

# Retrospective Analysis of Disease Burden, Treatment Patterns, and Healthcare Resource Utilization in Patients with Ulcerative Colitis in Dubai, United Arab Emirates

Sameer Al Awadhi<sup>1</sup>, Ahmed Mohammed Khassouan<sup>2</sup>, Mohammad Farghaly<sup>3</sup>, Sara Al Dallal<sup>4</sup>, Mostafa Zayed<sup>5</sup>, Fadwa Ebeid<sup>5</sup>, Badarinath Ramachandrar<sup>6</sup>, Kumaresan Subramanyam<sup>7</sup>, Haytham Mohamed<sup>5</sup>

<sup>1</sup>Head of Gastroenterology Unit, Rashid Hospital - Dubai Health, Dubai, UAE; <sup>2</sup>Gastroenterology Digestive Disease Unit, Rashid Hospital – Dubai Health, Dubai, UAE; <sup>3</sup>Health Economics and Insurance Policies Department, Dubai Health Authority, Dubai, UAE; <sup>4</sup>Dubai Health Authority, Dubai, UAE; <sup>5</sup>Pfizer Inc Ltd, Dubai, UAE; <sup>6</sup>Real-World Evidence, IQVIA, Dubai, UAE; <sup>7</sup>EMEA Consulting Services, IQVIA, Bengaluru, India

SA122



## BACKGROUND

- Ulcerative colitis (UC), a debilitating chronic inflammatory disease with incidence rates ranging from 1.2 to 20.3 cases per 100,000 people/year, adversely impacts quality of life and healthcare costs in affected individuals.<sup>1-3</sup>
- The current study assessed the disease burden (proportion of patients with disease year-over-year, comorbidities), treatment patterns and healthcare resource utilization (HCRU) in patients with UC, as captured in an insurance e-claims data source in Dubai, United Arab Emirates (UAE).



## METHODOLOGY

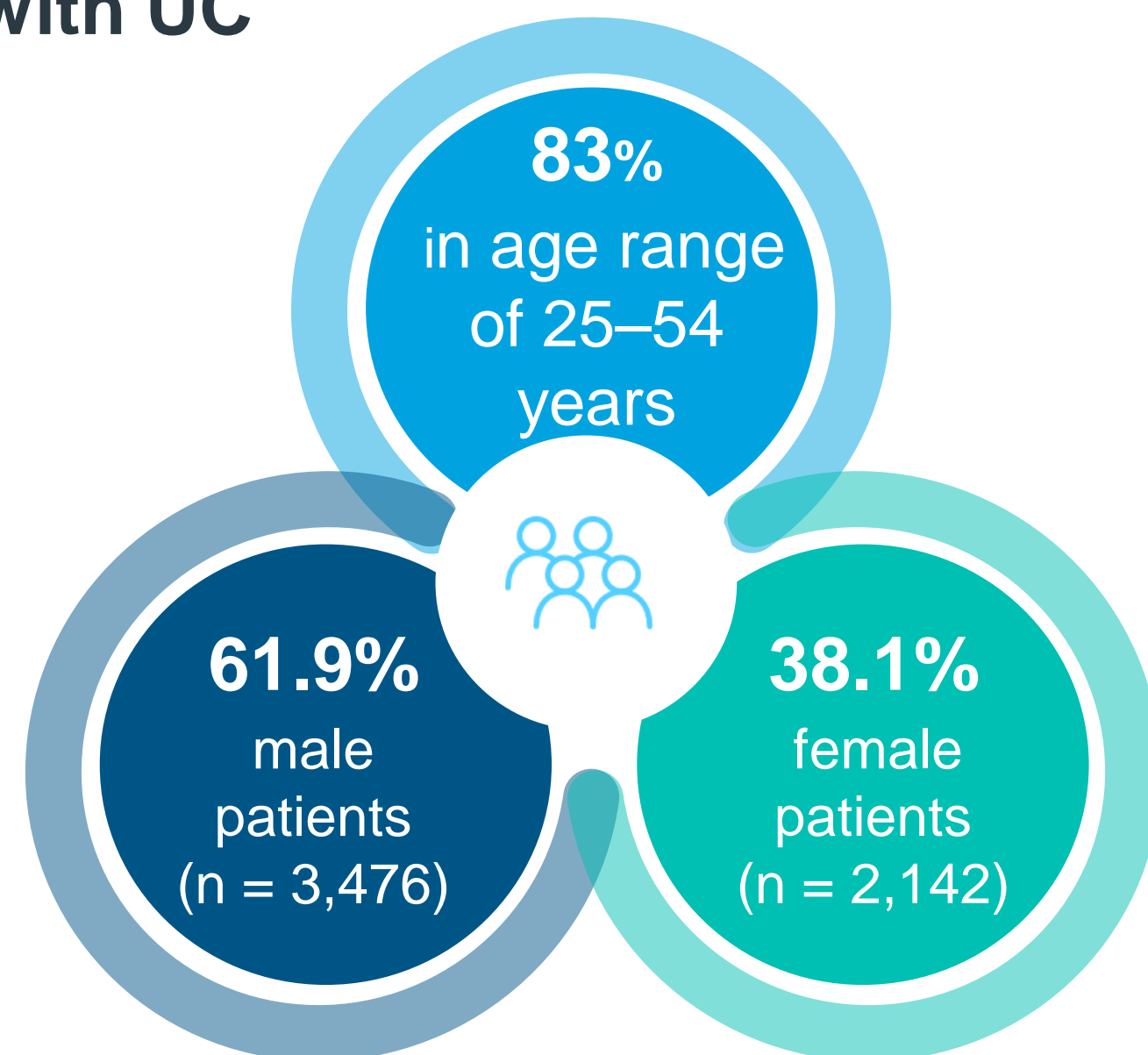
- This retrospective cohort study was conducted from 01 January 2014 to 30 September 2023 using the Dubai Real-World Database (DRWD).
- DRWD captures insurance-related claims processed by private insurers in the Emirates of Dubai and covers only the expatriate community, which constitutes 89% of total populations.
- Patients with a first diagnosis claim (primary/secondary/hospital admission) for UC any time during the index period (01 January 2014 to 30 September 2022) and treated with relevant medications as per European Crohn's and Colitis Organisation (ECCO) guidelines were analysed.



## RESULTS

### 1. Baseline characteristics in patients with UC

- The study included 11,812 patients with a mean age of **38.8 years**. The majority of patients (83%) were aged 25–54 years, with a predominantly male population (male patients: 61.9%; female patients: 38.1%).



### 2. Proportion of patients with UC in e-claims database : Year-over-year trend in patient distribution

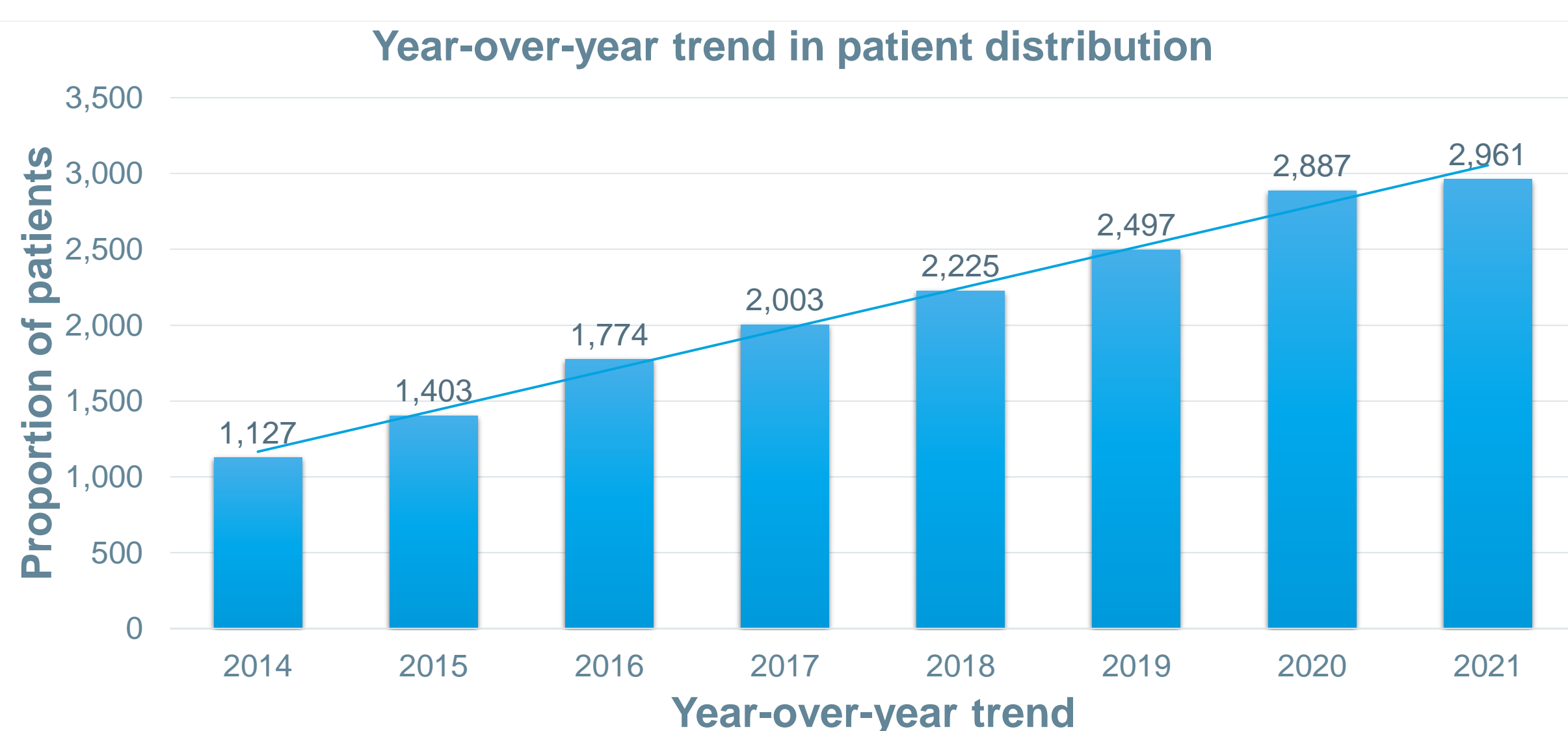
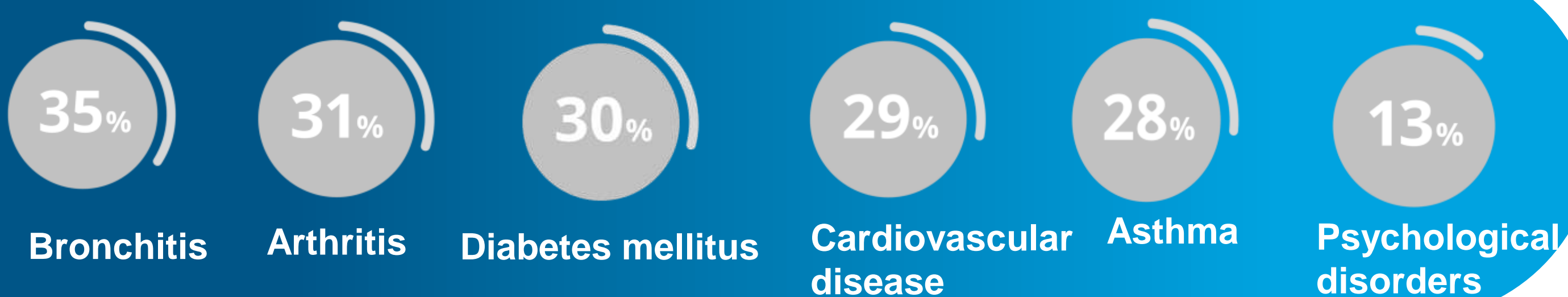


Figure 1: Proportion of patients with UC year-over-year (e-claims data)

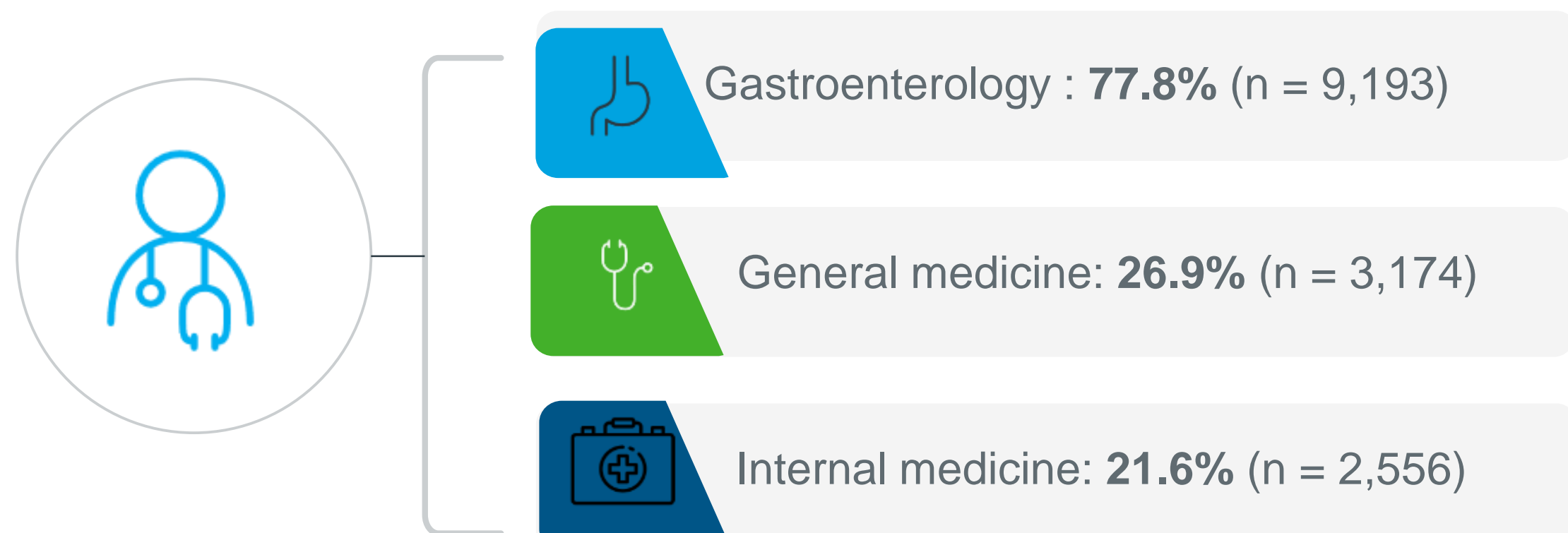
The cumulative proportion of UC cases ranged from 0.07% to 0.10% of the total patient population in DRWD, between 2014 and 2022, demonstrating a gradual increase in the number of cases (Figure 1).

### 3. Comorbidity analysis in patients with UC

Among patients with UC with comorbidities (n = 5,441), the most prevalent comorbidities were bronchitis (35%), arthritis (31%), diabetes mellitus (30%), cardiovascular disease (29%), asthma (28%), and psychological disorders (13%).



### 4. Speciality analysis in patients with UC



In patients with UC, the most frequently consulted specialities included gastroenterology (77.8%), general medicine (26.9%), and internal medicine (21.6%).

### 4. Treatment pattern in patients with UC

Most patients (92.9%, n = 10,973) were prescribed conventional treatment (immunosuppressants, corticosteroids, 5-aminosalicylic acid); while only 7.1% (n = 839) of patients received advanced treatment (biologics, Janus kinase inhibitors, sphingosine-1-phosphate receptor modulators), highlighting the low prescription of biologics and other advanced therapies (Figure 2).

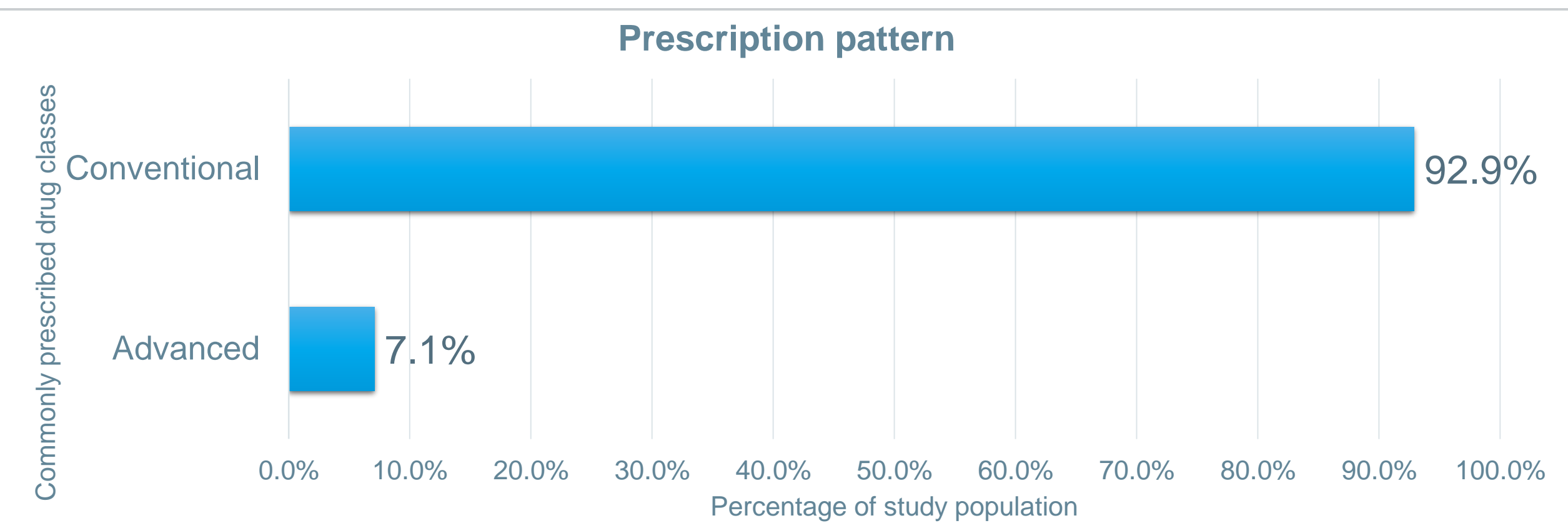
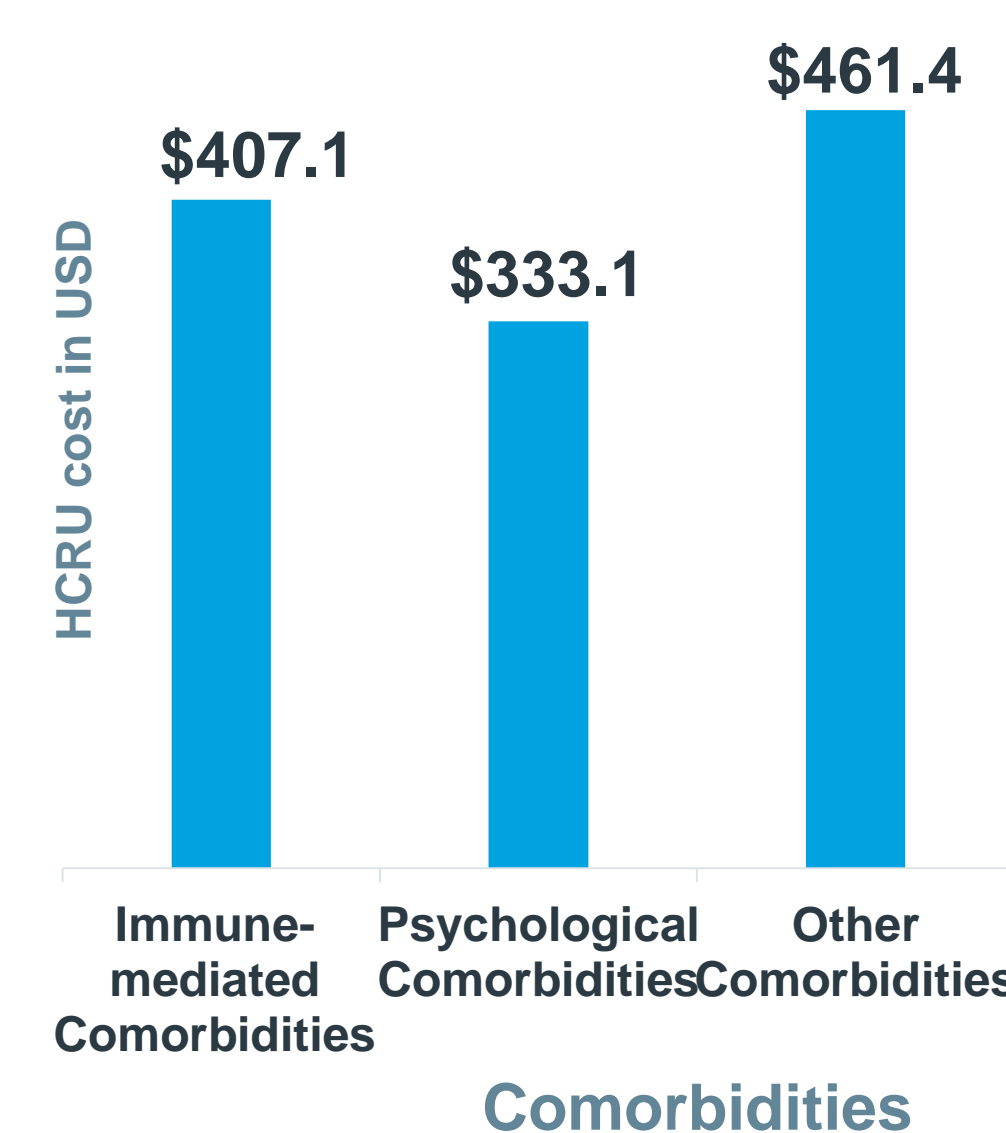


Figure 2: Percentage of patients prescribed conventional and advanced treatment in study population

### 5. HCRU in patients with UC



- In the overall cohort, the median all-cause cost and disease-specific cost incurred were USD 2,703.4 and USD 1,314.7, respectively.
- The median disease-specific cost due to inpatient visits (USD 3,442.0), outpatient visits (USD 1,197.6) and medications (USD 513.8) were the major cost drivers.
- Among patients with UC with comorbidities, the median disease-specific costs incurred for immune-mediated disorders, psychological disorders, and other comorbidities were USD 407.1, USD 333.1, and USD 461.4, respectively, during the 12-month post-index period (Figure 3).

Figure 3: HCRU cost in patients with UC with comorbidities

## CONCLUSION

The current study findings highlight a substantial disease burden in the region, with an increase in the number of UC cases over the years, prevalent comorbidities, and associated healthcare costs. The primary treatments administered were immunosuppressants and steroids, with a low biologic prescription rate. For more effective UC management, novel therapies such as biologics and novel oral drugs are emerging as promising therapeutic strategies, considering their optimal clinical outcomes. Further studies are needed to evaluate how biologics and newer therapies may play a role in achieving preferable outcomes and reducing the disease burden of UC in Dubai, UAE.

## REFERENCES

- Gajendran M, Loganathan P, Jimenez G, Catinella AP, Ng N, Umapathy C, et al. A comprehensive review and update on ulcerative colitis(). *Dis Mon*. 2019;65(12):100851.
- Porter RJ, Kalla R, Ho GT. Ulcerative colitis: Recent advances in the understanding of disease pathogenesis. *F1000Res*. 2020;9.
- Barreiro-de Acosta M, Molero A, Artme E, Díaz-Cerezo S, Lizán L, de Paz HD, et al. Epidemiological, Clinical, Patient-Reported and Economic Burden of Inflammatory Bowel Disease (Ulcerative colitis and Crohn's disease) in Spain: A Systematic Review. *Advances in Therapy*. 2023;40(5):1975-2014

Acknowledgements: Dr Kavitha Ganesh and Dipti Mothay from IQVIA for medical writing support; Chandan Kumar NP from IQVIA for data analysis.

Presented at: ISPOR Europe, November 17–20, 2024, Barcelona, Spain.

Disclosures: Mostafa Zayed and Haytham Mohamed are full-time employees of Pfizer Inc. Other authors do not report any conflicts of interest.

Funding: The study was funded by Pfizer Inc.

