## Burden of bowel urgency across specific treatment groups among Crohn's disease patients – real world global study analyses

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#### **BACKGROUND**

- Bowel urgency, the sudden and immediate need to have a bowel movement, is a common symptom in Crohn's disease (CD) patients.
- The pathophysiology /mechanism of bowel urgency in CD is very complex.
- Bowel urgency may persist despite treatment for CD and even when disease is considered inactive. 1-2

#### **OBJECTIVE**

■ This study explored differences in disease burden among CD patients with bowel urgency based on their treatment pathway.

#### **KEY RESULTS**

Table 1: Patients with CD on treatment for >3 months with presence of bowel urgency by treatment groups – physician reported data

	TT-naïve N=110	1L TT N=126	TT-exp N=60	p-value
Age, mean (SD)	37.8 (13.1)	40.0 (13.0)	44.7 (14.1)	0.0059*
Sex, male, n (%)	62 (56.4)	59 (46.8)	30 (50.0)	0.3381
BMI, mean (SD)	23.4 (2.9)	24.0 (3.9)	23.9 (3.5)	0.2910
Smoking status	N=103	N=117	N=59	0.5772
Current smoker, n (%)	28 (27.2)	22 (18.8)	14 (23.7)	
Ex-smoker, n (%)	30 (29.1)	44 (37.6)	20 (33.9)	
Never smoked, n (%)	45 (43.7)	51 (43.6)	25 (42.4)	
Flare status: Currently flaring <sup>a</sup> , n (%)	9 (8.7)	N=115 17 (14.8)	17 (29.3)	0.0024*
Current treatment: Steroids, n (%)	N=110 50 (45.5)	N=126 19 (15.1)	7 (11.7)	<0.0001*
SIBDQ <sup>a,b</sup> : Total score, mean (SD)	49.0 (8.5)	N=37 47.9 (14.7)	45.4 (11.9)	0.3873
EQ-5D: VAS <sup>a,c</sup> , mean (SD)	76.3 (13.6)	71.6 (21.0)	N=30 71.8 (13.6)	0.2893
WPAI: Overall work impairment <sup>d</sup> , mean % (SD)	26.4 (17.5)	22.0 (15.6)	27.9 (16.2)	0.5582

SD – standard deviation; BMI – body mass index; SIBDQ – Short Inflammatory Bowel Disease Questionnaire; VAS – Visual analogue scale; WPAI – Work Productivity and Activity Impairment alnohules patients with known data; bScores range 10 – 70, higher scores indicate better health related quality of life; Scores range 0 – 100, higher scores indicate better health related quality of life; Includes working patients with known data; statistical significance of α = 0.05.

### Comparing patients with bowel urgency by treatment group (Table 1)

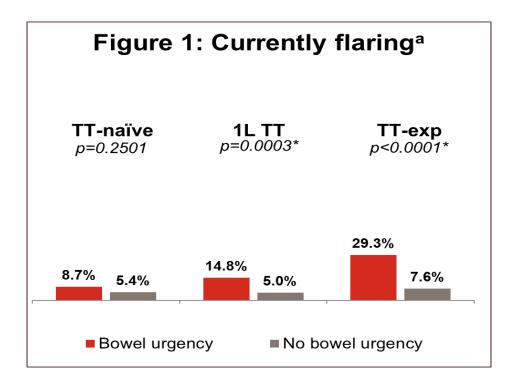
- 346 gastroenterologists reported data on 2,541 patients with CD with current treatment duration >3 months (France: n=439, Germany: n=458, Italy: n=414, Spain: n=458, UK: n=229, US: n=543).
- Of the patients with CD in the TT-naïve (n=643), 1L TT (n=994) and TT-exp (n=404) groups, 17%, 13% and 15% experienced bowel urgency at the time of data collection, respectively.
- TT-exp had the highest proportion of flaring patients (29%).
- Steroid use was highest in the TT-naïve group (45%) vs. 1L TT (15%) and TT-exp (12%) (p<0.0001).</p>
- 1L TT patients had the highest number of visits to healthcare professionals in the last 12 months.
- The patient reported outcome measures indicated substantial and similar quality of life impairment across all patients with bowel urgency.

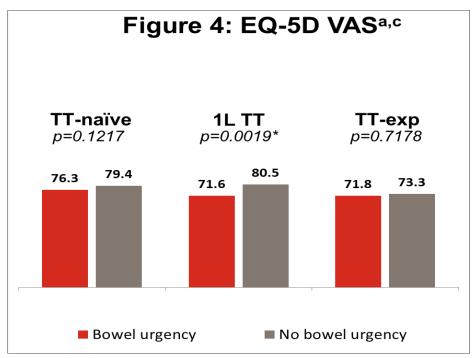
### CONCLUSIONS

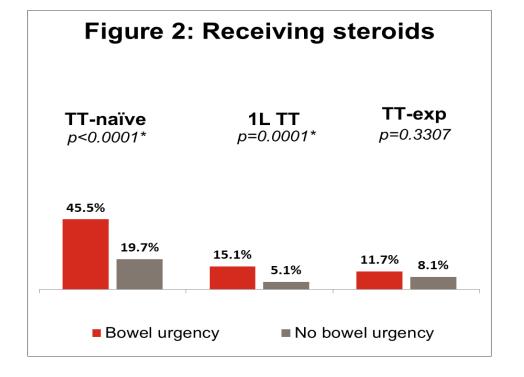
- This study confirmed that a substantial proportion of patients with CD across all three groups still experience bowel urgency despite receiving advanced treatment.
- Patients with bowel urgency are more likely to receive steroids, have decreased work productivity and worse quality of life compared to patients without bowel urgency.
- Since bowel urgency is known to negatively impact patients' quality of life, there is a therapeutic need to address this symptom.

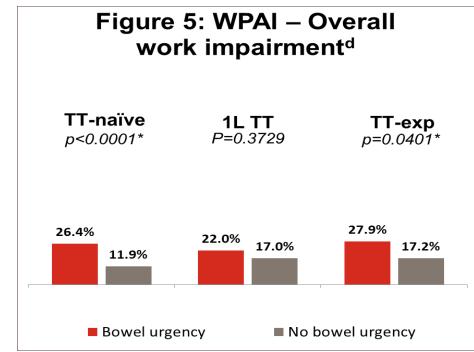
### **METHODS**

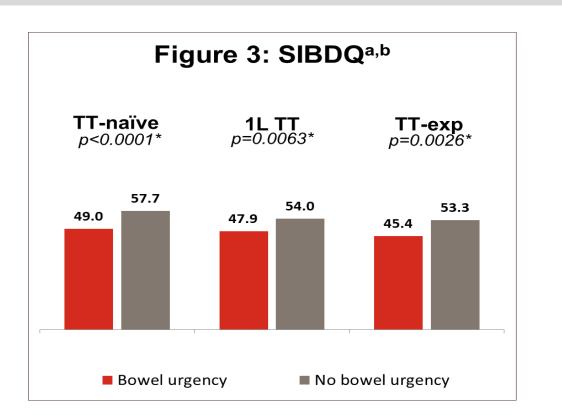
- Data were extracted from the Adelphi Disease Specific Programme<sup>TM</sup> for CD³, a point-in-time survey of gastroenterologists and patients with CD from Jan 2020-Mar 2021 in Germany, France, Spain, Italy, UK and US.
- Gastroenterologists provided patient demographics, clinical characteristics and treatment history.
- The same patients were invited to complete the Short Inflammatory Bowel Disease Questionnaire (SIBDQ)4, EQ-5D Visual Analog Scale (VAS)5, and Work Productivity and Activity Impairment (WPAI)6 questionnaire.
- Three patient subgroups were identified:
  - never received targeted therapy (biologics and JAK inhibitors; TT-naïve),
  - receiving first targeted therapy currently (1L TT)
  - receiving targeted therapy with prior targeted therapy use (TT-exp).
- Patients with current treatment duration ≤3 months were excluded. Within these groups, patients were further divided by whether they were currently experiencing day- or nighttime bowel urgency as reported by gastroenterologists.
- Fisher's and T-tests were used to compare across groups.











Outcomes in patients with and without bowel urgency were compared, stratified by treatment groups (TT-naïve, 1L TT, TT-exp). Binary outcomes were compared using Fisher's exact test (Figures 1-2) and quantitative variables using T-test (Figures 3-5).

SIBDQ – Short Inflammatory Bowel Disease Questionnaire; VAS – Visual analogue scale; WPAI – Work Productivity and Activity Impairment

TT-naïve = never received targeted therapy,

1L TT = currently receiving first line targeted therapy,

TT-exp = receiving targeted therapy with prior targeted therapy use

<sup>a</sup>Includes patients with known data; <sup>b</sup>Scores range 10 – 70, higher scores indicate better health related quality of life; <sup>c</sup>Scores range 0 – 100, higher scores indicate better health related quality of life; <sup>d</sup>Includes working patients with known data.

# Comparing patients with vs. without bowel urgency (Figures 1-5)

- Patients with bowel urgency in the 1L TT and TTexp groups were significantly more likely to be currently flaring than those without bowel urgency (Figure 1).
- Patients with bowel urgency in the TT-naïve and 1L TT groups were more likely to be receiving steroids (Figure 2).
- Patients with bowel urgency in all treatment groups had significantly lower SIBDQ than patients without bowel urgency (Figure 3).
- Patients with bowel urgency in the 1L TT group had significantly lower EQ-5D VAS scores than patients without bowel urgency (Figure 4).
- Patients with bowel urgency in the TT-naïve and TT-exp groups had significantly more work impairment than patients without bowel urgency (Figure 5).

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#### SCLOSURES

- Raja Atreya received reimbursement from Eli Lilly & Company for expenses related to presenting this poster; Marijana Nedeljkovic Protic, Petra Streit, Susanne Hartz, and Theresa Hunter are employees and shareholders of: Eli Lilly and Company; Hannah Knight, Sophie Barlow, and Fritha Hennessy are employees of Adelphi Real World.
- Data collection was undertaken by Adelphi Real World as part of an independent survey, entitled the Adelphi IBD DSP. Eli Lilly & Company did not influence the original survey through either contribution to the design of questionnaires or data collection. The analysis described here used data from the Adelphi IBD DSP. The DSP is a wholly owned Adelphi product. Eli Lilly & Company is one of multiple subscribers to the DSP. This study was previously presented at the United European Gastroenterology Week (UEGW) 2022

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