

# ADHERENCE TO DISEASE MODIFYING ANTIRHEUMATIC DRUGS IN PATIENTS WITH RHEUMATOID ARTHRITIS

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## Background:

A lack of adherence to disease-modifying antirheumatic drugs (DMARDs) can increase inflammatory activity in patients with rheumatoid arthritis (RA)

## Purposes:

- To estimate adherence to subcutaneous biological (DMARD-b) and conventional (DMARD-c) DMARDs in RA patients.
- To evaluate inflammatory activity as a function of DMARD adherence.

## Materials and Methods:

### Study design:

- Cross-sectional study (april 2015)
- Pharmaceutical care outpatients with RA receiving DMARD-b in a 550-bed hospital

### Study variables:

- Age
- Sex
- DMARDs
- Adherence
- Inflammatory activity (DAS28)

### DAS28

- Remission (DAS28 ≤ 2,6)
- Low (DAS28 ≤ 3,3)
- Moderate (3,2 < DAS28 < 5,1)
- High (DAS28 ≥ 5,1)

### Data obtained from:

- Electronic clinical records (Turriano®, Mambrino®)
- Out-patient dispensing records (APD-Prisma®)
- Community pharmacy electronic prescription dispensing programs (specialists and community physicians) (Fierabrás®)
- Pharmaceutical interview

### Statistical analysis:

Pearson's X<sup>2</sup> test to compare inflammatory activity between adherence and non-adherence groups to combination therapy with DMARD-b and DMARD-c.

Adherence was evaluated by two indirect methods:

### 1) Patient self-administered questionnaire:

#### CQR-5- Compliance Questionnaire Rheumatology

- "I take my antirheumatic medicines because I then have fewer problems"
- "I definitely don't dare to miss my anti-rheumatic medications"
- "My medicines are always stored in the same place and that's why I don't forget them"
- "I take my medicines because I have complete confidence in my rheumatologist"
- "What the doctor tells me, I hang on to"

#### Four point Likert answering scale:

"Definitely don't agree" (scored 1) → "Definitely agree" (scored 4)  
lower scores → lower levels of adherence.

### 2) Electronic dispensation records: "Medication possession rate"

$$MPR = \frac{N^{\circ} \text{days a medication was dispensed}}{N^{\circ} \text{days of the treatment period during the previous 12 months}}$$

"Adherent patients" = MPR ≥ 80% + "high adherence" (CQR-5 classification)

## Results:

### Study population:

55 patients treated with DMARD-b  
(81,8% females, mean age: 56 ± 14,0 yrs)

19 in monotherapy

36 associated with DMARD-c  
(72,2% methotrexate,  
13,9% leflunomide,  
13,9% others)

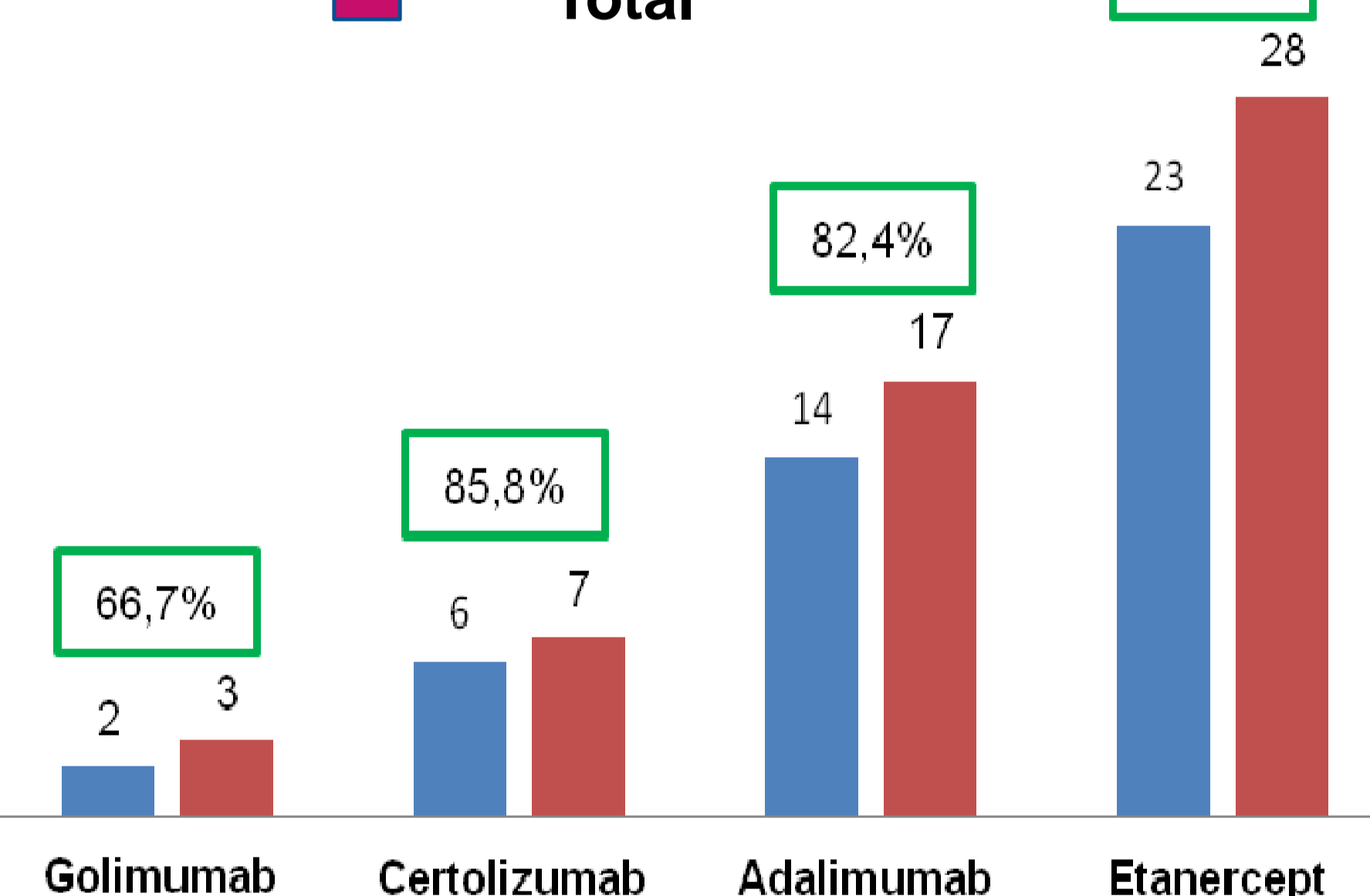
## Adherence

81,8% of patients were adherent to DMARD-b  
(89,5% in monotherapy)

In combination group,  
58,3% were adherent to both (DMARD-b: 77,7%,  
DMARD-c: 72,2%)

Adherence was higher to leflunomide (80,0%) than to methotrexate (69,2%)

■ "Adherents"  
■ "Total"

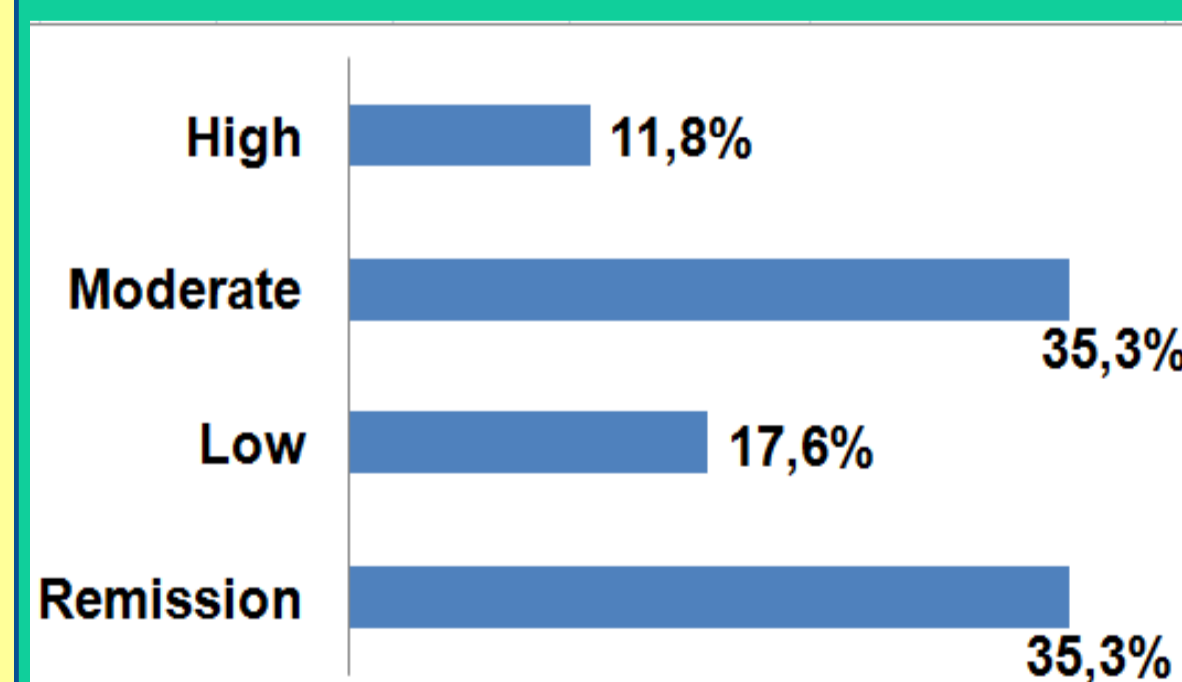


## Inflammatory Activity

### DMARD-b Monotherapy

17 "adherent" patients

2 "non-adherent" patients

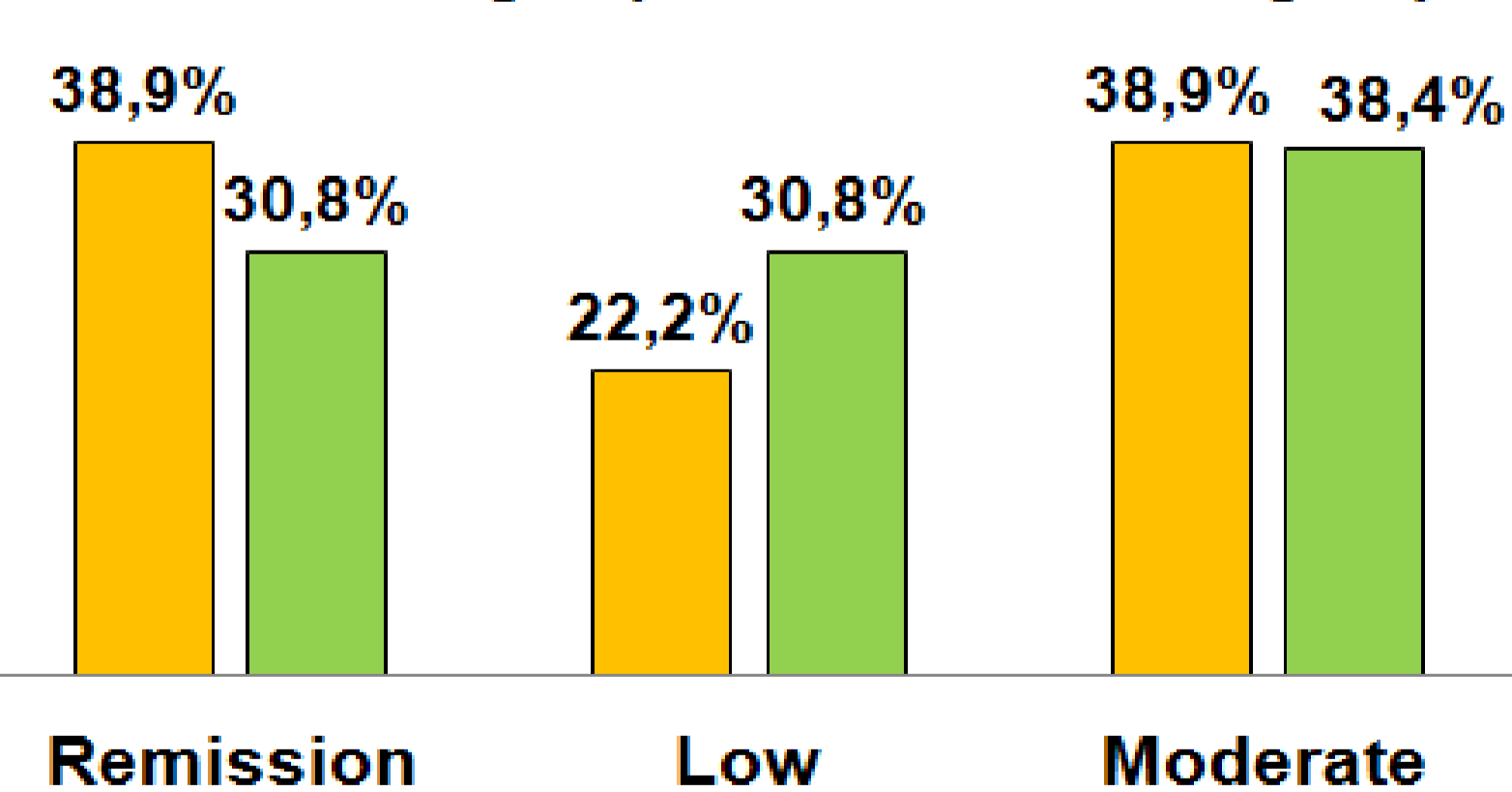


One in remission

One had low inflammatory activity

### Combination therapy

■ Adherence group ■ Non-adherence group



p < 0,05

p < 0,05

p < 0,05

## Conclusions:

- Adherence to DMARD-B was high in RA patients.
- Adherence to the combination therapy was lower; being higher to DMARD-b than to DMARD-c.
- Non-adherence to this combination therapy does not appear to increase inflammatory activity.