Background: Tumor necrosis factor inhibitors (TNFi) are a key therapeutic weapon in psoriatic arthritis (PsA), and can be used as monotherapy or in combination with other csDMARDs, which are usually used as first-line therapy in these patients, although its efficacy is not as well documented as in other rheumatic diseases. The optimal use of ITNF in PsA, as monotherapy or in combination therapy with csDMARDs, is still under debate.

Objectives: We aimed to compare the response to treatment with TNFi in monotherapy and combined with csDMARDs, as first biologic, in patients with PsA.

Methods: Retrospective study that included PsA patients followed at our Rheumatology department under TNFi as first biologic, fulfilling CASPAR classification criteria and registered in Reuma.pt. Clinical and laboratory data were collected at the start of the first ITNF and in the last visit of 2019. Disease activity was assessed using CDAI, SDAI, DAS28(4V), BASDAI, ASDAS, and the response measured using the BADAIS0, ASDAS, ASAC, ACR and PsARC responses. Comparison between groups was performed using the chi-square test, Mann-Whitney U/test (categorical and continuous variables, respectively). Logistic regression analyses were performed to determine predictors of bDMARD failure, and survival analysis to measure persistence under the first bDMARD regarding csDMARD status at baseline.

Results: We included 99 patients, 47 (47.5%) females with a mean age of 47.9 ± 11.7 years at the start of the first ITNF. Fifty-one patients (51.5%) had symmetric polyarthritis, 26 (26.3%) spondyloarthropathies, 16 (16.2%) asymmetric polyarthritis, 3 (3.0%) distal arthritis and 1 (1.0%) arthritides mutilans. Sixty-three percent were under corticosteroid therapy and 77.8% under csDMARD therapy at the start of the first ITNF (mostly methotrexate, in 55.6% of patients under csDMARD), Etanercept (41, 41.4%), golimumab (25, 25.3%), adalimumab (22, 22.2%), infliximab (9, 9.1%) and certolizumab (2, 2.0%) were the ITNF started in these patients. Patients who started ITNF as monotherapy had more frequent involvement of axial skeleton compared with combined therapy (54.5% vs 19.5%, p<0.001), were less exposed to corticosteroids (26.3% vs 72.6%, p<0.001) and had higher mean BASMI (3.7±1.9 vs 3.0±1.9, p=0.001) and BASFI (6.7±1.3 vs 4.7±2.5, p=0.036). Patients who were on ITNF monotherapy at the last consultation (43.4%) had a lower mean tender (10.1±5.3 vs 6.8±4.3, p=0.002) and swollen (2.0±0.7 vs 1.0±0.7, p=0.002) joint counts, median patient VAS (30.4±6.5 vs 50.4±6.5, p=0.023), mean CDAI (5.6±4.4 vs 8.7±4.9, p=0.019), SDAI (6.2±4.9 vs 9.1±4.1, p=0.032), and DAS28(4V) (2.2±1.8 vs 2.7±1.8, p=0.047). ITNF failure was not significantly different in both groups. In the regression models, we found that basal DAS28(4V) (OR 1.874, 1.147-3.062 95%CI; p=0.012) was a predictor of first ITNF failure; there were no differences regarding csDMARD status.

When evaluating only patients without spondyloarthropathies, we found that, at the last visit, ITNF monotherapy patients still had less exposure to corticosteroids (28.9% vs 54.3%, p=0.002), fewer mean tender (0.7±1.0 vs 2.6±4.4, p=0.006) and swollen (0.2±0.7 vs 1.1±1.0, p=0.005) joint counts, with no other differences observed. In the regression models, we found no differences regarding csDMARD status in these patients, while adalimumab (OR 0.009, 0.001-0.139 95% CI; p=0.009) was a negative predictor of bDMARD failure. Survival analysis revealed no differences between mono- and combined therapy.

Conclusion: We can conclude that the differences observed regarding csDMARD status in patients with PsA are mainly due to different patterns of arthritis, namely, predominance of axial involvement. In patients without spondyloarthropathies, ITNF monotherapy did not differ significantly in terms of response to treatment and disease activity measures, nor does monotherapy predict bDMARD failure and treatment response. These results suggest that ITNF monotherapy is possible in PsA without compromising treatment response.

Disclosure of Interests: None declared.

Clinical and functional disability.

Methods: This is an ongoing 52-week multicenter, prospective study conducted in the Greek health care system. Eligible patients are bio-naïve adults with active peripheral PsA, inadequate (within the first 12 months of treatment) response/intolerance to a prior conventional synthetic disease-modifying antirheumatic drug (cDMARD), and no prior use of tofacitinib, initiating apremilast as per the approved label. Data are being collected by physicians, as assessed, in routine clinical practice, and by patient-reported outcomes. 170 patients enrolled in the study; data analysis and final publication (baseline) from the first 100 eligible consenting patients are presented in this interim analysis as per protocol.

Results: 99 evaluable patients were consecutively enrolled in 19 rheumatology departments between 15-April-2019 and 13-Jan-2020. At baseline (Table 1) [mean (SD) age: 53.8 (11.7) years], 43.4% of the patients had at least one (30.3% had ≥2) ongoing comorbidity other than PsA/PSO. The median [interquartile range (IQR)] age: 53.8 (11.7) years, 43.4% of the patients had at least one (30.3% had ≥2) ongoing comorbidity other than PsA/PSO. The median [interquartile range (IQR)] age: 53.8 (11.7) years, 43.4% of the patients had at least one (30.3% had ≥2) ongoing comorbidity other than PsA/PSO. The median [interquartile range (IQR)] age: 53.8 (11.7) years, 43.4% of the patients had at least one (30.3% had ≥2) ongoing comorbidity other than PsA/PSO. The median [interquartile range (IQR)] age: 53.8 (11.7) years, 43.4% of the patients had at least one (30.3% had ≥2) ongoing comorbidity other than PsA/PSO. The median [interquartile range (IQR)] age: 53.8 (11.7) years, 43.4% of the patients had at least one (30.3% had ≥2) ongoing comorbidity other than PsA/PSO. The median [interquartile range (IQR)] age: 53.8 (11.7) years, 43.4% of the patients had at least one (30.3% had ≥2) ongoing comorbidity other than PsA/PSO. The median [interquartile range (IQR)] age: 53.8 (11.7) years, 43.4% of the patients had at least one (30.3% had ≥2) ongoing comorbidity other than PsA/PSO.