

therefore less rehospitalisation, therefore showing a high impact for the work of clinical pharmacists.

## REFERENCES AND/OR ACKNOWLEDGEMENTS

**Conflict of interest** No conflict of interest

### 4CPS-191 SWITCH TO BENRALIZUMAB FOR SEVERE EOSINOPHILIC ASTHMA

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10.1136/ejhpharm-2022-eahp.403

**Background and importance** Mepolizumab and benralizumab are monoclonal antibodies directed against anti-IL-5 and anti-IL5R, respectively, and their use reduces exacerbation rate and maintenance oral corticosteroid requirements in severe eosinophilic asthma.

We observed that a minority of patients treated with mepolizumab experienced a suboptimal response and switched to benralizumab which provides a more complete depletion of eosinophils.

**Aim and objectives** To study the effectiveness and safety of benralizumab in patients with severe refractory uncontrolled eosinophilic asthma after failure of mepolizumab.

To compare patients' annual asthmatic exacerbations after switching to benralizumab.

**Material and methods** Observational, retrospective study of patients with severe eosinophilic asthma treated with benralizumab for at least 6 months with prior mepolizumab therapy in a tertiary level hospital. The study was conducted until October 2021.

Data collected: sex, age, adherence level, duration of treatment with mepolizumab, pulmonary function tests: forced expired volume in the first second (FEV1), FEV1/forced vital capacity ratio (FEV1/FVC); blood eosinophil value, points for the Asthma Control Test (ACT) and number of exacerbations. The average of variation in these parameters 24 weeks before and after starting treatment with benralizumab was analysed. Adverse events were also collected. Statistical analysis was performed using the Student's t-test.

**Results** 30 patients previously treated with mepolizumab after its failure or lack of asthma control, started treatment with benralizumab. 21 were women with a median age of 53 (17–80) years.

The average level of adherence, according to the dispensing registry, was  $90.62 \pm 6.70\%$ .

The median duration of treatment with mepolizumab was 13 (3–39) months.

FEV1 increased by  $8.26 \pm 3.90$  mL ( $p < 0.01$ ), FEV1/FVC ratio increased by  $3.24 \pm 1.43$  ( $p < 0.01$ ) and ACT improved by  $4.84 \pm 0.25$  points ( $p < 0.001$ ). Eosinophilia decreased from  $160.43 \pm 94.7$  to  $24.26 \pm 20$  cells/ $\mu$ L ( $p < 0.001$ ).

Annual asthmatic exacerbations were reduced from 2.19 (1–6) to 0.57 (0–3) ( $p < 0.0001$ ).

1 patient did not respond to benralizumab and was switched to dupilumab after 6 months.

Adverse events due to benralizumab were recorded in 3 patients, and in 2 of them treatment had to be definitively discontinued. Adverse effects were: moderate erythema nodosum, allergic reaction, hot flashes and back pain.

**Conclusion and relevance** We report substantial and clinically meaningful improvements in exacerbation rate, asthma control and ACT scores. Benralizumab may be an effective alternative for those patients with lack of asthma control with mepolizumab.

## REFERENCES AND/OR ACKNOWLEDGEMENTS

**Conflict of interest** No conflict of interest

### 4CPS-199 EVALUATION OF FREMANEZUMAB RESPONSE IN MIGRAINE PROPHYLAXIS

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10.1136/ejhpharm-2022-eahp.404

**Background and importance** Fremanezumab is a humanised monoclonal antibody (IgG2) that binds to the calcitonin gene-related peptide (CGRP). CGRP is a neuropeptide that, in addition to modulating nociceptive signals, is a vasodilator that is associated with migraine. CGRP levels have been found to increase significantly during migraine and normalise with headache relief.

**Aim and objectives** To study the effectiveness and security of fremanezumab in migraine prophylaxis after 3 months of treatment.

**Material and methods** Retrospective observational study. All patients with more than 3 months of fremanezumab treatment in our hospital were included.

Data collected: sex, age, previous biological therapy, dosage regimen, moderate-severe migraine days per month and score on the Headache Impact Test-6 (HIT-6), Migraine Disability Assessment Scale (MIDAS) and any adverse event.

**Results** Forty-five patients were included with a median age of 43 (23–70) years of whom 39 (86.7%) were women. Effectiveness data could be extracted for 35 of them.

No patient had any other previous biological treatment for migraine. 32% of patients were treated with fremanezumab 675 mg once every 3 months and the remainder with 225 mg monthly.

Patients presented pre-baseline versus after 3 months (mean  $\pm$  standard deviation):  $17.7 \pm 7.2$  vs  $10.9 \pm 9.4$  migraine days/month ( $p < 0.001$ ); MIDAS scale:  $94.8 \pm 80.4$  vs  $82.3 \pm 102.7$  ( $p > 0.1$ ) and HIT-6 scale:  $65.4 \pm 9.8$  vs  $63.2 \pm 11$  ( $p > 0.01$ ).

Treatment was effective (reduced by half the number of migraine days per month) in 53% (20 patients). 5.7% of patients (n=3) were discontinued due to a response of less than 30%. Of the 3 patients who did not respond, 2 switched to galcanezumab and 1 to botulinum toxin.

31% patients presented some type of adverse event. Most of them were due to reactions in the area of administration, asthenia and gastrointestinal disorders, and all were of mild-moderate intensity.

**Conclusion and relevance** Fremanezumab has demonstrated consistent efficacy in some patients by achieving a fast reduction in the number of migraine days per month, although the reduction in pain and disability was not shown to be statistically significant.

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