The Severe Asthma Patient Experience: In-Clinic and Self-Administration of Mepolizumab

Poster No. 1301 (A1312)

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Aims

Mepolizumab is an add-on maintenance treatment for patients with severe eosinophilic asthma (SEA) and has been shown to reduce blood eosinophil counts and asthma exacerbations and improve lung function and health-related quality of life, compared with placebo.[1–3]

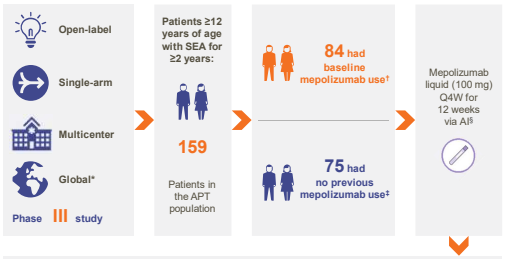
The original approved formulation of mepolizumab was as a lyophilized powder for reconstitution and administration in-clinic.[4,5] A liquid drug formulation in a ready-to-use prefilled autoinjector (AI), enabling self-administration, was approved for use in 2019.[4,5]

This post hoc descriptive analysis compared the patient experience in patients who had previously received mepolizumab in-clinic and then switched to self-administration using an AI with those who first started mepolizumab with self-administration using an AI.

Methods

Study design

GSK ID: 204959; NCT03099096[5]



Endpoints

Quantitative assessment (via questionnaire) of all participants at the end of the study (Week 12). Questions broadly covered participants' experience using the AI, including assessment of their anxiety, satisfaction, comfort, and confidence levels with self-administration.

*Countries include: USA, Germany, UK, Canada, Australia, Russia, and Sweden; †mepolizumab (100 mg) subcutaneously Q4W for ≥12 weeks in-clinic by a healthcare practitioner prior to screening; ‡met additional SEA criteria requiring regular treatment with high-dose inhaled corticosteroids plus additional controller medication, and history of ≥1 exacerbations requiring systemic corticosteroids in the prior year; §injections were given at Weeks 0, 4, and 8. APT, all patients treated (comprising patients/caregivers who attempted ≥1 self-administration via an AI); Q4W, once every 4 weeks

Results

Baseline demographics and clinical characteristics

	Age	Female n (%)	Disease duration	Exacerbation rate in previous year
With baseline mepolizumab use	53 (15) years	52 (62%)	25 (16) years	1.3 (1.4)
No previous mepolizumab use	46 (16) years	46 (61%)	21 (16) years	2.0 (1.1)

Values are mean (standard deviation) unless otherwise specified.

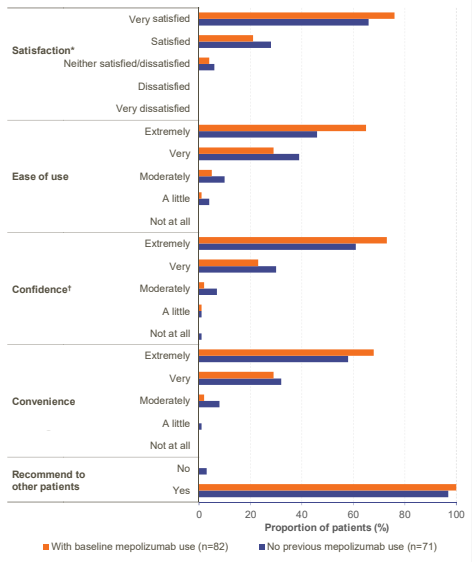
The majority of participants successfully administered mepolizumab using the AI at Week 8 (the third dose) regardless of baseline mepolizumab use

The denominator for the percentage of successful injections is the number of attempted injections.

Similar proportions of participants with and without baseline mepolizumab use reported anxiety with mepolizumab self-administration using an AI*

*When asked: 'How anxious did you feel about administering mepolizumab using the AI at home?'

A positive treatment experience was reported by the majority of patients using the AI, regardless of baseline mepolizumab use

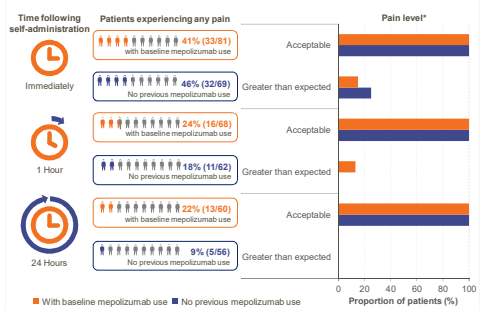


*When asked: 'Overall, how satisfied are you with having to give yourself an injection every 4 weeks with the pen at home?'; †when asked: 'At the end of the study, how confident were you about your ability to use the pen in the correct way on your own when you were not at the doctor's office?'

Conclusions

- The majority of patients in both groups reported similar levels of satisfaction, success, confidence, and convenience with self-administration of mepolizumab using an AI.
- The majority of patients reported little or no anxiety with self-administration of mepolizumab using an AI regardless of whether they had previously received mepolizumab in-clinic or not.
- Injection pain following self-administration of mepolizumab with an AI was similar in patients with or without prior mepolizumab use.
- These findings provide further evidence of the convenience and usability of self-administration of mepolizumab using an AI in patients with SEA.

Injection pain reported at Week 8 was similar with and without baseline mepolizumab use



*All patients were asked if the pain was acceptable, despite the degree of pain experienced and the relative pain to expectation.

References

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Disclosures

- This study was funded by GlaxoSmithKline (GSK ID: 204959; NCT03099096).
- DB has received grant/research/clinical trial support from GSK, Teva, AstraZeneca, Pearl, Novartis, Genentech, Lupin, Merck, Mylan, Boehringer Ingelheim, Amgen, Aimmune, Menlo, Shire, Biocryst and has consulted/participated in advisory boards for GSK, ALK America, Gerson-Lehman, Guidepoint Global. CB has received payments from GSK, AstraZeneca/MedImmune, Novartis, Genentech/Roche, Chiesi, and Boehringer Ingelheim.
- CP, RF, JB, and EB are employees of GSK and hold stocks/shares.
- *Affiliation at time of this analysis. EB contributed to this study and the parent abstract but was not available to approve the final version of this poster presentation.
- Editorial support (in the form of writing assistance, assembling tables and figures, collating and incorporating author comments, grammatical editing, and referencing) was provided by Kerry Knight, PhD, at Fishawack Indicia Ltd, UK, and was funded by GSK.

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Prepared for the American Thoracic Society Annual Meeting (2020)