge VTE prophylaxis with rivaroxaban 10 mg/day. Our primary outcome was quality-adjusted life years (QALYs) over one year, and strategies were compared using a willingness to pay of $100,000/QALY from a societal perspective. Costs (in 2020 $US), incremental cost-effectiveness ratios (ICERs), and number needed to treat (NNT) to prevent one VTE and VTE death were calculated. Deterministic 1-way and probabilistic analyses were performed to assess uncertainty within the model.

Results: Four-week post-discharge prophylaxis with rivaroxaban resulted in 1.68 higher QALYs per 1000 persons and an incremental cost of $185,778 per QALY as compared to no post-discharge prophylaxis. The NNT to prevent a single VTE was 78 individuals, while the NNT to prevent a single VTE-related death was 3190 individuals. One-way sensitivity analyses showed that higher baseline VTE risk >4.5% or decreased cost of rivaroxaban ≤$280 can reduce the ICER to <$100,000/QALY. Probabilistic sensitivity analyses favored post-discharge prophylaxis in 26.5% of iterations.

Table. Cost-effectiveness analysis results

	Post-discharge VTE prophylaxis	No post-discharge VTE prophylaxis
Cost (in 2020 $US)	$690.39	$377.45
Incremental cost	$312.94	-
Effectiveness (QALYs)	0.99773	0.99604
Incremental effectiveness	1.68 QALYs per 1000 persons	-
ICER	$185,778/QALY	-
NNT to prevent one VTE	78	-
NNT to prevent one VTE-related death	3190	-

Abbreviations: QALY (Quality-Adjusted Life Years), ICER (Incremental Cost-Effectiveness Ratio), NNT (Number Needed to Treat), VTE (Venous Thromboembolism)

Conclusion: Four weeks of post-discharge VTE prophylaxis results in higher QALYs as compared to inpatient prophylaxis alone, and can prevent one post-discharge VTE among 78 patients with IBD. As such, post-discharge VTE prophylaxis in patients with IBD should be considered in a case-by-case scenario considering VTE risk profile, costs, and patient preference.

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Can Patients Monitor Response To Ustekinumab In The Real World?

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Background: Real time monitoring of patients with Crohn's disease (CD) gives us the opportunity to examine disease trajectory. We have demonstrated the feasibility of using a monitoring platform with patient reported data, collected prospectively and routinely in clinical practice. The question is whether it can be used for specific drugs

Methods: TrueColours-IBD (TC-IBD)is a real time, web based platform that through email prompts linked to questionnaires, collects longitudinal patient reported outcome measures (for CD, symptoms