

# Understanding Severe Asthma in Women: Toward a More Precise and Gender-Sensitive Management

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## Background and Importance

Asthma is a prevalent chronic respiratory disease with social impact

Sex-related differences exist in prevalence, severity, and management.

Causes of these differences remain unclear clinically and pharmacologically

Understanding them may enable personalized treatment and better outcomes

## Aim and Objectives

This study aims to analyze severe asthma in women and explore sex-based differences in disease control, treatment, and quality of life.

## Materials and Methods

- Retrospective study of severe asthma patients at a Spanish tertiary hospital.
- Data collected from January to December 2024
- Sources: electronic medical records (HCIS®), Severe Asthma Unit database, Single Prescription Module (MUP), and Farmatools® dispensing program.



## Results

- **Patients:** 223 severe asthma patients, mean age 63 years; 70.4% women
- **Inhaled therapy:** LABA-ICS most common (66.2% women vs. 63.6% men).
- **Adherence:** Poor adherence (MPR <50%) in 24.2% of patients, higher in women (26% vs. 15.4%).
- **Oral corticosteroids & comorbidities:** More frequent in women (20.6% vs. 15.1% OCS; 63% vs. 36.3% antidepressants/anxiolytics).
- **Biomarkers & asthma control:** Women showed lower FeNO (33.5 vs. 46.5) and IgE (329.5 vs. 431.5), and poorer ACT scores (18.3 vs. 21.5).
- **Biologic therapy:** Prescribed in 109 patients, mostly mepolizumab; distribution similar between sexes.

Variable	Women (n=157)	Men (n=66)	p-value
MPR <50%	26%	15.4%	<0.05
Oral corticosteroids	20.6%	15.1%	<0.05
Antidepressants/Anxiolytics	63%	36.3%	NS
ACT score	18.3	21.5	<0.05
FeNO (ppb)	33.5	46.5	<0.05
IgE (UI/mL)	329.5	431.5	<0.05

## Conclusion and Relevance

- Sex differences in severe asthma are clinically and pharmacologically relevant.
- Women show higher comorbidity, poorer disease control, and lower adherence.
- Highlights need for gender-sensitive management and further research.

