REAL-WORLD EFFECTIVENESS OF MEPOLIZUMAB IN REDUCING ASTHMA EXACERBATIONS IN JAPAN

To better understand how mepolizumab performs in the real-world, we assessed the impact of mepolizumab on exacerbation rates and OCS dose among patients with severe eosinophilic asthma in Japan, using data derived from the Medical Data Vision (MDV) Claims Database.

Mepolizumab is a humanized anti-IL-5 monoclonal antibody approved as an add-on therapy for severe eosinophilic asthma in multiple regions worldwide.²

Exacerbations were defined as: Outpatient asthma visit with short-term SCS treatment
- Exacerbation associated with adenovirus, influenza, or unexplainable
- A need for a change of oral corticosteroids dose (for patients receiving OCS)

WE ANALYZED: THE RATE OF AND PROPORTION OF PATIENTS WITH ANY EXACERBATION

THE RATE OF AND PROPORTION OF PATIENTS WITH EXACERBATIONS REQUIRING HOSPITALIZATION

WE ALSO ANALYZED MEDIAN DAILY OCS Dose IN 97 PATIENTS WITH CONTINUOUS OCS USE

MIDIAN DAILY OCS Dose (mg/4d)

For patients with medical claims between June 2015 and September 2019

We excluded real-world data in the MDV claims database.

For patients with medical claims between June 2015 and September 2019

We excluded patients with:
- Inconsistent/missing information on age and sex
- A diagnosis of EGIS up to 12 months before their first mepolizumab injection

The rate of and proportion of patients with exacerbations requiring hospitalization

Most common clinical comorbidities

Aims

Outpatient asthma visit with short-term SCS treatment

Median age 62 years Female 53%

WE INCLUDED patients with:
- A diagnosis of asthma up to 12 months before their first mepolizumab injection
- Regular (quarterly) contact with healthcare systems in the MDV database during the 12 months before and 12 months after first mepolizumab injection

1007 patients had ≥1 medical claim for mepolizumab

Proportion of patients with any exacerbation

56%

Decreased by 56%

Before mepolizumab

After mepolizumab

Exacerbations requiring hospitalization per patient-year

Decreased by 41%

Before mepolizumab

After mepolizumab

Median daily OCS dose

9.3 mg/4d

Before mepolizumab

6.7 mg/4d

After mepolizumab

3.7 mg/4d

ESCAPES REQUIRING HOSPITALIZATION

- Decreased by 31%

Before mepolizumab

After mepolizumab

HOSPITALIZATION PER PATIENT-YEAR

3.3

6.7

Exacerbations requiring hospitalization per patient-year

Our results show that the effectiveness of mepolizumab previously demonstrated in clinical trials translates to the real world

This reflects the findings of previous Phase III clinical trials, which have shown mepolizumab reduces exacerbations and OCS use compared with placebo for patients with severe eosinophilic asthma.⁴

*MDV code 622489001; †reported by ≥20% of patients: chronic comorbidities were identified by the presence of a disease code† at baseline. 24% of patients included before mepolizumab initiation (estimated follow-up was 1 year in the case of the following: 1 year after mepolizumab initiation; patients discontinued by 36 months without another mepolizumab injection), state of all asthma treatments, ≥3 days of hydrocortisone therapy; patients with ≥1 days between incidence of OCS dose during 3 month before mepolizumab initiation.

REFERENCES


3. Available at: https://tago.ca/-ATS29

AFFILIATIONS

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SUMMARY

41–56% REDUCTION

in exacerbation rates in patients with severe eosinophilic asthma treated with mepolizumab in a real-world setting

Mepolizumab also reduced daily OCS doses by up to 51%