Mepolizumab Impact on Healthcare Resource Utilization and Work Productivity in Patients With Severe Asthma: REALITI-A 2-Year Analysis

Treatment with mepolizumab reduced HCRU and WPAI 24 months post-initiation, compared with the pre-initiation period in patients with severe asthma in a real-world setting.

Pre-exposure

−27.2 (28.7) ■ 0−24 months post-exposure

-4.2(24.1)

% work

time missing

11.0 (26.4)

EE 182

Digital poster



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Background

- Patients with severe asthma are commonly prescribed mOCS despite adverse event risk. Advancements in asthma therapy have led to the introduction of add-on biologic treatments with the goal of achieving reduced exacerbations and disease control^{1,2}
- HCRU and work productivity losses are higher among patients with severe asthma compared with patients with mild-to-moderate asthma³⁻⁶
- Mepolizumab is a first-in-class humanized monoclonal antibody, specifically targeting IL-5, approved for the treatment of patients with **severe asthma** with eosinophilic phenotype⁷
- Patients treated with mepolizumab have demonstrated improvement in HCRU, and WPAI outcomes in both clinical and real-world settings⁸⁻¹¹
- However, long-term HCRU and WPAI outcomes for patients with severe asthma treated with mepolizumab are limited

Aims



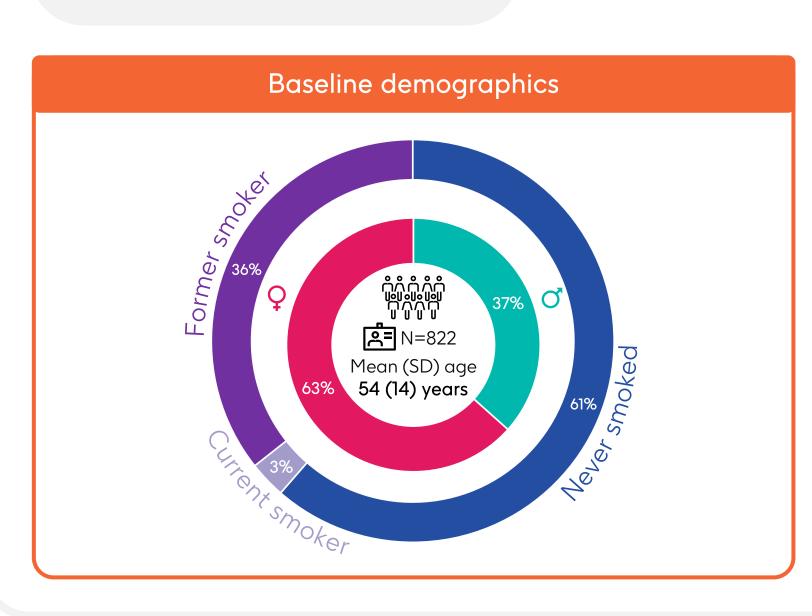
Describe the long-term effect of mepolizumab treatment on HCRU and WPAI in patients with severe asthma, in an analysis of 2-year data from the real-world REALITI-A study

Baseline data

impairment while working

52.3 (28.1)

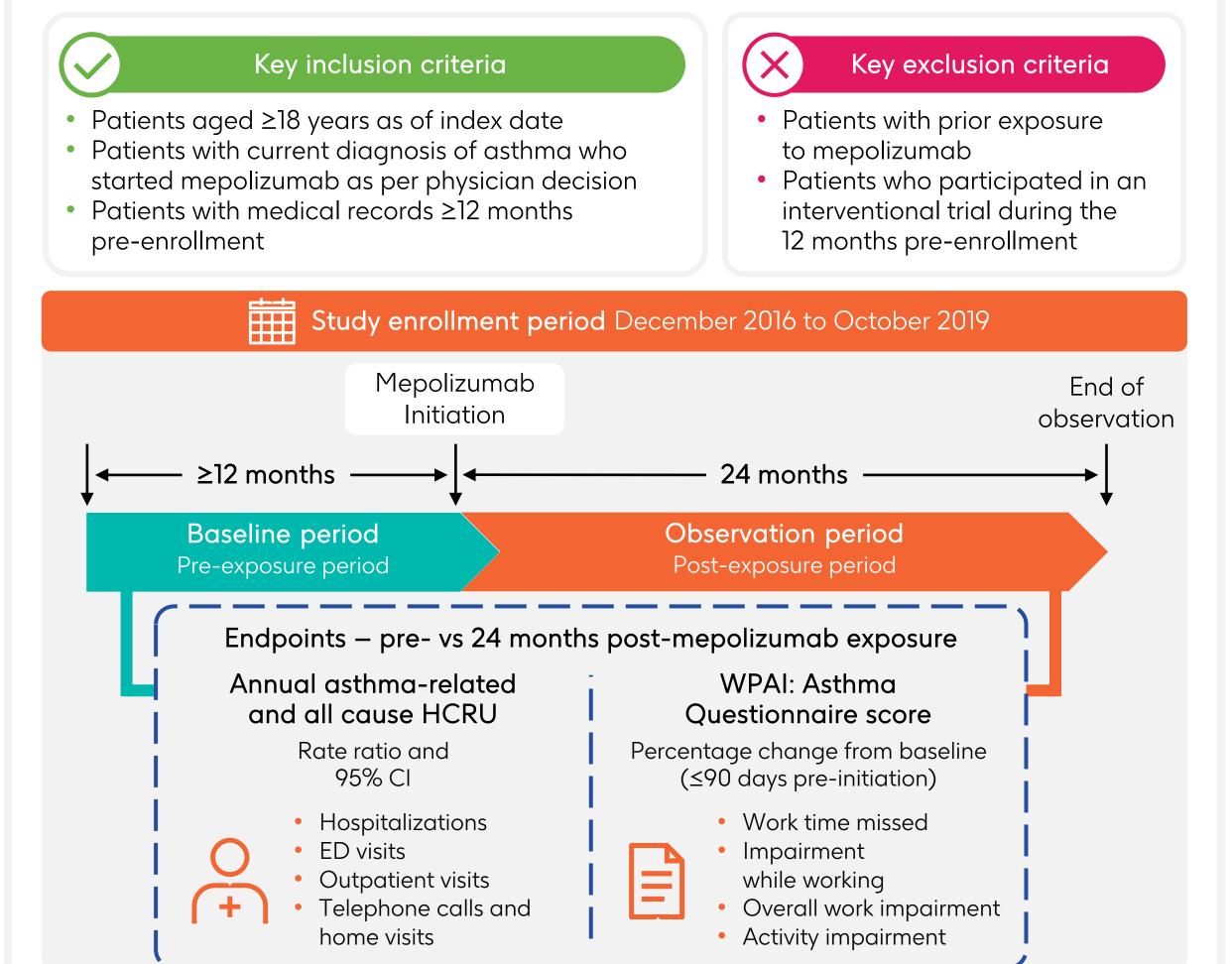
-31.3 (31.3)



Baseline clinical characteristics Mean (SD) clinically significant **mOCS** use prior to initiation was N=320 (39%), with a median dose exacerbations prior to initiation*: 4.4 (4.1) of 10.0 mg/d (min, max; 0, 80) *Defined as exacerbations requiring OCS use and/or an ED visits and/or hospitalization.

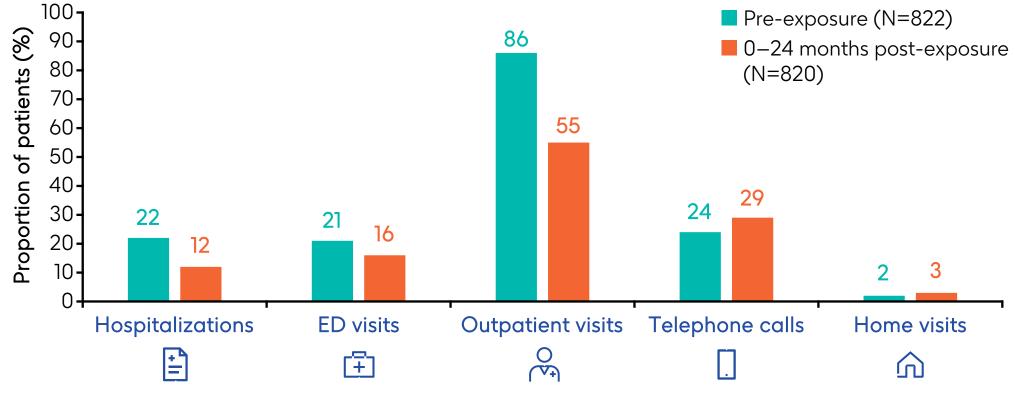
Study design

Real-world, prospective observational

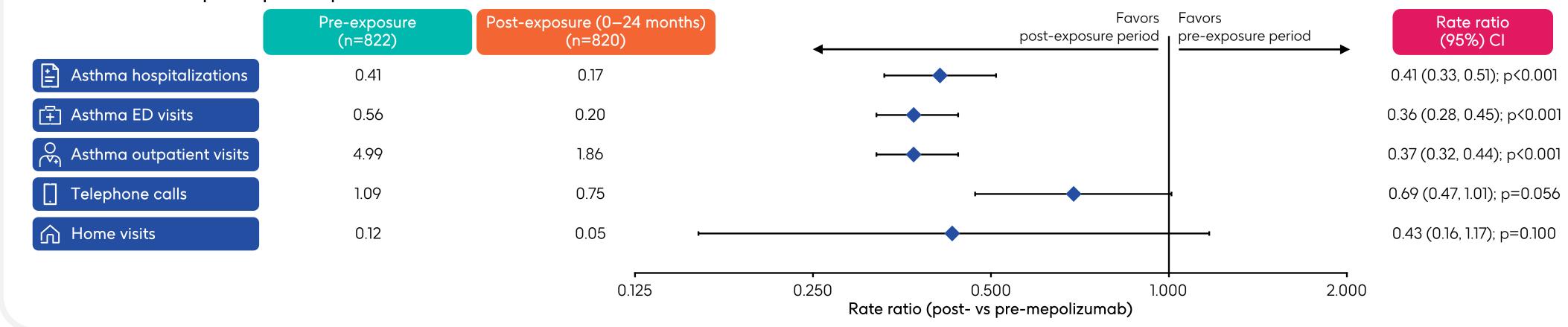


Results

Figure 1: Fewer patients had asthma hospitalizations, ED visits, and outpatient visits during the 24 months post-mepolizumab initiation compared with the baseline period



% overall % impairment % activity while working Figure 2: The rate of asthma hospitalizations, ED visits, and outpatient visits during the 12 months post-mepolizumab initiation was significantly (p<0.001) reduced by 59–63% versus the pre-exposure period



Conclusions

This **real-world** analysis indicated that 24 months of **mepolizumab treatment** in patients with severe asthma reduced overall HCRU compared with the pre-exposure period, with **significant** reductions observed in hospitalizations, ED visits, and outpatient visits

Improved work productivity and reduced activity impairment were also observed 24 months **post-mepolizumab initiation**, with around 30% reductions in indicators of activity impairment, overall work impairment and impairment while working



These **real-world data** may be informative for healthcare system resource allocation

Abbreviations

Cl, confidence interval; ED, emergency department; HCRU, healthcare resource utilization; IL-5, interleukin-5; mOCS, maintenance oral corticosteroids; SD, standard deviation; WPAI, work productivity; and activity impairment

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Disclosures

Figure 3: Reductions were observed across all WPAI: Asthma composite scores at

24 months post-mepolizumab initiation compared with baseline, with greater

reductions observed in activity impairment, overall work impairment and

-28.0 (31.3)

38.2 (28.7)

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