Nature Reviews Gastroenterology & Hepatology | Published online 14 Dec 2016

IN BRIEF

IBD

Ustekinumab therapy for Crohn's disease

Ustekinumab is a monoclonal antibody against IL-12 and IL-23. Three phase III trials have now shown that ustekinumab is effective as an induction and maintenance therapy for Crohn's disease. In two 8 week induction trials, UNIT-1 ($n = 741$) and UNIT-2 ($n = 628$), patients with moderate to severe Crohn's disease received either placebo or a single intravenous dose of ustekinumab. In both trials, those receiving one of two doses of ustekinumab had a significantly ($P \leq 0.003$) higher rate of response after 6 weeks than placebo. Patients who responded then participated in the IM-UNITI trial ($n = 397$), receiving maintenance subcutaneous injections of either ustekinumab or placebo. After 44 weeks, significantly more patients receiving ustekinumab were in remission than placebo ($P = 0.005$ and $P = 0.04$ for 8 week and 12 week regimens, respectively). Adverse events were similar among all treatment groups.

ORIGINAL ARTICLE Feagan, B. G. *et al.* Ustekinumab as induction and maintenance therapy for Crohn's disease. *N. Engl. J. Med.* http://dx.doi.org/10.1056/NEJMoa1602773 (2016)

BARRETT OESOPHAGUS

Risk stratification using Cytosponge

A device called Cytosponge could be used to identify patients with Barrett oesophagus at low-risk of disease progression, according to the BEST2 study group. Cytosponge is a foam sphere within a gelatine capsule on a string that expands in the stomach after swallowing. When pulled from the stomach, the sponge enables collection of cells along the entire oesophagus, minimizing sampling bias. A multicentre discovery cohort of patients with Barrett oesophagus ($n = 468$) were tested with Cytosponge to identify clinical and molecular biomarkers that could stratify patients by risk. The optimum panel consisted of age, Barrett segment length, BMI, *TP53* mutation status, Aurora kinase A expression and presence of glandular atypia. The model was validated in an independent cohort ($n = 65$), scoring 38% at low-risk for malignant progression. These patients could be spared invasive and expensive endoscopic surveillance, enabling prioritization for those at higher risk.

ORIGINAL ARTICLE Ross-Innes, C. S. *et al.* Risk stratification of Barrett's oesophagus using non-endoscopic sampling method coupled with a biomarker panel: a cohort study. *Lancet Gasterol. Hepatol.* http://dx.doi.org/10.1016/S2468-1253(16)30118-2 (2016)

THERAPY

Sterile faecal transfer for *C. difficile* infection

Although an effective therapy for *Clostridium difficile* infection (CDI), faecal microbiota transplantation (FMT) can entail uncontrollable risks for infection, especially in patients who are immunocompromised. Now, in a preliminary study, Ott *et al.* have shown that sterile faecal filtrate transfer (FFT; containing bacterial debris, metabolites, proteins and DNA) rather than intact microorganisms is effective in treating patients with CDI. In the study, five donor stool samples were fully characterized according to FMT standards, sterile-filtered to remove bacteria and particles and then transferred to five patients with chronic-relapsing CDI. FFT restored normal stool habits and stopped CDI symptoms for a minimum of 6 months in all five patients, suggesting that bacterial components, metabolites or bacteriophages mediate the effects of FMT, and that FFT could be a promising alternative approach.

ORIGINAL ARTICLE Ott, S. J. *et al.* Efficacy of sterile fecal filtrate transfer for treating patients with *Clostridium difficile* infection. *Gastroenterology* http://dx.doi.org/10.1053/j.gastro.2016.11.010 (2016)