# Apremilast adherence in patients with psoriasis and psoriatic arthritis

X. Fernández-sala[1], E. González-colominas[1], E. Navarrete Rouco[1], O. Ferrández[1], N. Carballo[1], R. Gonzalez[1], L. Tarrasón[1], E. Beltrán[2], F. Gallardo[3], M. Ferran[3], S. Grau[1]

[1]Hospital del Mar, Pharmacy Department, Barcelona, Spain.
[2]Hospital del Mar, Rheumatology Department, Barcelona, Spain.
[3]Hospital del Mar, Dermatology Department, Barcelona, Spain.

**Abstract number:** 4CPS-036
**ATC code:** D05 - Antipsoriatics

***Keywords:*** *Apremilast, Adherence, Psoriasis, Psoriatic arthritis*

## Background

A limited number of studies have evaluated medication adherence in psoriasis (PS) or psoriatic arthritis (PsA), reporting rates between 29% and 88% (medication possession ratio (MPR>80%)). However, until now none study has included apremilast as the evaluated drug.

## Purpose

To evaluate adherence to Apremilast treatment in patients with PsO and PsA and to assess the possible factors associated to a MPR<100%.

## Materials and methods

Retrospective observational study including all patients starting apremilast in an outpatient pharmacy service from a tertiary university hospital. Exclusion criteria: patients with less than one medication pharmacy refill (early discontinuation or recent treatment initiation). Apremilast was given as an initial 5-day titration period and a maintenance dose of 30 mg twice daily. Dose reductions due to adverse effects indicated by the prescriber were not considered as lack of adherence.

Data collected: demographics, treatment indication, previous biological treatment, incidence of adverse events (AE) and adherence to apremilast using the MPR.

$$\text{MPR} = \frac{\text{Sum of days' supply for all fills in period}}{\text{Number of days in period}} \times 100\%$$

Differences between patients with a MPR≥100% vs. MPR<100% were evaluated in the univariate-analysis.

## Results

Forty-one patients were included with a median age of 47 (23-68) years; 56.1% were males. Of them, 70.7% were receiving apremilast for Psoriatic arthritis (PsA) and 26.8% had received previous biologic therapy. Adherence to apremilast is depicted in Figure 1.

At least one adverse effect was reported in 9 (21.9%) patients, manly diarrhea, nausea and headache (Table 1).

Seventeen patients (41.6%) patients discontinued apremilast during the study period (Figure 2).

**Figure 1. Adherence to Apremilast**

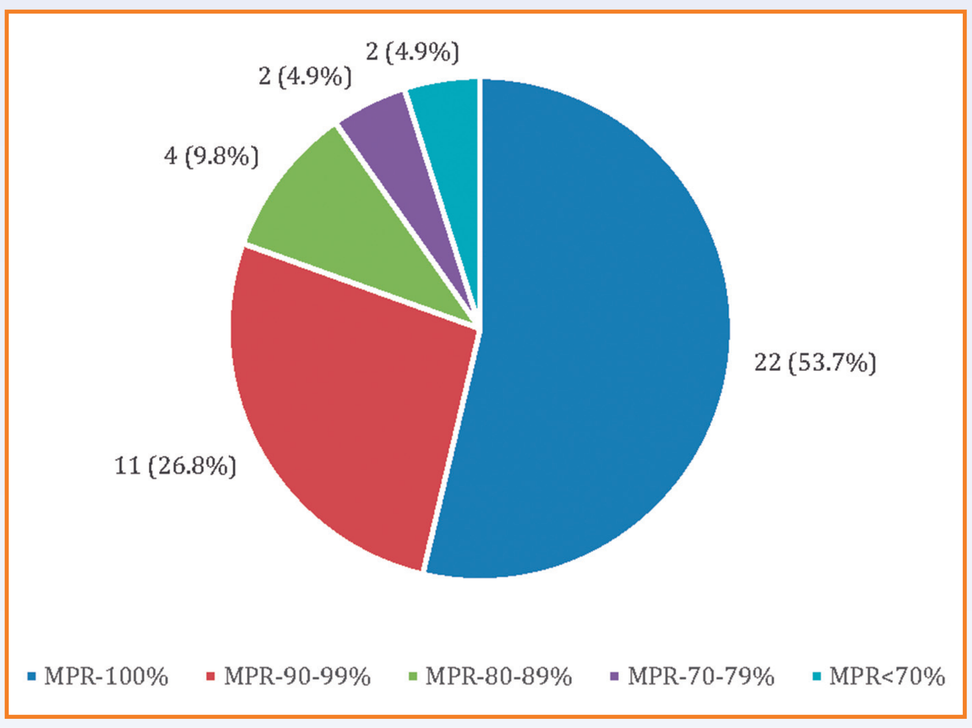


**Figure 2. Patients discontinuing treatment with apremilast (n=17, 41.6%)**

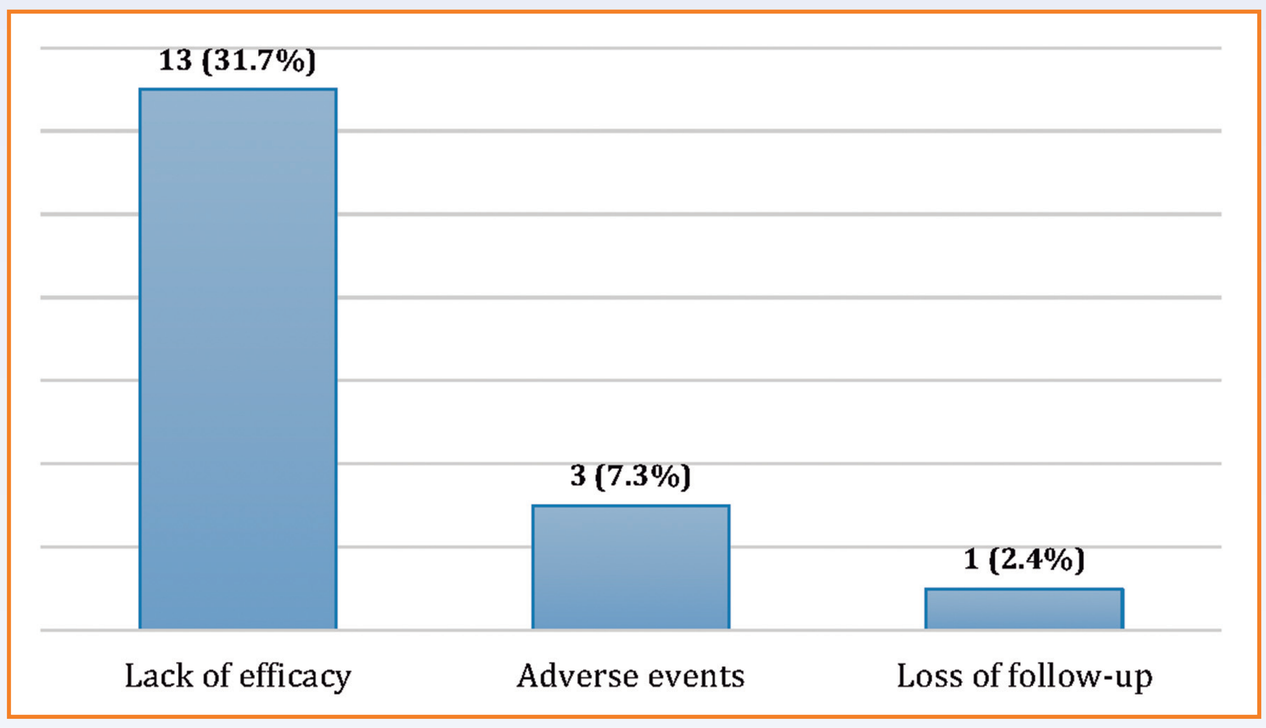


**Table 1. Univariate analysis of variables to identify differences between patients with and without 100%-adherence (MPR =100% vs. MPR<100%).**

| | MPR<100% (n=19) | MPR-100% (n=22) | P-value (Fisher) |
|---|---|---|---|
| Age, median(range) | 44.0(30-62) | 51.5(23-68) | 0.630 |
| Age> 50 years, n(%) | 7(36.8) | 12(54.5) | 0.350 |
| Males, n(%) | 12(63.2) | 11(50.0) | 0.531 |
| Psoriatic arthritis, n(%) | 12(63.1) | 17(77.3) | 0.493 |
| Previous biologic therapy, n(%) | 4(21.1) | 7(31.8) | 0.499 |
| Treatment discontinuation due to adverse event, n(%) | 2(10.5) | 1(4.5) | 0.588 |
| Discontinuation (none-response), n(%) | 5(26.3) | 8(36.4) | 0.524 |
| Any adverse event, n(%)<br>Diarrhoea<br>Nausea<br>Headache | 7(36.8)<br>3 (15.8)<br>1 (5.3)<br>4 (21.1) | 3(13.6)<br>4 (18.2)<br>1(4.5)<br>1(4.5) | 0.144<br>1.000<br>1.000<br>0.164 |

## Conclusions

- Apremilast adherence rate was >90% in more than 80% of the patients.
- Considering MPR> 80% reported in literature, this rate was achieved in approximately 90% of patients, probably related to a multidisciplinary attention.
- None factor was associated to a poorer adherence, however further studies including a greater number of patients are needed.

http://www.eahp.eu/24-4CPS-036

Hospital del Mar

Parc de Salut MAR Barcelona