# Combination therapy with anti-TNF and immunosuppressive therapies is the most effective medication to prevent and treat endoscopic postoperative recurrence in patients with Crohn's disease

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#### **Disclosure of Conflicts of Interest:**

- **Consulting fees** for Abbvie, Takeda, Pfizer and Janssen
- Lecture fees for Abbvie, Takeda, Pfizer, MSD, Ferring,
  Vifor-Pharma, Sanofi-Aventis and Janssen



#### **Background and Aims**

- **Postoperative recurrence** (POR) is a major concern in patients with Crohn's disease (CD)<sup>1</sup>
- **Anti-TNF agents** are considered the most effective medications to prevent and to treat endoscopic postoperative recurrence in Crohn's disease (CD)<sup>2</sup>
- However, more than 20% of the patients may experience endoscopic POR within 6 months despite these medications<sup>2</sup>
- We assessed the factors associated with the efficacy of anti-TNF agents to prevent endoscopic or clinical POR



#### **Methods**

- From a prospectively-maintained database
- We consecutively enrolled all patients with:
  - √ Crohn's disease
  - ✓ Intestinal resection between 2011 and 2016
  - ✓ Colonoscopy at 6 months
  - √ Follow-up >6 months
- Endoscopic POR was defined as Rutgeerts' Index ≥ i2
- Clinical POR was defined as recurrence of symptoms (HBI>4) leading to hospitalization or therapeutic intensification after exclusion of other causes of recurrent symptoms
- Univariate and multivariate analyses were performed including all the potential risk factors



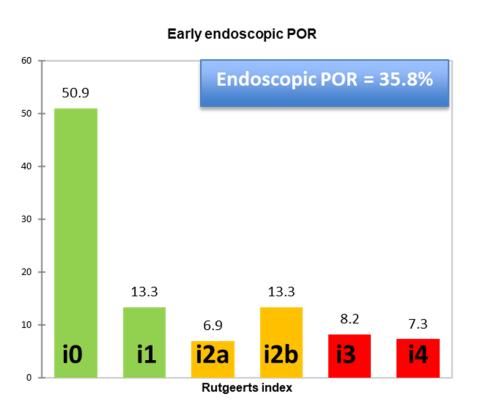


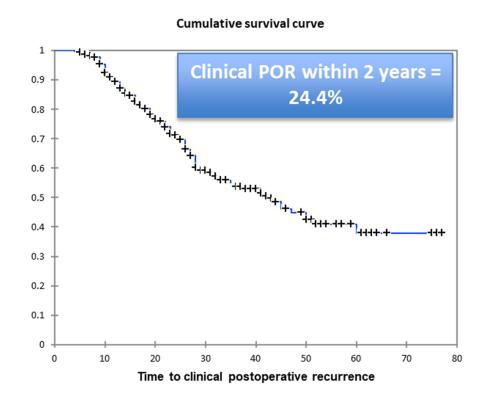
#### **Baseline characteristics of the 316 CD patients**

Age at baseline mean ± sd	$38.8 \pm 14.2 \text{ years}$
Female gender	50.6%
Current smoker	11.7%
Disease duration	$11.7 \pm 10.8$ years
Location	
L1 n (%)	35.8%
L2 n (%)	5.7%
L3 n (%)	58.5%
Behaviour	
B1 n (%)	6.3%
B2 n (%)	48.1%
B3 n (%)	45.6%
Perianal lesions n (%)	22.8%
Prior intestinal resection n (%)	37.6%



#### **Prevalence of POR**



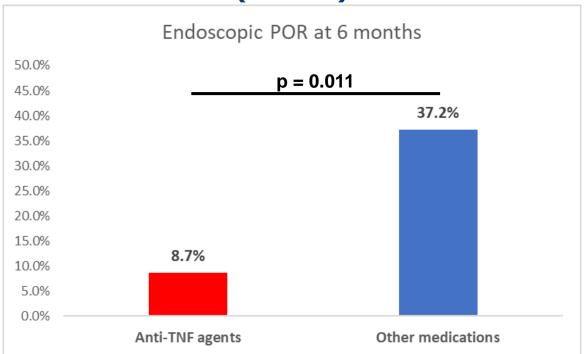




#### **Prevention of endoscopic POR at 6 months**

**Anti-TNF-naïve patients** 

(n=117)



In multivariate analysis,

anti-TNF therapy was the most effective medication

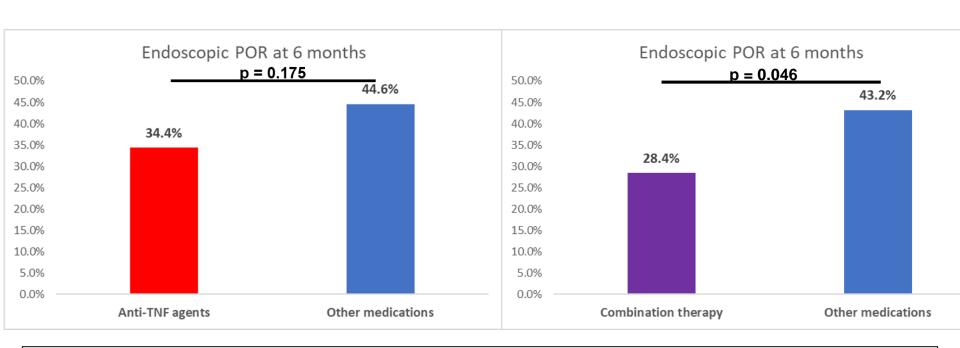
to prevent endoscopic POR in anti-TNF-naïve patients

OR=0.145 [0.029-0.714], p=0.018



#### Prevention of endoscopic POR at 6 months

Anti-TNF-exposed patients (n=199)



In multivariate analysis,

#### Combination therapy was the most effective treatment

to prevent endoscopic POR in anti-TNF-exposed patients (OR=0.477 [0.219-0.997], p=0.041)



## Factors associated with efficacy of anti-TNF agents to prevent endoscopic POR

### Anti-TNF-exposed patients (n=199)

- Resuming the same anti-TNF agent than before the surgery was <u>NOT</u> associated with higher risk of endoscopic POR
  - ✓ 43.5% vs 33.6%, p=0.188
- Even in the case of **primary non-response** with this specific anti-TNF
  - ✓ 40.4% vs 27.3%, p=0.175

In multivariate analysis,

**Prior exposure ≥ 2 anti-TNF agents prior surgery** 

was associated with **higher risk** of endoscopic POR

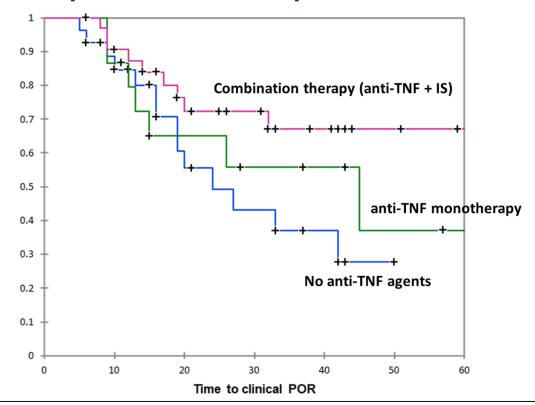
OR=4.17 [1.56-11.15], p=0.004



#### **Prevention of clinical POR**

Patients who were not treated with anti-TNF after the surgery but experienced endoscopic POR at 6 months

76 patients



In multivariate analysis,

Combination therapy was associated with lower risk of clinical POR HR= 0.38 [0.14-0.99], p=0.049



#### **Conclusions**

- Anti-TNF therapy is the most effective medication to prevent endoscopic POR in patients with CD
- Concomitant use of immunosuppressive therapy should be preferred in patients previously exposed to anti-TNF agents
- Combination therapy with anti-TNF and immunosuppressive therapy is the best option in patients presenting with endoscopic POR at 6 months to prevent clinical POR

