

# CLINICAL BENEFIT OF INFLIXIMAB MONITORING IN INFLAMMATORY BOWEL DISEASE



Llinares Esquerdo M, Martínez Pérez S, Miralles Andreu G, Peral Ballester L, Murcia López AC, Navarro Ruiz A. Hospital General Universitario de Elche, Pharmacy Department

## BACKGROUND:

The adjustment of Infliximab(IFX) doses is commonly based on subjective data or invasive methods. However, pharmacokinetic monitoring of Infliximab plasma levels is available in our hospital at this moment; this tool that has been proved to be useful in the optimization of clinical results (1)(2).

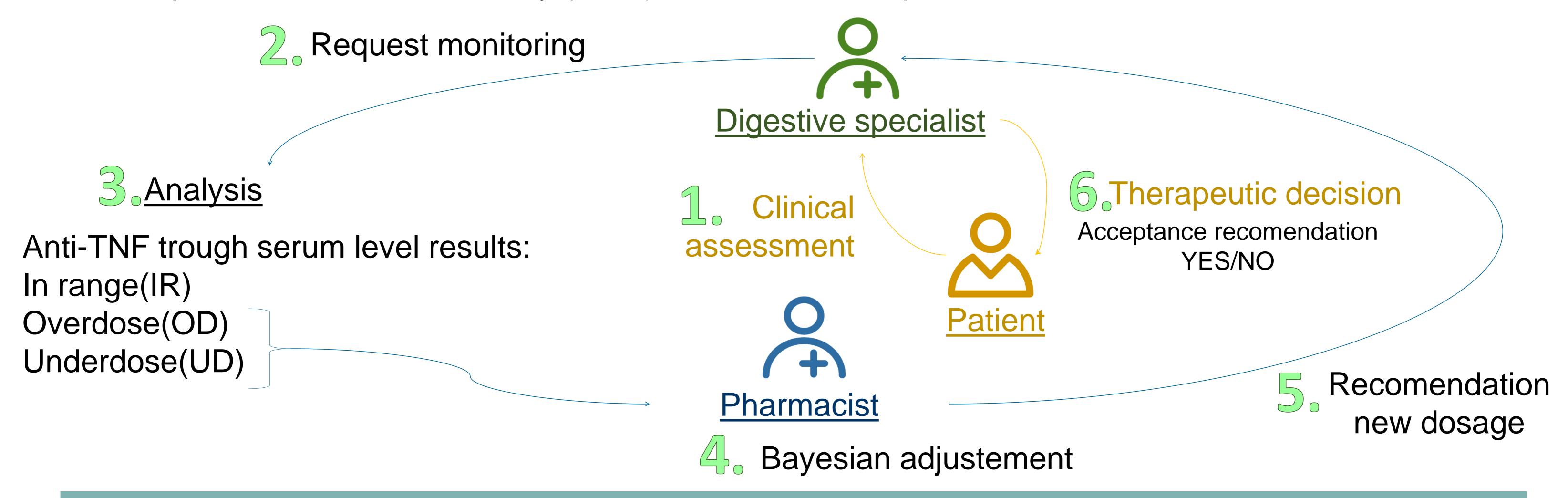
#### **PURPOSE:**

To analyze the clinical course of acute phase reactants in patients with inflammatory bowel disease (IBD) treated with IFX; and to evaluate if there is a clinical benefit resulting from applying the pharmacokinetic recommendations in the management of these patients.

# MATERIAL AND METHODS:

Analytical results collected: fecal calprotectin and C-reactive protein (CRP) measured before the monitoring (PRE) and three months later (POST).

Retrospective observational study (2017) in a General Hospital.



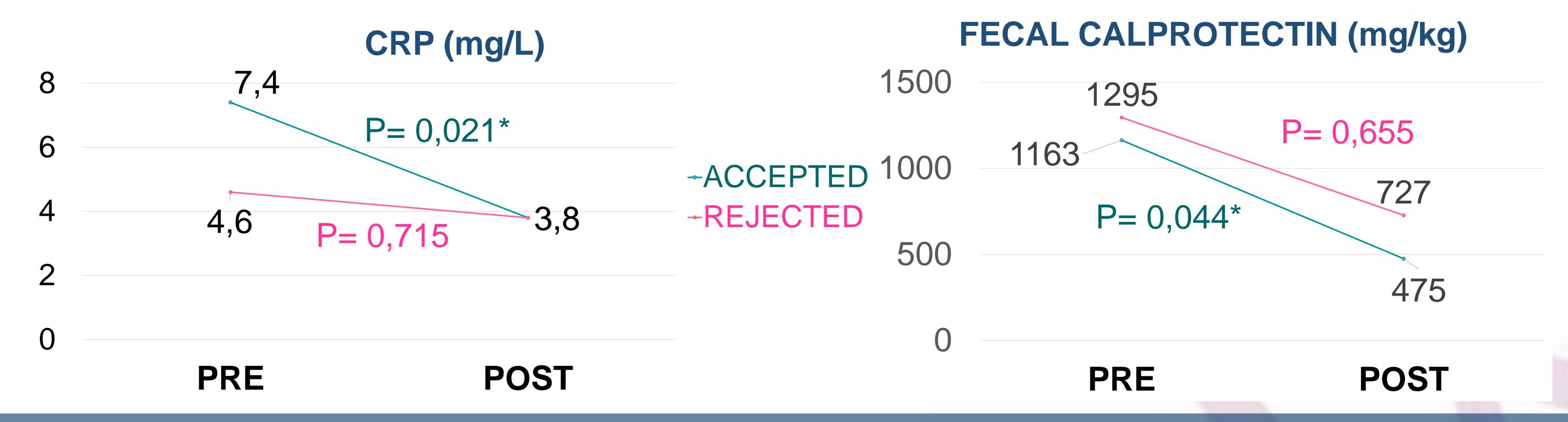
### RESULTS:

21 patients with IBD was monitoring:

	PRE	POST	
Fecal calprotectin (mg/kg)	1257.2	503.2	P = 0.053
CRP (mg/L)	7.1	3.8	P=0.035

P-value was calculated with Wilcoxon test

# ACUTE-PHASE REACTANTS (PRE AND POST MONITORING) SEGMENTED BY THE ACCEPTANCE OF THE PHARMACIST INTERVENTION



#### DISCUSSION AND CONCLUSION:

Both PCR and calprotectin were reduced after 3 months of IFX monitoring.

The clinical improvement observed was greater in the group of patients in whom the dose drug was adjusted following the recommendation of the pharmacist.

ACKNOWLEDGEMENTS: To my workmates, thank you.

<sup>1.</sup> Mitrev N, Vande Casteele N, Seow CH, Andrews JM, Connor SJ, Moore GT, et al. Review article: consensus statements on therapeutic drug monitoring of antitumour necrosis factor therapy in inflammatory bowel diseases. Aliment Pharmacol Ther. 2017 Dec;46(11–12):1037–53.

<sup>2.</sup> Kelly OB, Donnell SO, Stempak JM, Steinhart AH, Silverberg MS. Therapeutic Drug Monitoring to Guide Infliximab Dose Adjustment is Associated with Better Endoscopic Outcomes than Clinical Decision Making Alone in Active Inflammatory Bowel Disease. Inflamm Bowel Dis. 2017 Jul;23(7):1202–9.