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significantly associated with SpA (p = 0.04). Multivariate analysis showed that familial history of IBD (OR = 0.17; IC95%; 0.03–0.93; p = 0.04) and CD (OR = 3.72; IC 95%; 0.98–14.15; p = 0.05) were independent risk factors of axial SpA during IBD. EIMs other than SpA were more frequent in group 1 than in group 2 such as peripheral arthropathies (19.2% vs. 8.3% respectively; p = 0.02), anterior uveitis (11.5% vs. 0% respectively; p = 0.01) and erythema nodosum (7.7% vs. 0% respectively; p = 0.04).

Conclusion: In conclusion, predictors of symptomatic axial SpA were familial history of IBD and CD with structuring behaviour. Early-stage diagnosis is important to avoid ankylosis, which is a major cause of handicap in younger patients.

#### P195

### Cost-effectiveness of a 17-gene classifier to guide initial treatment choice in Crohn's disease in the UK

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Background: PredictSURE IBD™ is a CE-marked whole blood-based biomarker test that predicts long-term clinical outcomes in inflammatory bowel disease (Crohn's disease, CD and ulcerative colitis, UC). PredictSURE IBD™ uses a 17-gene qPCR-based classifier to stratify patients into two prognostic subgroups, high and low risk. High-risk patients experience significantly more aggressive disease than low-risk patients, with the need for earlier and more frequent treatment escalation over time. Early stratification could enable personalised treatment strategies, such as 'top-down' use of biologics in high-risk patients. Our objective was to examine the cost-effectiveness of PredictSURE IBD™ in guiding the use of early biologic therapy in newly diagnosed CD patients in the UK.

**Methods:** A decision tree leading into a Markov state-transition model was constructed in MS Excel to compare two treatment approaches: (1) standard of care therapy following established UK

clinical guidelines, consisting of sequences of immunomodulator followed by biologic upon relapse ('step-up' treatment), (2) targeted therapy guided by PredictSURE IBD<sup>TM</sup>, whereby patients identified as high-risk receive sequences of anti-TNF biologic treatment followed by other biologic classes upon relapse ('top-down' treatment), Figure 1. Parameters were informed by patient data from PredictSURE IBD<sup>TM</sup> clinical studies and the literature.

Results: Top-down treatment guided by PredictSURE IBD<sup>TM</sup> resulted in an incremental cost-effectiveness ratio (ICER) of £7,179 per quality-adjusted life-year (QALY), with £1,852 incremental costs and 0.258 incremental QALYs vs. standard of care generated over a 15-year time horizon. Additional costs relating to earlier biologic use were offset by reductions in the costs of flares, hospitalisations and surgery. Incremental QALYs were driven by increased time spent in remission and improved quality of life from reduced flares and surgery. The model was most sensitive to the time horizon, rates of mucosal healing on top-down vs. step-up therapy, the costs of hospitalisation and the costs and quality of life in the severe disease health state.

Conclusion: Modelling shows that upfront use of biologic guided by PredictSURE IBD<sup>TM</sup> could substantially improve clinical outcomes for high-risk patients by increasing remission rates and reducing flares, surgery and treatment escalations. The ICER for PredictSURE IBD<sup>TM</sup> was well below the £20–£30k/QALY threshold used by the UK National Institute for Health and Care Excellence (NICE). Topdown treatment guided by PredictSURE IBD<sup>TM</sup> would not only represent a treatment paradigm shift for CD patients but would also be a highly cost-effective use of resources in the UK National Health Service.

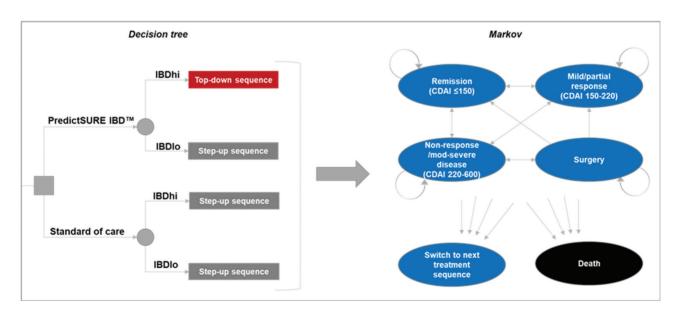
#### P196

### High frequency of undiagnosed mental illness in inflammatory bowel diseases

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Background: Inflammatory bowel diseases (IBD) are associated with mental disorders, which can negatively influence the course of IBD. Nonetheless, psychiatric disorder comorbidities (PDCs) remain undiagnosed in many IBD patients. The aim of this study was to assess the frequency of undiagnosed psychiatric comorbidities in IBD patients.

Methods: Two-hundred-thirty-seven adult IBD [136 Crohn's disease (CD) and 101 with ulcerative colitis (UC)] outpatients were consecutively recruited in a single university hospital centre between January 2018 and June 2019. After the visit for IBD clinical evaluation, participants completed self-report questionnaires and then underwent a clinical interview by a trained psychiatrist.

Results: One-hundred-fourteen (48%) IBD patients had at least one undiagnosed psychiatric disorder. Forty-three (18%) patients presented a single PDC, 40 (16.8%) had two PDCs, 11 (4.6%) had 3 PDCs, 12 (5%) had 4 PDCs, 7 (2.9%) had 5 PDCs and 1 (0.4%) had 6 PDCs. PDCs were equally distributed among CD (72/136, 53%) and UC (42/101, 42%) patients. Mood disorders (54/114, 47%) and anxiety (27/114, 24%) disorders were the most common PDC; moreover, 23 (20%) patients suffered from post-traumatic stress disorder (PTSD), 3 (3%) had an obsessive-compulsive disorder, and 7 (6%) a substance abuse/dependence disorder. Fifty-nine per cent of IBD patients diagnosed with a psychiatric disorder during the study did not have a positive psychiatric anamnesis. PDCs were not related to activity, phenotype or localisation of IBD.

Conclusion: Psychiatric disorders are common in IBD but not related to activity, phenotype or localisation of bowel disease. Overall, these findings suggest the necessity to include psychiatric evaluation in the management of IBD patients.

#### P197

# A snap-shot survey of IBD patients' at a tertiary centre: a focus on knowledge and willingness to self-manage

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**Background:** Good quality Care in inflammatory bowel disease (IBD) includes the provision of patient-relevant information. Data on the level of patient understanding is lacking. We studied patients' understanding of their IBD condition.

**Methods:** The IBD team and patient representatives devised a 16-item questionnaire that collected data on baseline demographics and disease-specific characteristics. Answers denoting understanding were scored positively. A sum (Q-sum) of the individual question scores was expressed as median (range).

Results: 150 patients were surveyed (49% male). Thirty-nine per cent had ulcerative colitis, 51% Crohn's Disease and 10% IBD-unclassified. There were: 39 aged <30, 94 aged 30–60, and 15≥60.

The median (range) Qsum was 9 (1–16). Twelve per cent of patients had a Qsum of \$313. The Qsum of patients < 60 years old was 10 (2–16) compared with 7 (1–13) of the ≥60 age group (p = 0.02). Sixty-two per cent of the younger and 60% of the older group perceived themselves as well informed (p = 0.9). The Qsum scores were 12 (2–14), 10 (2–16) and 8.5 (3–14) for patients with disease duration of ≤1 year, 2–15 and ≥15 years respectively (p < 0.05). There was no difference in scores according to disease and medication type. 96% of patients in the <60 age group were willing to access online information compared with 60% in the ≥60 age group (p < 0.01). Younger patients were more confident in recognising symptoms of a flare [86%] compared with those aged ≥60 [60%] (p = 0.01), and were also more likely to understand how their condition may progress compared with older patients (66% vs. 40%, p < 0.05).

Among patients <60 years only 14% of males and 26% of females (p=0.08) reported having enough information on fertility. Sixtysix per cent of patients on biologic drugs and 53% on non-biologic drugs considered themselves well informed (p=0.12). Forty-six per cent of the non-biologics cohort also reported low levels of knowledge on self-management of mild flares. Seventy-six per cent of the biologics group and 87% of the non-biologics group expressed willingness for information on self-management (p=0.1).

Conclusion: Older patients are less well informed, less confident in recognising symptoms of a flare, and less likely to access online resources. The level of knowledge inversely correlated with disease duration. This may reflect the heightened recent awareness on the inclusion of patient education in clinical care and availability of resources. There is an interest in receiving information on self-management of mild flares. Education sessions should be personalised according to patient characteristics and objective measures such as PAM score (Insignia Health), implemented to show benefits.

#### Reference

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#### P198

## Colorectal cancer diagnosis in patients with inflammatory bowel disease in Spain: A room for improvement

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Background: Ulcerative colitis (UC) and Crohn's disease (CD) are inflammatory bowel diseases (IBD), characterised by chronic inflammation of the digestive tract. IBD patients have an increased risk of developing colorectal cancer (CRC) compared with the general population. A proper screening in this population is essential to guarantee an early CRC diagnosis and maximise the success of the treatment. The aim of the study was to analyse the usual clinical practice in the diagnosis of CRC in IBD patients in Spain, and possible areas of improvement.

Methods: This preliminary qualitative study was carried out through the creation of four round tables with gastroenterologists and