patients had not accessed information previously. Concerns were explored (table 1). Participants who had accessed information utilised a variety of sources: 19.8% had spoken to an IBD clinician, 31.4% accessed CCUK online resources, 2.6% read leaflets and 3.8% asked friends/family.

53% of parous women breastfed. No women reported concerns that IBD could directly harm their child via breastfeeding; 1 had concerns that IBD medications could harm their child via breastfeeding.

The majority (59%) stated they would like more information, with 33.6% patients preferring to receive it from an IBD clinician. Other methods included leaflets (28.1%), posters (12.1%) and patient education events (6.0%). The participants would rather discuss fertility and pregnancy issues with their IBD clinician (26%) than with their GP (17%).

Conclusion Many patients feel uninformed regarding pregnancy with IBD, with a variety of concerns. Information should be readily available for both genders, and integrated into patient-clinician discussions.

### Abstract P89 Table 1  Patient response to concerns

<table>
<thead>
<tr>
<th>Concern</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infertility due to IBD</td>
<td>13.50%</td>
<td>11.50%</td>
<td>22.40%</td>
<td>12.80%</td>
<td>6.40%</td>
</tr>
<tr>
<td>Infertility due to medication</td>
<td>11.50%</td>
<td>12.80%</td>
<td>17.30%</td>
<td>16.70%</td>
<td>7.00%</td>
</tr>
<tr>
<td>Miscarriages</td>
<td>9.00%</td>
<td>14.70%</td>
<td>18.60%</td>
<td>16.00%</td>
<td>7.10%</td>
</tr>
<tr>
<td>IBD harming child</td>
<td>7.70%</td>
<td>12.20%</td>
<td>16.70%</td>
<td>16.70%</td>
<td>13.50%</td>
</tr>
<tr>
<td>Medications harming child</td>
<td>7.70%</td>
<td>7.10%</td>
<td>17.30%</td>
<td>19.90%</td>
<td>15.40%</td>
</tr>
<tr>
<td>Inheritance risk</td>
<td>5.10%</td>
<td>6.40%</td>
<td>6.40%</td>
<td>9.00%</td>
<td>16.70%</td>
</tr>
<tr>
<td>Unable to care for child</td>
<td>4.50%</td>
<td>10.30%</td>
<td>7.70%</td>
<td>9.00%</td>
<td>6.40%</td>
</tr>
<tr>
<td>Complicated pregnancy</td>
<td>4.50%</td>
<td>4.50%</td>
<td>10.30%</td>
<td>10.30%</td>
<td>7.10%</td>
</tr>
</tbody>
</table>

A minimum of 5 years of follow up data was collected. Type of recurrence was recorded as: 1) clinical recurrence - symptom flare requiring course of steroids or inpatient admission; 2) biochemical recurrence - faecal calprotectin >250μg/l; 3) endoscopic recurrence; or 4) surgical recurrence – the need for further CD-related surgery.

**Results** 304 patients (59.5% female) were included. Median age at diagnosis was 29 (range 3–82 years) and at resection was 43 (range 17–85 years). 82.9% had terminal ileal, colonic, or ileocolonic involvement. Upper GI and perianal disease occurred in 17.1% and 12.8% respectively. 94% had a stricturing or penetrating phenotype. 52.9% of patients were never-smokers, 16.5% were ex-smokers and 30.6% were current smokers. 33.6% patients had a SIMD score of 1.

47% of patients had clinical recurrence and 48.7% had biochemical recurrence with 49 patients 16.1% requiring further surgery for Crohn’s disease.

There were significant associations between younger age at diagnosis/resection, male sex, current smoking and biochemical, surgical and clinical recurrence respectively. There was no significant association between SIMD score and recurrence of any type.

**Conclusions** Our data suggests rates of post-operative recurrence in line with existing published data. Risk factors for this are similar to those identified in the REMIND study1, with younger age at diagnosis/resection, male sex and smoking all associated with higher rate of recurrence. Our data suggests deprivation does not influence recurrence rates. However more work is needed to validate this in larger, prospective cohorts.

### REFERENCES

### P90 POST-OPERATIVE CROHN’S DISEASE RECURRENT IN GLASGOW – HOW COMMON IS IT AND DOES DEPRIVATION MATTER?

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10.1136/gutjnl-2020-bsgcampus.165

**Introduction** 50% of patients with Crohn’s Disease (CD) will have surgery within the first 10 years, with 35% requiring additional surgery. The REMIND cohort linked male gender, smoking and previous resection to recurrence.1 The link between CD and deprivation is debated2, and its influence on recurrence is unknown. We aimed to define our local post-operative CD population, highlighting recurrence rates.

**Methods** CD resections between 2008–2014 were identified from NHS Greater Glasgow & Clyde Pathology Archive. Data including gender, age at diagnosis and resection, Montreal Classification and smoking status was obtained from Electronic Patient Records. Scottish Index of Multiple Deprivation (SIMD) score was determined by postcode and was ranked 1–5 (most to least deprived).

### P91 TRENDS IN IBD MORTALITY IN THE ERA OF BIOLOGICS

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**Introduction** It is arguable that the only truly valid endpoints of healthcare are death and quality of life. Few RCTs are powered to examine these and so even for therapies of proven value and high cost such data are often not available. We have therefore examined the changing mortality from IBD at a population level in several countries in the era of biologic drugs.

**Methods** We obtained from the WHO mortality database the recorded deaths due to IBD and population figures for a number of advanced economies in which ICD coding within these data were adequate to identify IBD as a cause of death. From these we calculated cause-specific mortality rates for IBD. We went on to conduct interrupted time series analyses for each nation using SEER joinpoint software. The methodology is described in, Kim HJ, Fay MP, Feuer EJ, Midthune DN. ‘Permutation tests for joinpoint regression with applications to cancer rates’ Statistics in Medicine 2000; 19:335–351: (correction: 2001;20:655).
Results The annual percentage change in mortality from IBD both before and after a joinpoint derived from each nation’s data, along with the p value derived from a permutation test comparing a single joinpoint with a null hypothesis of no joins were as follows. In the UK mortality declined 0.3% p.a. before 2009 and 6.3% p.a. after (p<0.001). Corresponding figures for other nations were for Australia 15.2% p.a. rise before 1999 and 0.1% p.a. fall after (p=0.5), Belgium 0.9% p.a. rise before 1998 and 1.9% p.a. fall after (p=0.6), Denmark 1.9% p.a. rise before 2007 and 7.3% p.a. fall after (p=0.02), Netherlands 3.4% p.a. rise before 2001 and 0.9% fall after (p=0.5), Finland 2.3% p.a. fall before 2010 and 2.8% p.a. rise after (p=0.5), Sweden 2.8% p.a. rise before 2011 and 8.7% p.a. fall after (p=0.1), Czech Republic 3.5% p.a. rise before 2013 and 2.9% fall after (p=0.6) and Switzerland 5.6% p.a. rise before 1997 and 0.5% p.a. fall after (p=0.9).

Hence only in the UK and Denmark was there a clear change in the rates of IBD mortality. In both cases a clear reduction was seen. For the UK this is shown graphically in figure 1 which plots mortality rate from IBD per 100,000 population by year for England and Wales.

Conclusions In an era of increasing use of anti-TNF drugs mortality from IBD has declined rapidly in the UK and Denmark. Such declines are not seen in many other advanced nations.

Introduction Tofacitinib is an oral partially selective Janus kinase inhibitor approved for the treatment of refractory moderate to severe ulcerative colitis (UC). Real-world experience of patients with UC treated with tofacitinib is however limited, and safety concerns over the risk of venous thromboembolism (VTE) have recently emerged. Further, factors linked to primary non-response remain poorly defined. We therefore sought to define the effectiveness and safety of tofacitinib in a real-world cohort.

Methods We conducted a retrospective observational cohort study of 134 patients with UC (64% male; median age 37 years [range 16–81]; 83% patients had previously received at least one biologic) treated with tofacitinib from October 2018 to October 2019 in four UK centres. Disease activity was assessed using the Simple Clinical Colitis Activity Index (SCCAI) or Partial Mayo Score (PMS) depending on study site. Response and remission were defined as a reduction in SCCAI or PMS of ≥3, and SCCAI ≤2 or PMS ≤1, respectively.

Results Overall, 74% (88/119; 95% CI 65–81%) patients responded to tofacitinib at week 8 and steroid free remission was observed in 44% (47/108; 95% CI 34–53%) patients at week 26 (figure 1). Endoscopy was undertaken in 90 patients (67%) at baseline with routine follow-up endoscopy in 11 patients at week 8 and 34 patients at week 14. Median baseline UCEIS was 5 (IQR 4–6) falling to 2 (1–6) at week 8 and 2 (1–4) at week 14.

Primary non-response was independently associated with younger age (p=0.014) and higher baseline CRP (p=0.004). Prior biologic exposure did not influence response or remission rates. Continuing tofacitinib in the setting of primary non-response was rarely helpful. Dose escalation recaptured response in 9/19 patients who lost response. Dyslipidaemia was observed in 20% (27/134; 95% CI 14%–28%) of patients but no major adverse cardiovascular events occurred. Seven patients had serious infections, with herpes zoster in 3 patients. Overall, adverse events that curtailed treatment were uncommon and no VTE occurred.

Conclusions In this multi-centre real-world cohort, tofacitinib was well tolerated and clinically effective in a treatment refractory UC population.