

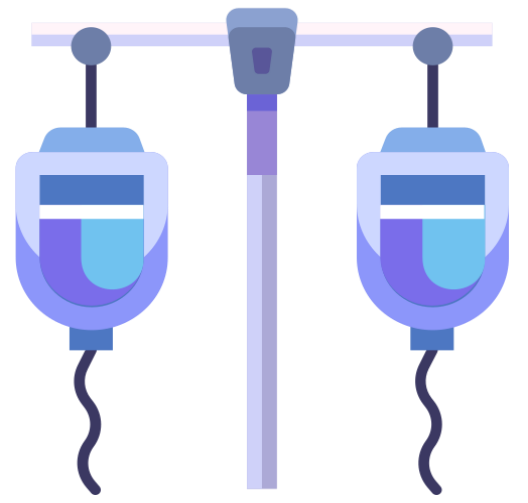
# REAL-LIFE STUDY OF THE USE OF TUMOR NECROSIS FACTOR INHIBITORS IN PEDIATRIC PATIENTS WITH INFLAMMATORY BOWEL DISEASE

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## BACKGROUND AND IMPORTANCE



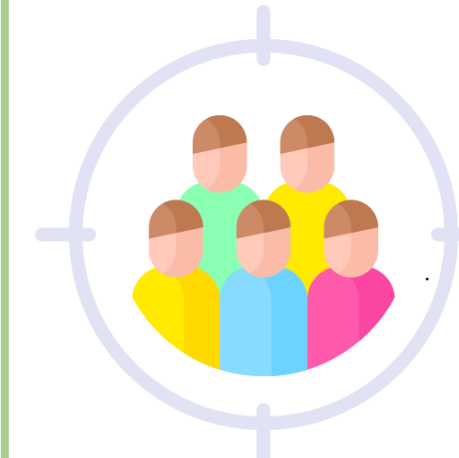
**Pediatric inflammatory bowel disease (PIBD)** is a chronic immune-mediated pathology with increasingly early diagnosis.

The **only approved biologics drugs** for PIBD are **infliximab (IFX)** and **adalimumab (ADA)**, both tumor necrosis factor inhibitors (anti-TNF).

## AIM AND OBJECTIVES



Describe the use of IFX and ADA as **first-line therapies for PIBD**.



Assess their **effectiveness and safety**.

## MATERIAL AND METHODS

### Retrospective and observational study



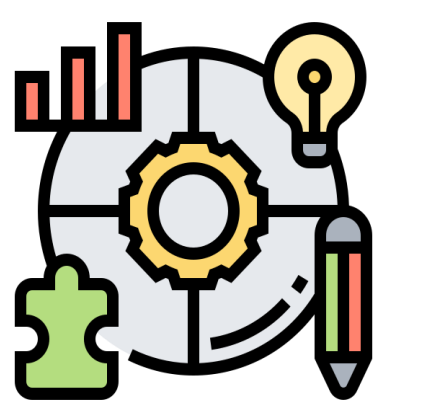
Included all patients who began **anti-TNF treatment** from **January 2021** to **March 2024**.

### Collected variables

Demographics (age, sex, weight, diagnosis)
Pharmacological (prescribed drugs, dose and frequency of administration),
Analytical (drug and fecal calprotectin (FC) levels),
Adverse reactions

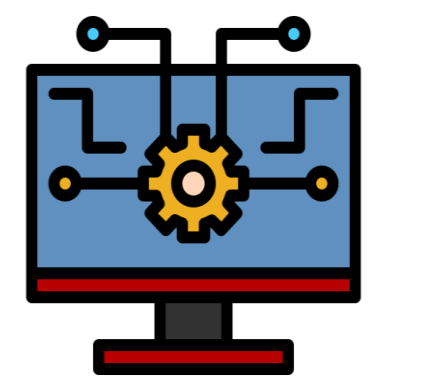
### Cut-off points

- **Drug intensification:** higher doses/frequencies than IFX and ADA data sheet.
- **Analytical response:** last 5 FC averages  $\leq 120 \mu\text{g/g}$ .
- **Optimal maintenance plasma levels seeking mucosal healing:** IFX  $\geq 7-10 \mu\text{g/mL}$ , ADA  $\geq 5-8 \mu\text{g/mL}$ .



### Data sources

Electronic Health Record (HCIS)<sup>®</sup>, Modulab<sup>®</sup>, Farmatools<sup>®</sup>



### Statistical analysis

Median and frequency distribution (%).

## RESULTS

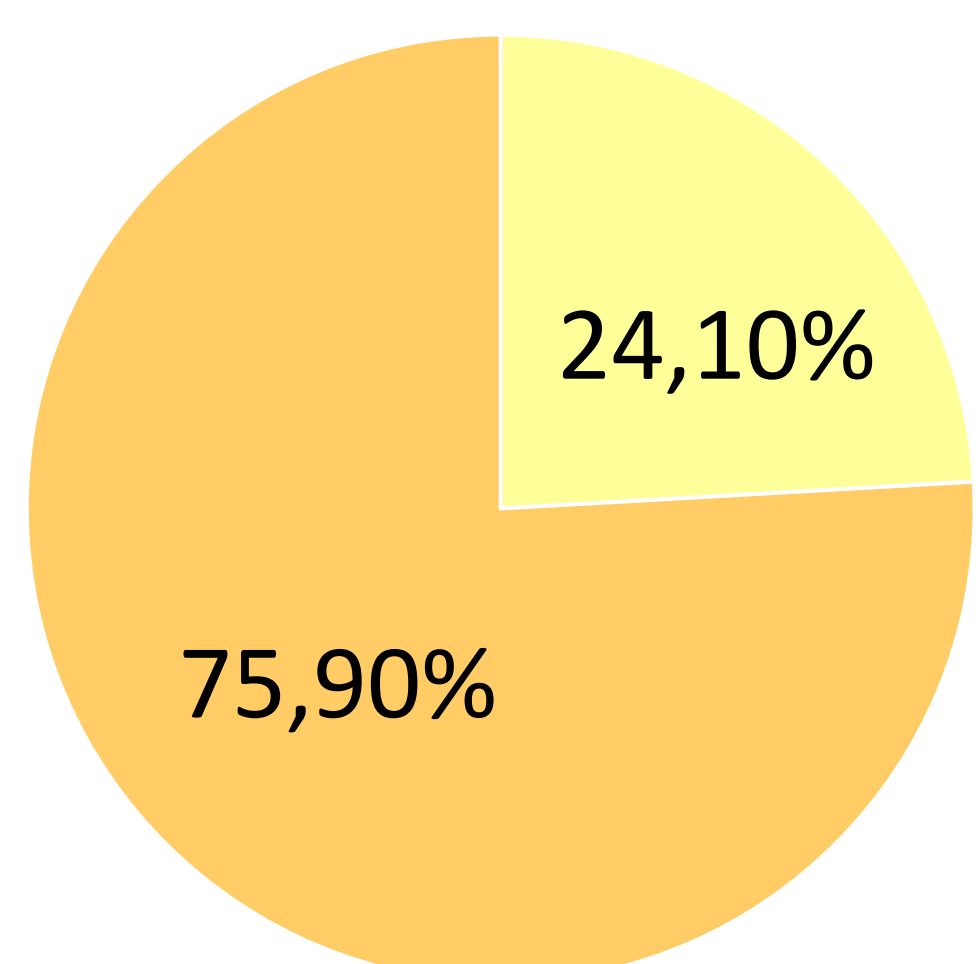


54 patients



35,2 % girls

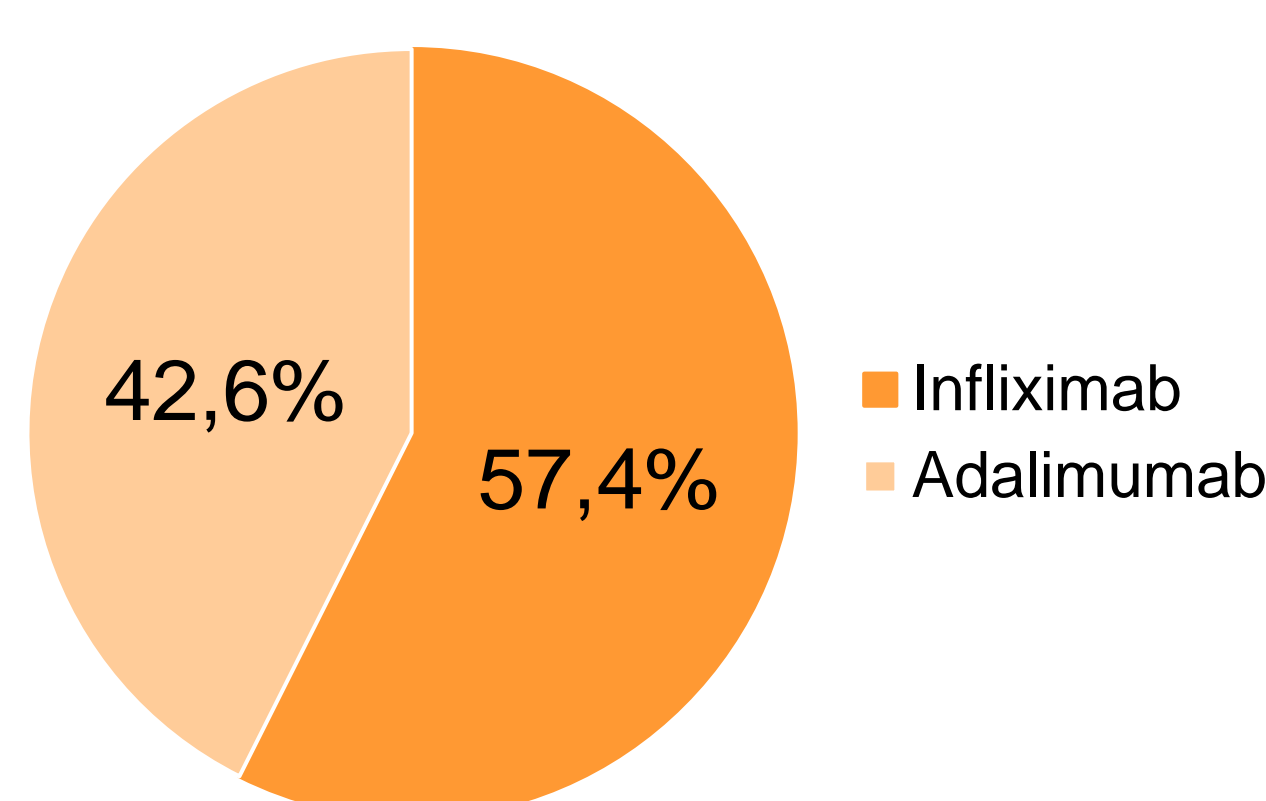
64,8 % boys



Median age  
14 years (2-18 years)

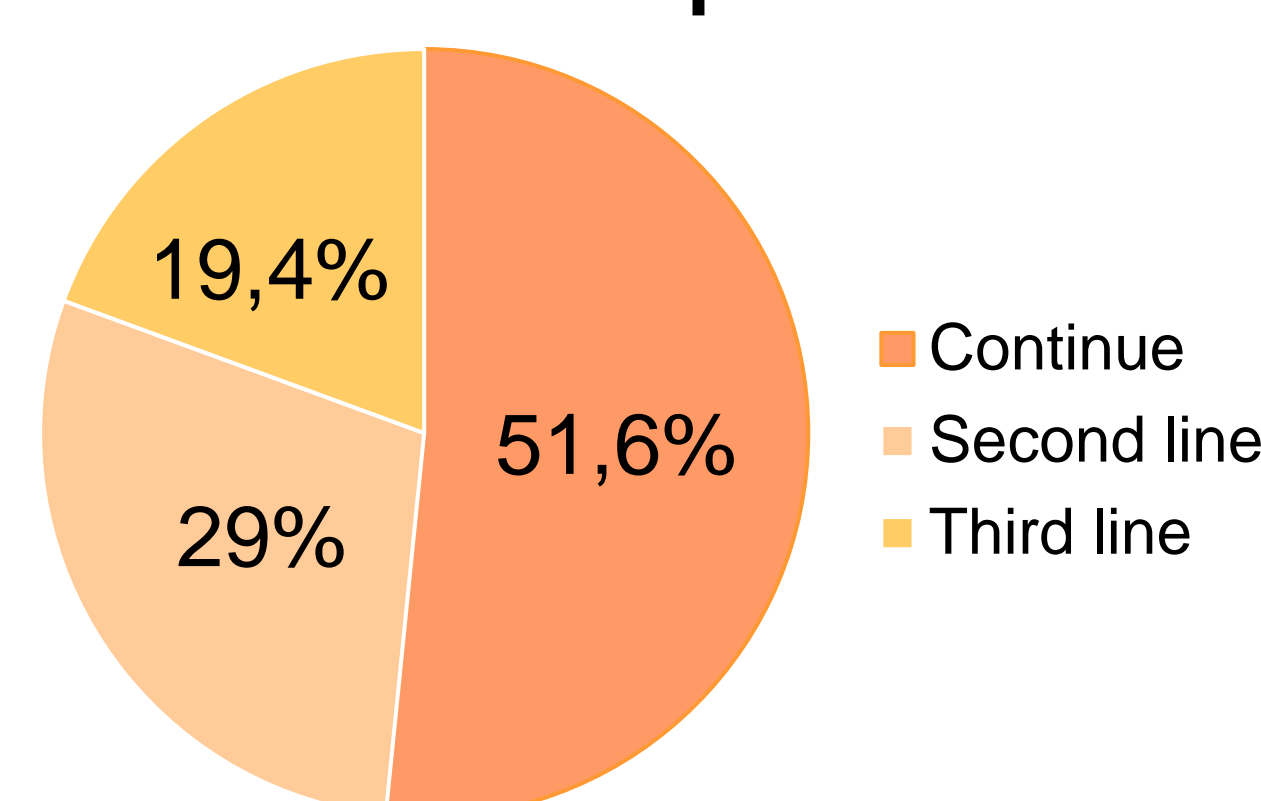
■ Ulcerative colitis  
■ Crohn's disease

### Initial anti-TNF

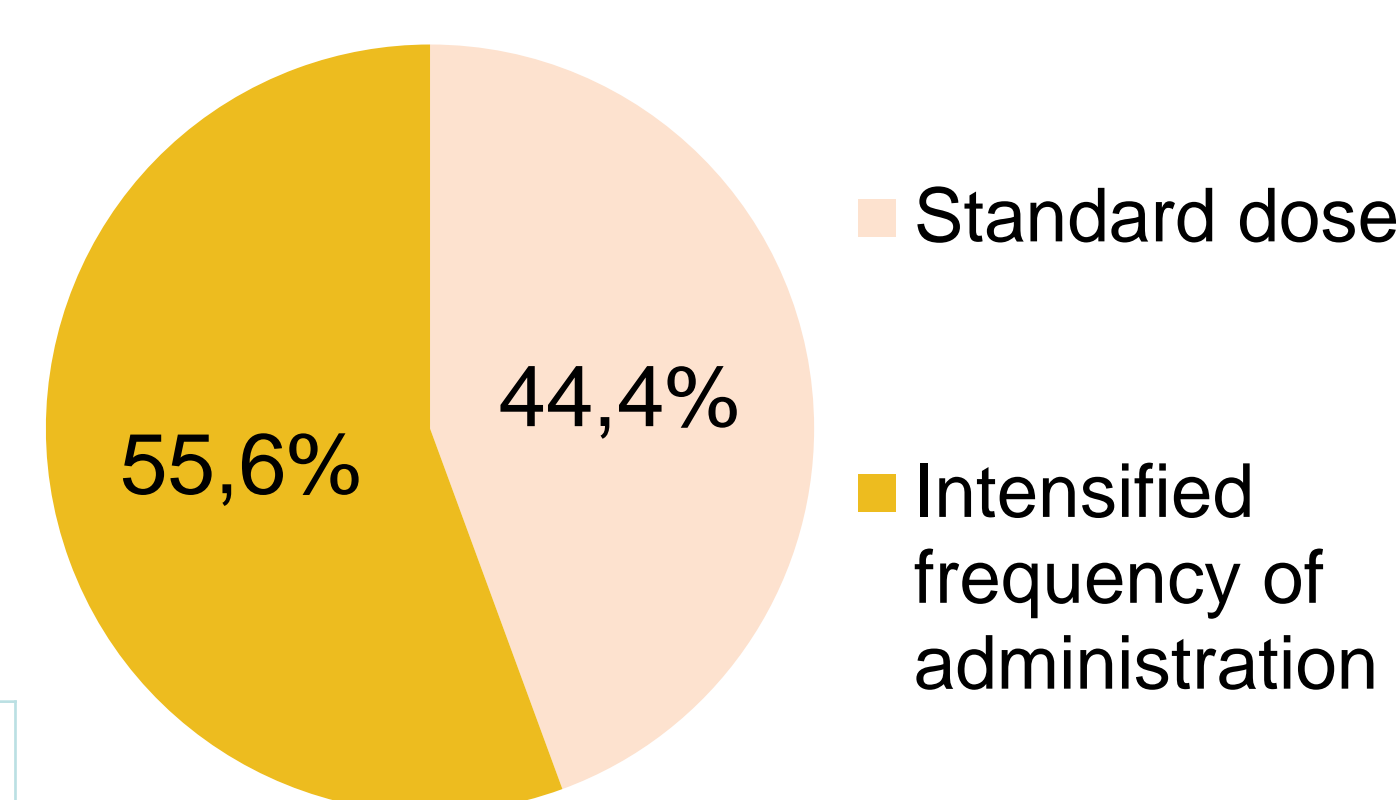


31 (57.4%) started with **infliximab (IFX)**; 20 had **CD** and 11 had **UC**.  
23 (42.6%) started with **adalimumab (ADA)**; 21 **CD** and 2 **UC**.

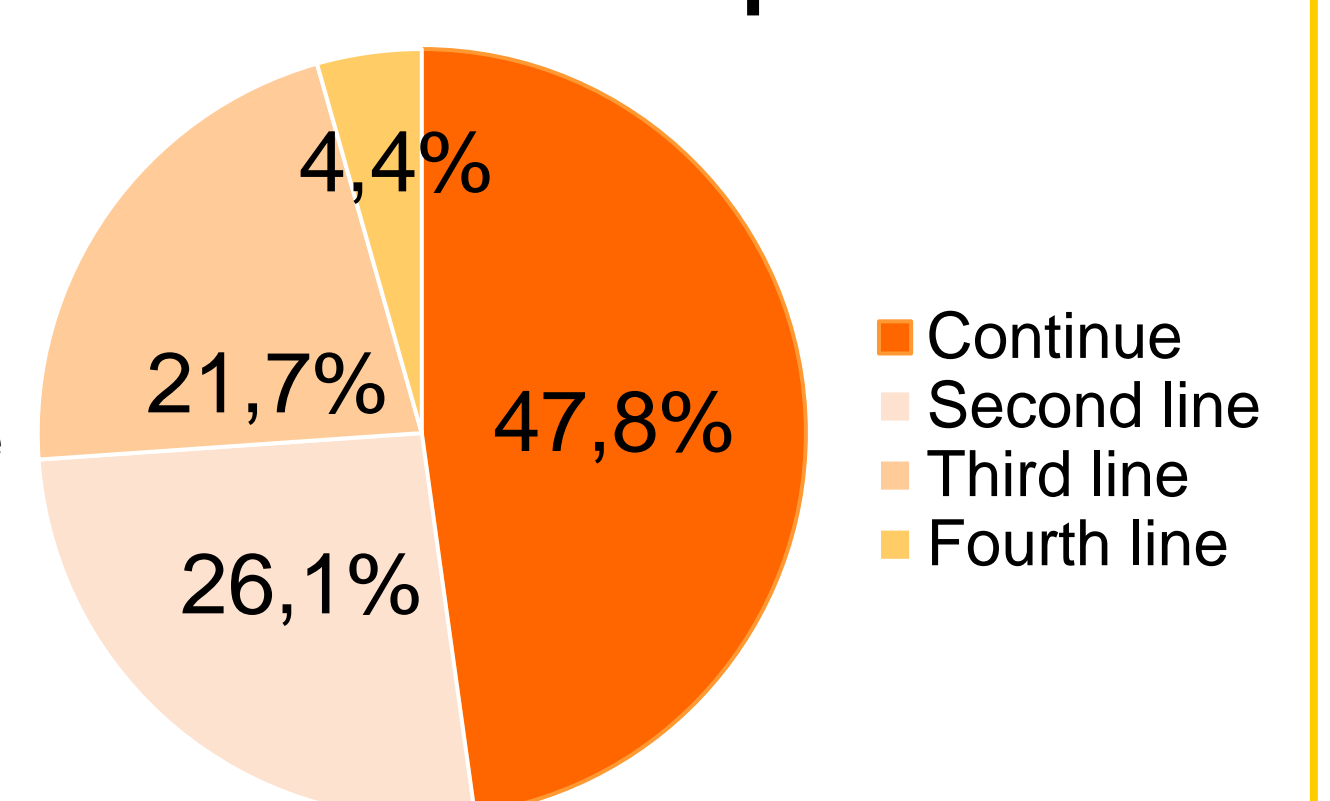
### Infliximab patients



### Dose



### Adalimumab patients



- **Standard doses;** 18 with ADA, 6 with IFX.
- **Intensified frequency of administration;** 8 with ADA, 22 with IFX.
- **Target changes** were due to **anti-TNF antibodies** or **clinical worsening** in 25 of 27 patients.

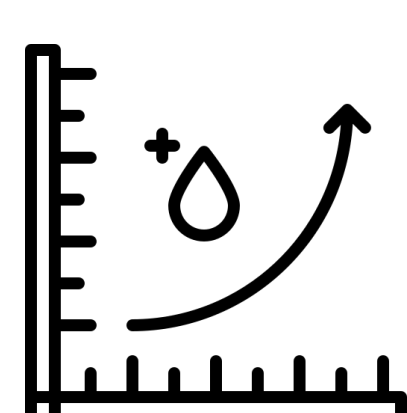
Effectiveness	Results
CF levels	29 (53.7%) patients presented decrease in CF $\leq 120 \mu\text{g/g}$ .
Drug levels	36 (66.7%) reached optimal drug levels, with 17 (31.5%) achieving this on standard dosing.

Security	Results
Psoriasis	Two reported adverse reactions

## CONCLUSION AND RELEVANCE



Our study shows that IFX and ADA are **highly effective and safe** for PIBD, though many patients need **higher doses** or **intensified regimens**.



**Close monitoring of drug levels** and analytical parameters are crucial for **personalized treatment** and effective management of pediatric patients.

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SUPPRESSANTS

