

model. **Methods:** Participants with UC were recruited from US clinical sites to participate in-depth, open-ended face-to-face concept elicitation (CE) interviews. Two studies were conducted, one interviewing parents of children aged 2–4 years, children aged 5–11 years, and their parents. The other interviewed adolescents (aged 12–18 years) and adults (aged 18+ years). Interviews were audio-recorded and transcribed. Interview transcripts were analyzed using thematic analysis. **Results:** Sample recruited: 8 parents of 2–4-year olds, three 5–7-year olds and their parents, nine 8–11-year olds and their parents, 14 adolescents (12–17 years), and 21 adults (20–70 years). There was a high level of qualitative agreement between cohorts with nearly all symptoms being discussed by children, adolescents, and adults and also observed by the child's parents. The most frequently discussed symptoms (discussed by $\geq 75\%$ of the participants in each cohort) were similar across all cohorts. These were: blood in stool, urgent bowel movement, frequent bowel movements, diarrhea, and incomplete evacuation. The only symptom reported by all participants [children (their parents), adolescents, and adults] was stomach/abdominal pain. Feeling dehydrated was discussed only by adult participants (4/21) and was the only symptom not discussed by children, their parents or adolescents. Impacts due to UC were also regularly discussed across all cohorts with only a few impacts being age specific (i.e., work for adults and school for children). However, impact on activities of daily living was only discussed by adults. **Conclusions:** The results from the CE interviews show the clear burden of UC and that this is similar across all age groups allowing for a unified disease model to be developed.

PGI55 QUALITY OF LIFE AND PATIENT PREFERENCE AMONG DANISH PATIENTS WITH ULCERATIVE COLITIS - RESULTS FROM A SURVEY STUDY

Hagelund L,¹ Stallknecht SE²

¹Pfizer A/S, Ballerup, Denmark, ²Incentive Aps, Holte, 84, Denmark

Objectives: Ulcerative colitis (UC) is a chronic condition characterized by inflammation in the rectum and colon with symptoms including increased frequency of bowel movements, abdominal pain, diarrhoea, weight loss and anaemia. Understanding quality of life and patient preferences and how they are associated with factors such as treatment adherence can help inform improvements in treatment. The objective of this study was to explore health related quality of life (HRQoL) and assess patient preferences for medical treatment attributes to obtain information of the relative importance of the different attributes among Danish patients with ulcerative colitis (UC). **Methods:** In collaboration with the Danish patient organization for UC and Crohn's Diseases (Colitis-Crohn Foreningen) we collected data from people with self-reported UC via an online survey in March 2018. A total of 302 eligible respondents answered the HRQoL questionnaires EuroQol-5 Dimensions (EQ-5D-5L) and the Short Inflammatory Bowel Disease Questionnaire (SIBDQ). 212 patients completed the patient preference questionnaire (discrete choice experiment, DCE). The probability of choosing an alternative from a number of choices in the DCE was estimated using a conditional logit model. **Results:** The respondents had an average EQ-5D score of 0.77 (score range 0–1, higher score equals higher HRQoL) and an average SIBDQ score of 4.5 (score range 1–7, higher score equals higher HRQoL). HRQoL correlated with disease severity and the respondents had lower EQ5D than a gender and age matched subset of the Danish population (0.77 vs. 0.89). The discrete choice experiment revealed that the most important medical treatment attribute was efficacy within 8 weeks. Additionally, respondents stated preference for avoiding taking steroids, fast onset of effect and oral formulations. **Conclusions:** Danish patients with UC have lower HRQoL than a gender- and age-matched subset of the general population. Additionally, we show preferences for advanced treatment alternatives among Danish patients with UC.

Gastrointestinal Disorders - Real World Data & Information Systems

PGI56 EVALUATION OF MORTALITY ASSOCIATED WITH PROTON PUMP INHIBITORS AND H2 BLOCKERS: A REAL WORLD EVIDENCE STUDY

Luciano S

TriNetX, Inc., Cambridge, MA, USA

Objectives: The aim of this analysis was to estimate all-cause mortality among patients taking proton pump inhibitors (PPIs) and histamine H2 antagonists (H2 blockers). **Methods:** Patients identified through a federated network of electronic medical records were required to have taken PPIs or H2 blockers. Among these two cohorts, patients were required to have two records of these treatments recorded in their medical history at least three months apart. Patients treated with PPIs were matched 1-to-1 with patients treated with H2 blockers, using a greedy-nearest-neighbor algorithm. The risk of mortality was measured in the one year, five years, and ten years following the index treatment. All criteria were defined using ICD9/10, CPT, and RxNorm terminology. Kaplan-Meier curves and risk ratios (95% CI) were used to compare groups. **Results:** The mean age was 54.4 ± 18.8 (N=1,455,638) and 46.6 ± 22.7 (N=496,538) among PPI- and H2 blocker-treated patients. In the matched analysis (N=448,446), H2 blocker patients were 0.089 (0.778,0.841), 0.8 (0.785,0.815), and 0.799 (0.786,0.812) more likely to die than PPI patients in the one year, five years, and ten years following treatment. The survival probability was 0.25%, 1.34%, and 2.35% higher in PPI-treated patients than in H2-treated patients in

the one year, five years, and ten years following treatment (all with $p < 0.05$). **Conclusions:** Taking H2 blockers is associated with a small increased risk of mortality. This burden is observed in patients with and without an indication for PPI or H2 blocker use. PPIs were not associated with an increased risk of death, in contrast to other studies. This difference may be due to a broader and less selective patient population, or use of different controls.

PGI57 NON-BIOLOGIC TREATMENT OF GERMAN PATIENTS WITH INFLAMMATORY BOWEL DISEASE: ASSESSMENT OF HEALTH CARE RESOURCE USE AND COST ASSOCIATED WITH DISEASE ACTIVITY

Hardtstock F,¹ Brandes A,² Knop J,² Orzechowski HD,³ Fuchs A,⁴ Deiters B,⁵ Ghiani M,⁶ Wilke T,⁷ Bokemeyer B⁸

¹IPAM e.V., Wismar, Germany, ²Takeda Pharma Vertrieb GmbH & Co. KG, Berlin, Germany, ³Formerly, Takeda Pharma Vertrieb GmbH & Co. KG, Berlin, Germany, ⁴AOK PLUS, Dresden, Germany, ⁵GWQ ServicePlus AG, Düsseldorf, Germany, ⁶IPAM, University of Wismar, Wismar, Germany, ⁷Ingress-Health HWM GmbH, Wismar, Germany, ⁸Gastroenterology Practice Minden, Minden, Germany

Objectives: Inflammatory bowel disease (IBD) describes chronic inflammatory disorders, with Crohn's disease (CD) and ulcerative colitis (UC) as the most common forms. The majority of patients with at least moderate disease severity receives non-biologic therapies, mainly corticosteroids (CS) and/or immunosuppressants (IS). The aim of this study was to assess the percentage of non-biologic moderate/severe IBD patients with remaining IBD disease activity, and to understand the influence of observed active disease on health care resource use (HCRU) and direct cost. **Methods:** German claims data (AOK PLUS and GWQ ServicePlus; 8.5 million insured persons) were analysed retrospectively. CD/UC patients with at least one CS/IS prescription between 07/01/2015-06/30/2016 were included and followed for 12 months after index prescription. Indicators of IBD disease activity were (i) ≥ 2 prescriptions of systemic/locally-acting oral CS and/or (ii) at least one IBD-related surgery and/or (iii) IBD-related hospitalization(s) with ≥ 7 days of stay. In- and outpatient services as well as medication were considered for HCRU / cost analysis, numbers were reported per patient year (PY). **Results:** Of 5,170 CD (mean age 48.2 years, 56.9% female) and 4,701 UC patients (55.0 years, 48.5% female), 2,433 CD patients (50.3 years, 55.3% female) and 1,940 UC patients (58.2 years, 48.6%) had remaining IBD disease activity. Patients with active disease more often visited a GP than patients with non-active disease (6.8 vs. 6.1; 5.9 vs. 5.7 visits; $p < 0.001$), had a higher frequency of specialist visits in case of CD (7.7 vs. 6.9, $p < 0.001$) and experienced higher IBD-associated hospitalization rates (0.6 vs. 0.2, 0.3 vs. 0.2, $p < 0.001$). Direct IBD-associated costs for CD/UC patients with/without disease activity were 9,047€ vs. 4,049€ ($p < 0.001$) and 8,655€ vs. 4,708€ ($p < 0.001$). **Conclusions:** A substantial percentage of moderate to severe non-biologic IBD patients shows remaining disease activity which is itself associated with a substantial increase in HCRU and cost.

PGI58 A STUDY OF LONG TERM HOSPITALIZATION COSTS IN PATIENTS WITH ULCERATIVE COLITIS USING GERMAN CLAIMS DATA

Ghiani M,¹ Naessens D,² Takács P,³ Myers D,⁴ Maywald U,⁵

Bokemeyer B,⁶ Wilke T⁷

¹Ingress-Health HWM GmbH, Wismar, Germany, ²Janssen Pharmaceutica NV, Antwerpen, Belgium, ³Janssen-Cilag, Budapest, Hungary, ⁴Janssen Pharmaceutica, Stockholm, Sweden, ⁵AOK PLUS, Dresden, Germany, ⁶Gastroenterology Practice Minden, Minden, Germany, ⁷IPAM, University of Wismar, Wismar, Germany

Objectives: Proctocolectomy is considered curative in patients with ulcerative colitis (UC). However, the long-term cost of surgery and its complications is an underexplored question. This study used German claims data to investigate long-term UC-related hospitalization costs in patients who underwent surgery and patients who did not. **Methods:** Adult patients with a UC diagnosis between 01/01/2010-31/12/2017 were included from German health insurance data. Patients with UC-related surgery after first UC diagnosis, between 01/07/2010-31/12/2014, were identified and the surgery date was set as index. Non-surgery patients received random index date within the inclusion period, after first UC diagnosis. Non-surgery patients without a prescription of corticosteroids or biologics in the six months before index were dropped. A 1:2 nearest-neighbor propensity score matching (PSM) with replacement was implemented before investigating costs of UC-related hospitalizations (main diagnosis of UC or UC extra-intestinal manifestations) over three years after index. **Results:** After PSM, of 21,392 UC patients, 76 were included in the surgery group (34 had proctocolectomy, 37 colectomy, and 5 other surgeries) and 114 in the non-surgery group. UC-related hospitalization costs per-patient-year (PPY) were significantly higher for patients who underwent surgery (1,955.5€ vs 453.9€, $p < 0.001$). Considering costs PPY among patients with at least one hospitalization, the most frequent diagnoses were UC (2,304.7€ vs 1,283.8€, $p = 0.003$) and manifestations in the dermatologic and oral systems (1,084.1€ vs 1,164.4, $p = 0.864$). In the surgery group, the highest hospitalization costs PPY were for fistulas (4,149.9€), which never occurred in the non-surgery group. Hospitalization costs PPY with other diagnoses were higher in the surgery group (3,182.1€ vs 1,850.5€, $p = 0.045$).