

INFLUENCE OF PATHOLOGY IN THE INJECTION PAIN REDUCTION WITH A NEW FORMULATION OF ADALIMUMAB

Martínez-Casanova J, Acín P, Carballo N, González R, Navarrete-Rouco E, Perez-García C, González-Colominas E, Tarrasón L, Grau S, Ferrández-Quirante O
Hospital del Mar, Pharmacy Department, Barcelona

Abstract number: 5PSQ-070
ATC code: L04

Keywords: adalimumab; pain; injection.

Background

Drug injection related pain is associated to a poor treatment adherence.

To reduce it, a new subcutaneous formulation of adalimumab free of citrate and with a smaller volume injection and caliber needle has come out.

Purpose

The objective was to assess the influence of the treated pathology and associated factors on the pain reduction due to the switch to adalimumab's new formulation.

Material and methods

Prospective study performed during adalimumab's formulation shift (2017) in the outpatient pharmaceutical care area from a tertiary hospital. All patients that had received both formulations were included and classified by the pathology treated with the biologic.

Pain was assessed by the patients through a visual analogue scale (VAS).

Data collected: demographic, country of origin, injection site, administration frequency, number of doses before the switch, biologic-naïve, VAS score pre (VASPRE) and post (VASPOST) formulation switch, concomitant medication.

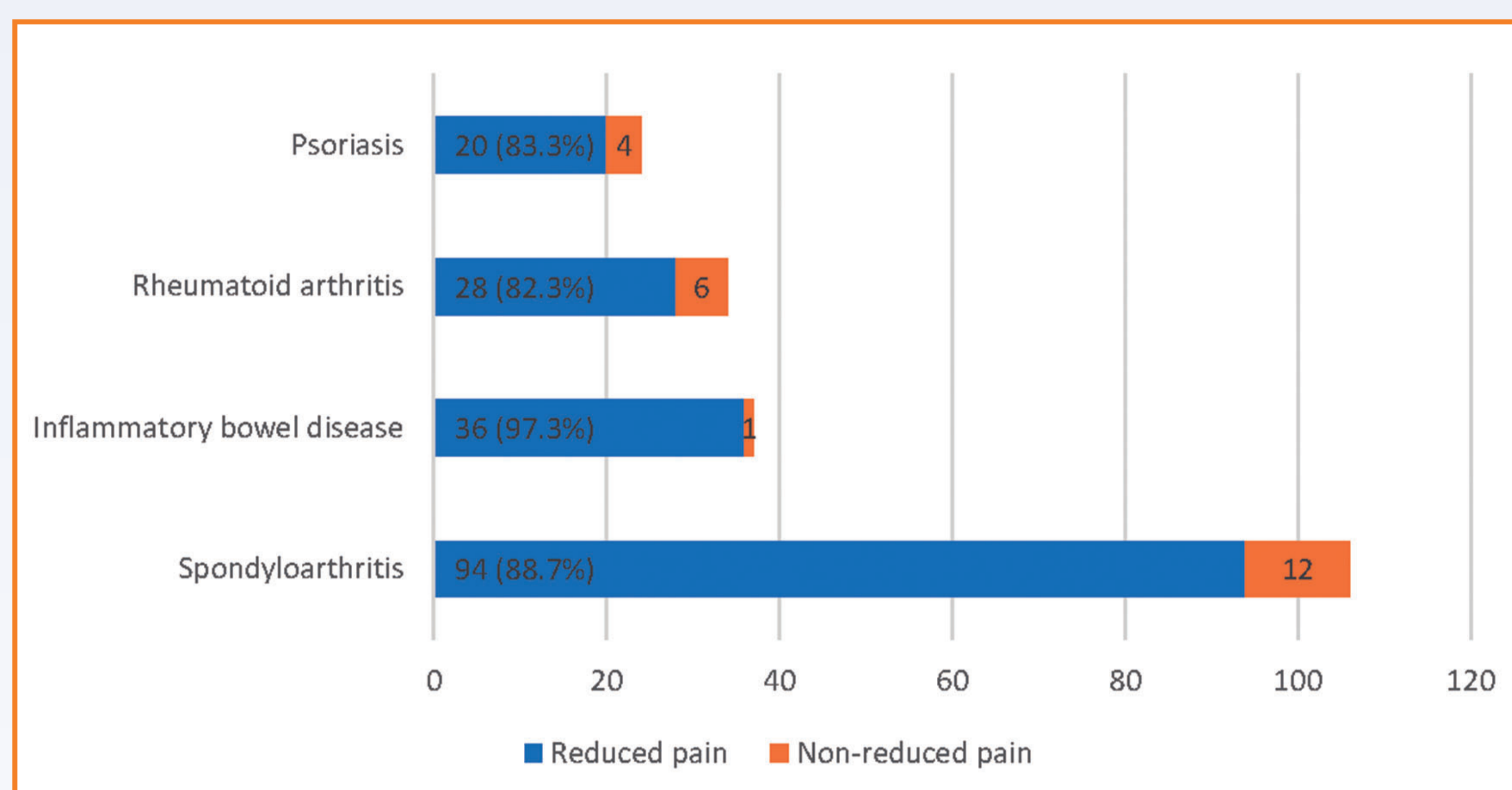
Statistics: median and interquartile range for quantitative variables (except age, mean (SD)), and % for qualitative ones. Association of several variables with pain reduction were checked through median regression models.

Results

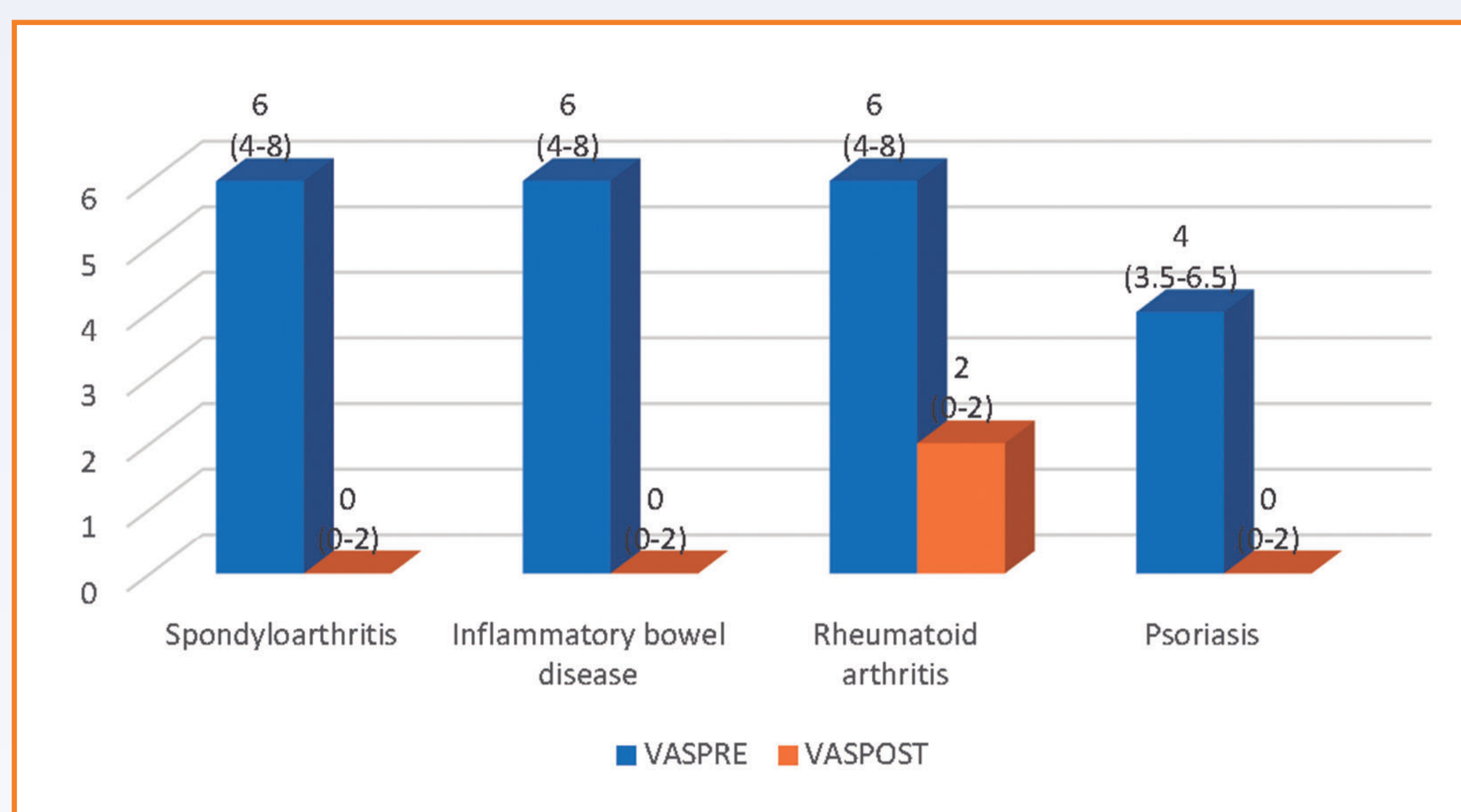
Demographic characteristics (n=201)

	Spondyloarthritis N=106	Inflammatory bowel disease (IBD) N=37	Rheumatoid arthritis (RA) N=34	Psoriasis N=24
Men	65 (61.3%)	24 (64.9%)	13(38.2%)	15 (62.5%)
Age, mean(SD)	52.6 (12.5)	44.7 (12.2)	61.2 (9.3)	50.9 (10.9)

Number of patients according to whether there was pain reduction or not



Pain reduction



Injection pain reduction (VASPOST-VASPRE) was statistically significant for all pathologies($p<0.001$).

Statistically significant differences observed for:

- VASPRE: RA vs psoriasis($p=0.0403$); IBD vs psoriasis($p=0.0207$).
- Injection pain reduction (VASPOST-VASPRE): IBD vs psoriasis($p=0.0117$).

For IBD, antidepressants treatment (4 patients, 10.81% of IBD cases) was the variable associated with the reduction in pain injection (MD=-4.0; IC95%:(-7.26, -0.74); $p= 0.018$). No variables were identified for the other pathologies.

Conclusions

- Most patients reported better tolerance to the new formulation of adalimumab, independently of the pathology.
- Pain with the original formulation was higher in patients with IBD and RA than in those with psoriasis.
- Pain reduction was higher in patients with IBD than in those with psoriasis.
- Antidepressant treatment wasn't associated with such a large pain reduction as was not antidepressant treatment in IBD patients.

