References

Methods
METHODS
MENSA & MUSCA
Poster No. 067
Seasonal Efficacy of Mepolizumab in Patients With Severe Eosinophilic Asthma – Meta-analysis From Two Phase 3 Trials
Taillé C1, Israel E2, Lee J3, Gruber A4, Smith SG5, Mallatt S5, Yancey S5, Bradford E5, Albers FC7, Liu MC2

Aims
- For patients with asthma, the risk of having an exacerbation can be influenced by allergen sensitization and seasonal triggers. Since many allergic and respiratory issues appear in seasonal patterns, asthma exacerbations are often observed in similar seasonal cycles.
- Mepolizumab is an anti-eotaxin-5 monoclonal antibody approved as an add-on therapy for severe eosinophilic asthma. Compared with placebo, mepolizumab in addition to optimized standard of care has been shown to reduce exacerbation rates for patients with severe eosinophilic asthma. However, studies assessing the effect of mepolizumab on seasonal exacerbations have been inconsistent.

This study aimed to evaluate the effect of the licensed dose of mepolizumab (100 mg subcutaneous [SC]) on seasonal exacerbations.

Methods
- MENSA & MUSCA
- Post hoc meta-analysis

Patients receiving mepolizumab versus placebo experienced a reduction in exacerbation rate across all seasons; those receiving placebo experienced larger seasonal variations in exacerbation rate.

Conclusions
- Mepolizumab reduces exacerbation rates for patients with severe eosinophilic asthma, irrespective of the season or allergen sensitization.
- The risk of exacerbation among patients receiving mepolizumab is mostly seasonally consistent across all seasons; however, the response to mepolizumab in the placebo group experiencing more exacerbations in this season.
- Our results suggest that although perennial and seasonal allergies can influence exacerbations over a 12-month period, patients with severe eosinophilic asthma may experience clinical benefit with mepolizumab, irrespective of the season.

The rate of exacerbations among patients receiving mepolizumab was significantly lower (P = 0.0006) compared with placebo. In the Southern Hemisphere, a 6-month delay was added to the exacerbation start date to classify the season. CI, confidence interval.