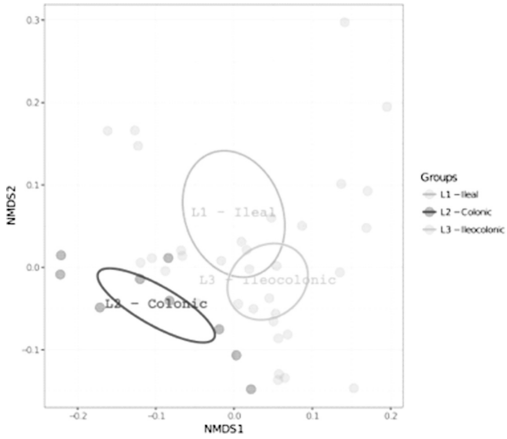
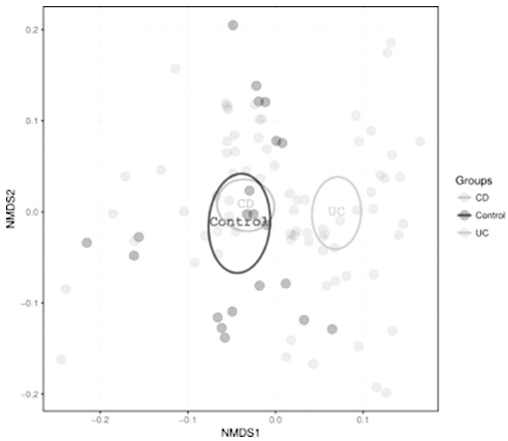


Abstract OWE-010 Figure 4 NMDS weighted UniFrac (bacteria-biopsies – disease distribution) R^2=0.17 p=0.001



Abstract OWE-010 Figure 5 NMDS weighted UniFrac (bacteria-all biopsies – diagnosis) R^2=0.11 p=0.001

The mucosal bacterial community was dysbiotic and influenced by subject, disease distribution (figure 4) and diagnosis (figure 5). In terms of mycobiome, fewer viable reads were obtained, due to limited template. *Saccharomyces* was the most abundant fungi, but it was absent in some samples, other relevant genera were *Malassezia*, *Cladosporium*, *Aspergillus* and *Candida*. The last was found more often in controls.

Conclusions CD patients' bacterial community is dysbiotic but fungi are not. *Saccharomyces* dominated most of faecal samples, but not biopsies. This implies it may not be a permanent resident of the mucosae. Fungi may arise from food: it is hard to discriminate what comes from food and what is active in the gut. The concept of a resident, symbiotic mycobiome needs further exploration.

OWE-011 CLINICAL EFFECTIVENESS, SAFETY AND IMMUNOGENICITY OF ANTI-TNF THERAPY IN CROHN'S DISEASE: 12-MONTH DATA FROM PANTS

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10.1136/gutjnl-2018-BSGAbstracts.116

Introduction PANTS (Personalised Anti-TNF Therapy in Crohn's disease [CD]) is a 3 year prospective observational UK-wide study investigating primary non-response (PNR), loss of response and adverse drug reactions to infliximab (IFX: Remicade [REM], CT-P13) and adalimumab (ADL: Humira). We now report the wk 54 clinical effectiveness and safety outcomes, and immunogenicity data to date.

Methods Inclusion criteria included: CD patients aged ≥6 years, active inflammatory disease (raised CRP [>3 mg/L] or calprotectin [≥50 µg/g]) and no prior anti-TNF therapy. PNR was defined at wk 12–14 as a requirement for ongoing steroids, or both HBI failed to fall by ≥3 points or to ≤4 and CRP failed to fall by ≥50% or to ≤3 mg/L. Remission was defined at wks 14 and 54 as HBI ≤3 points and CRP ≤3 mg/L and no concomitant steroids. Patients who stopped drug other than for elective withdrawal, pregnancy or loss to follow-up were regarded as treatment failures for subsequent endpoints. Drug (DL) and anti-drug antibody (ADA) levels were measured using the IDKmonitor drug tolerant assays. Immunogenicity was defined as ADA titre ≥10 AU/ml +undetectable DL.

Results 1601 (49% male, median age 33 years [IQR 23–47]) eligible patients were recruited from 118 sites. Patients were treated with IFX (751 [47%]: REM, 200 [12%] CT-P13) or ADL (650 [41%]). Baseline characteristics included: median disease duration 3 years (IQR 1–10); steroids 27%, azathioprine 44%, mercaptopurine 8%, methotrexate 5%; median CRP in IFX 9 mg/L (IQR CI 3–24) and 6 mg/L (IQR 2–14) in ADL. PNR at week 12–14 was 21%, 21% and 26% in the REM, CT-P13 and ADL treated patients respectively. PNR was associated with older age (p=0.0004), higher BMI (p=0.03) and low DL (p<0.0001 for IFX and ADL). Week 54 remission rate was 40%, 40% and 34% of the REM, CT-P13 and ADL treated patients. At wk 54, the immunogenicity rate for REM, CT-P13 and ADL was 26%, 28% and 11% rising to 42%, 38% and 23% by 3 years respectively (IFX vs. ADL p<0.0001, REM vs. CT-P13 p=0.25). Immunogenicity was associated with non-remission at wk 54 (p<0.0001 for both IFX and ADL). Immunomodulator use reduced the risk of immunogenicity for both IFX (HR=0.37, p<0.0001) and ADL (HR=0.34, p<0.0001). 140 patients (9%) withdrew drug for SAEs including 5 who died, 3 from CD and 2 from possibly drug-related acute respiratory illness.

Conclusions This is the largest prospective real-life study of anti-TNF therapy in IBD. We report the clinical effectiveness, safety and immunogenicity of REM, CT-P13, and ADL. This cohort provides a unique bioresource for multi-omic studies investigating personalised approaches to anti-TNF therapy.

OTH-003 PAEDIATRIC CROHN'S DISEASE PATIENTS IN REMISSION HAVE A REDUCED SKELETAL MUSCLE PROTEIN BALANCE AFTER FEEDING

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10.1136/gutjnl-2018-BSGAbstracts.117

Introduction Sarcopenia is common in active Crohn's disease (CD) and still prevalent in remission. This can lead to fatigue, physical inactivity and poor quality of life but the aetiology is