Efficacy of Thiopurine Monotherapy in the UK Inflammatory Bowel Disease Bioresource Cohort

Introduction
IBD BioResource is currently recruiting patients with Crohn’s Disease (CD), Ulcerative Colitis (UC) and IBDU from 89 hospitals UK-wide. To date >19,000 patients have been recruited with detailed clinical phenotype data plus serum and DNA, and all will have had Genome-Wide Association Scans ± whole genome sequencing by April 2019. Subjects can be recalled by genotype or phenotype for downstream studies by any investigator.

Thiopurines play a key role in the management of IBD - used either as monotherapy or in combination with other treatments to maintain remission. However, data regarding long term effectiveness are sparse.

Aims
To characterise the long term effectiveness of thiopurine monotherapy among subjects in the IBD BioResource cohort

Method
IBD phenotype data were extracted by research nurses and clinicians in each hospital site following case note review and uploaded to a Redcap database. Response to treatment was empirically classified as ‘effective’, ‘not effective’, and 5 other categories (‘transient’, ‘partial’, ‘interolerant’ etc.). By interrogating the Redcap database and analysing the data in R we sought to identify the proportion of patients in whom thiopurine was effective as monotherapy – in whom (1) treatment was classified as ‘effective’ and (2) there had been no escalation to biologic therapy or need for surgery for the duration of thiopurine therapy. Patients started on anti-TNF therapy at thiopurine initiation or undergoing surgery in the 1 year prior to initiation were excluded since we could not assess effectiveness of thiopurine monotherapy in these groups.

Results
Data were available on 8296 IBD Bioresource subjects (48.3% male) treated with a thiopurine and meeting inclusion criteria for assessment. In 2417 patients (29.1%) thiopurine monotherapy had been deemed to be an effective maintenance treatment - meeting both criteria (1) and (2) above. Long term effectiveness was higher in UC/IBDU (1531/3485; 43.9%) compared to CD (883/4799; 18.4% - Chi Sq P<0.0001). 3459/8296 (41.7%) treated with thiopurine were started within 1 year of diagnosis (Figure 1). Mean duration on drug = 5.9 years at the time of IBD Bioresource recruitment (at least 78% of those in whom thiopurine monotherapy has been effective are still on this therapy).

Conclusion
Thiopurines can be effective in producing durable remission, particularly in UC. Pharmacogenetic studies will follow. The IBD BioResource is open to all investigators for recall of well characterised patient cohorts.

Abstract
PTH-093
Figure 1
Time (years) from diagnosis to thiopurine initiation

Abstract
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Thiopurine Adverse Events in Patients with Inflammatory Bowel Disease in the UK - IBD BioResource Cohort

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Introduction
The Inflammatory Bowel Disease (IBD) BioResource is recruiting patients with Crohn’s Disease (CD), Ulcerative Colitis (UC) or IBD type Unclassified (IBD-U) from 89 hospitals UK-wide. >19,000 subjects have been recruited to