

EFFECTIVENESS AND SAFETY OF ANTI IL-5 DRUGS BENRALIZUMAB AND MEPOLIZUMAB IN SEVERE UNCONTROLLED EOSINOPHILIC ASTHMA PATIENTS

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BACKGROUND AND IMPORTANCE

Severe uncontrolled eosinophilic asthma (EA) is defined by pulmonary inflammation caused by eosinophilic cells. It is associated with an increased-on cytokine IL-5. Moreover, patients diagnosed with this phenotype of asthma are corticoids resistant. Among the new treatments for asthma, biological therapy with monoclonal antibodies against cytokine IL-5 seems to be a suitable option.

AIM AND OBJECTIVES

Analyze the effectiveness and safety in daily life routine practice with new anti-IL5 biological drugs, benralizumab and mepolizumab, used by severe uncontrolled EA patients.

MATERIAL AND METHODS

Retrospective observational study in a daily life clinical practice of a third level hospital. Patients selected diagnosed with EA treated with benralizumab and mepolizumab for at least 12 months from January 2018 to March 2023.

Data collected from clinical electronic program:

-Sex	-Blood eosinophilic count (EOS)
-Age	-Asthma Control Test (ACT)
-Comorbidities	-Exacerbation's number
-Forced Expiratory Volume in 1 second (FEV1)	-Oral glucocorticoid (OCS)
	-Inhaled treatment

★ Effectiveness measures:

- ✓ Reduction of EOS, OCS and exacerbations.
- ✓ Improvement of FEV1 and ACT.

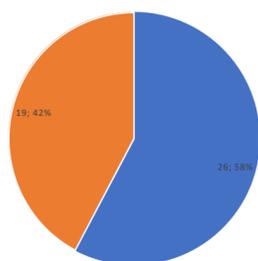
★ Safety measures:

- ✓ Adverse effects (AE) described.

RESULTS

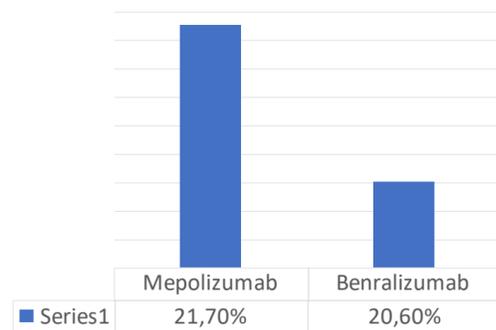
45 patients → 31 women (68.9%)

Proportion of patients treated



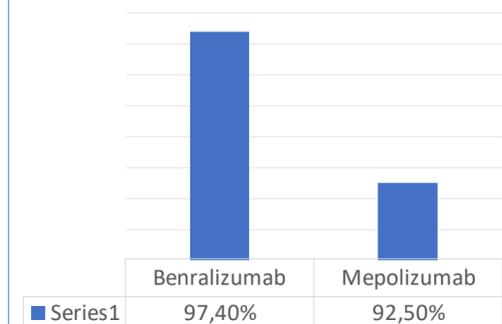
■ Benralizumab ■ Mepolizumab

FEV1 increment



*13 patients did not complete the test due to COVID pandemic situation.

EOS reduction



ASTHMA CONTROL TEST



	Exacerbations' number/ patient	Exacerbations' number/ patient	% exacerbations' reduction
MEPOLIZUMAB	4	1	75,00%
BENRALIZUMAB	3,3	1,8	45,50%

COMORBIDITIES

Nasal polyposis	21 (46,7%)
Rhinosinusitis	8 (17,8%)
Samster's triad	7 (15,6%)

- 21 (46,7%) patients continued diary OCS.
 - Medium dose 4.67 mg/per day.
- Inhaled therapy was continued by every patient.
- AE were not described.

CONCLUSION AND RELEVANCE

The use of anti-IL5, benralizumab and mepolizumab, in severe uncontrolled EA patients has shown to be effective and safe on daily life clinical practice, experiencing greater control of asthma.

