

# Hospital Universitario Virgen Macarena





## USTEKINUMAB TROUGH LEVELS AND THEIR IMPACT ON CLINICAL AND ANALYTICAL RESULTS IN CROHN'S DISEASE

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## **Background and importance**

Ustekinumab is an effective treatment for moderate to severe Crohn's disease (CD). However, limited data exist correlating ustekinumab serum levels with clinical remission, and its therapeutic range remains unclear.

## Material and methods



Observational, retrospective, multicenter study April 2019 - May 2024



Serum levels -> ELISA assay

Efficacy endpoints

Clinical remission Clinical response

Normalizacion of FCP and CRP

## Aim and objectives

To analyze the relationship between trough ustekinumab concentrations at maintenance and clinical and analytical response of patients with CD.

#### Variables collected

**Demographics** Age, BMI

**Biomarkers** 

Treatment

Serum levels, CRP, FCP at 0, 6, 12, and 24 months

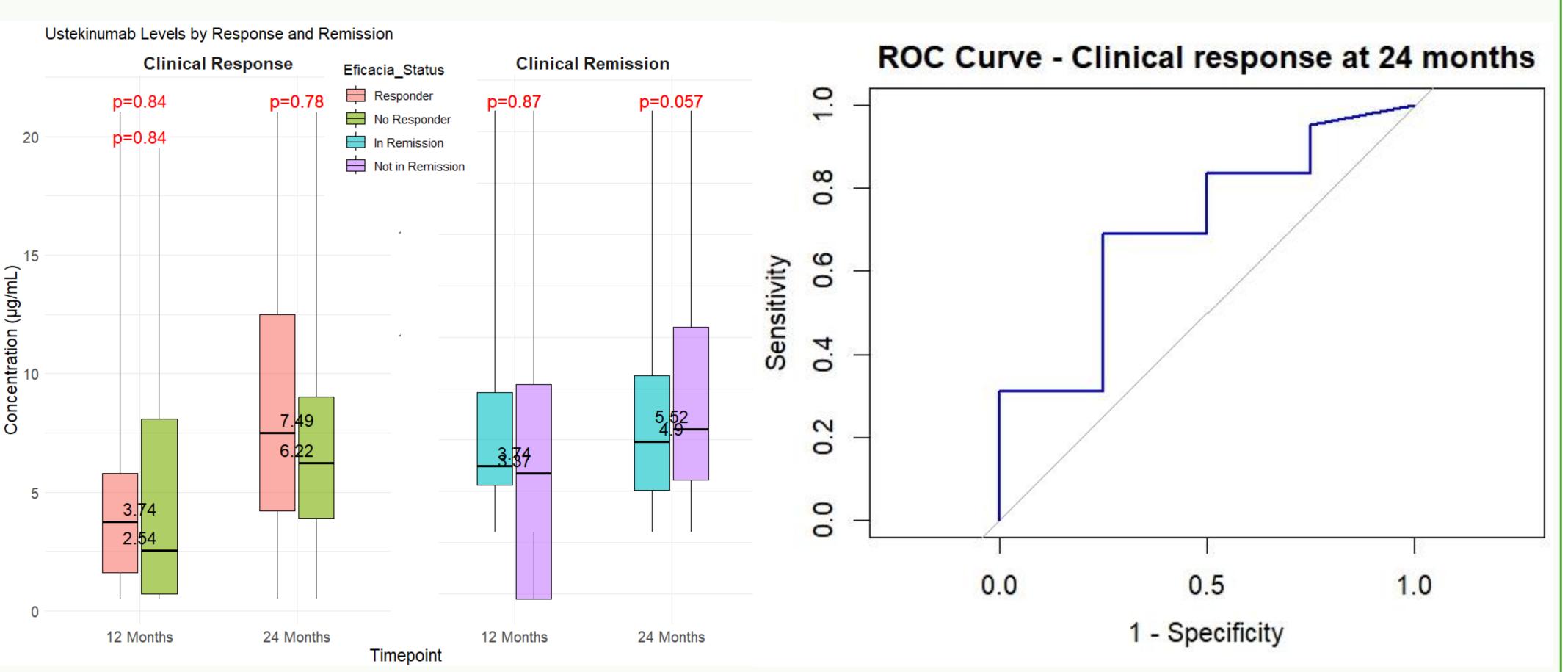
Persistence, Clinical Response & Remission at 6, 12, 24 months

### Results



## 89 patients 232 determinations

Variables	Total, N=232	
Age, median (IQR)	44,5 (23,5	
Sex, n (%)		
Female	107 (46,1%)	
BMI, median (IQR)	25,15 (8,29	
Age at diagnosis, n (%)		
<16 years	28 (12,1%)	
16-40 years	166 (71,6%	
>40 years	38 (16,4%	
Disease location, n(%)		
L1: ileal	110 (47,4%	
L2: colonic	22 (9,5%	
L3: ileocolonic	100 (43,1%	
Disease behavior, n (%)		
B1: non-stricturing and non-penetrating	122 (52,6%	
B2: stricturing	85 (36,6%	
B3: penetrating	25 (10,8%	
Family history of IBD, n (%)		
No family history	199 (85,8%	
First degree	15 (6,5%	
Second degree	18 (7,8%	
Extraintestinal manifestations, n (%)		
No manifestations	134 (57,8%	
Presence of manifestations	98 (42,2%	
Persistence, median (IQR)	42 (27,5	
Periodicity, n (%)		
Every 12 weeks	2 (0,9%	
Every 8 weeks	91 (39,2%	
Every 6 weeks	52 (22,4%	
Every 4 weeks	87 (37,5%	



Conc (µg/mL)	Sensitivity (%)	Specificity (%)	AUC
2.20	69.04	75.00	0.70

Timepoint	Clinical Response % (n)	Clinical Remission % (n)
Month 12	<b>80.8</b> % (59)	<b>50.7</b> % (37)
Month 24	90.2% (37)	<b>34.1</b> % (14)

#### Conclusion and relevance

Higher trough concentrations seem to be associated with greater clinical response. A larger cohort will be needed to test the robustness of the results.

