**Background:** Osteoporosis is an increasingly important health problem among patients with spondyloarthritis (SpA). The Measure of Bone Mineral Density BMD is routinely carried out in an anteroposterior (AP) view of the spine. However, the syndesmophytes, ligaments calcifications, and the posterior part of vertebral affect AP scanning. A lateral spine view is a more sensitive tool in assessing bone loss in trabecular bone.

**Objectives:** We aimed to evaluate the association between lateral lumbar DXA and syndesmophyte grading in patients with SpA.

**Methods:** We conducted a retrospective study involving 75 patients with SpA. Bone density of the hip and lumbar spine was measured with a GE Lunar Prodigy Advance Bone Densitometer equipment. All patients had lumbar lateral, AP, and proximal femur DXA scans. The T-score, which measures the difference between a patient’s BMD and young-normal subjects, was computed and age-matched.

**Results:** The mean age of the patients was 36±11 years. Male predominance was noted with a sex ratio of 4.76. The mean BMD was 25±5.5 kg/m². Eight percent were obese. Fifty-two percent had Vitamin D deficiency. Forty-eight percent of the patients had axial SPA, while 52% had axial and peripheral symptoms.

The mean age of onset was 27±7 years. Fifty-two percent of the patients had high inflammatory biomarkers. The BASDAI, ASDAS-VS, and ASDAS-CRP mean levels were respectively 3.5±2.4, 3.1±0.9, and 3±0.8. The mean BASRI and mass were respectively 8±4.8 and 16.4±19.4. Analyses of T-score values obtained over the femoral neck revealed osteoporosis in 18.7% of the cases and osteopenia in 32% of the cases. On the other hand, analyses of AP, spine views revealed osteoporosis in 25.3% and osteopenia in 45.3% of patients (p<0.028, r=0.254). We detected the highest percentage of osteoporosis in lateral lumbar view and T-scores matched more closely with femoral neck values; osteoporosis in 29.3%, and osteopenia in 22.7% of the patients (p<0.03, r=0.562). BMD measured in AP and lateral views were in good agreement (p<0.03, r=0.592). Age was inversely but not significantly associated with BMD in lateral (p=0.442, r=0.09), AP (p=0.319, r=0.117) and femoral neck projections (p=0.179, r=0.157). Femoral neck BMD was associated with the activity of SPA (ASDAS vs p=0.027, r=0.295), and the mobility limitation was the highest percentage of osteoporosis in lateral lumbar view and T-scores matched.

**Disclosure of Interests:** None declared.

**Disclosure of Patients’ Involvement:** This study included 55 pts at the age of 45-65 years with diagnosis of psoriatic arthritis, a hallmark of psoriatic arthritis (PsA), is a uniformly diffuse and sometimes painful swelling of the fingers and/or toes. 1 Up to 50% of patients (pts) with PsA may experience dactylitis, as such, dactylitis is an accepted domain of PsA that should be considered in treatment decisions. 2 In PsA, dactylitis typically involves feet more than hands; dactylitic joints more frequently have erosive damage, compared with non-dactylitic joints. 3 There remains a need for effective therapies to treat dactylitis in pts with PsA. Improvements in dactylitis have been associated with tofacitinib, an oral Janus kinase inhibitor for the treatment of PsA. 4, 5

**Objectives:** To assess the effect of tofacitinib on dactylitis by location (hands/feet) and individual digits in patients with PsA.

**Methods:** These post hoc analyses used data pooled from two Phase 3 studies (12-month OPAL Beyond [NCT01776681] and 6-month OPAL Beyond [NCT01882439]) in pts with active PsA treated with tofacitinib 5 mg twice daily (BID; approved dose; to Month [M] 6), tofacitinib 10 mg BID (to M6) or placebo (PBO; to M3). Pts were treated continuously with a single conventional synthetic disease-modifying antirheumatic drug. Pts were categorised by the presence of dactylitis at baseline (BL) in the hands and/or feet. Endpoints included change from BL in Dactylitis Severity Score (DSS), the number of dactylitic digits and the proportion of pts with dactylitis in individual digits at M1, M3 and M6. Descriptive statistics were generated by visit and treatment arm.

**Results:** Data were pooled from 373 pts with DSS >0 at BL. BL characteristics, including gender, age, race, body mass index, PsA duration, BID vs. PBO, and dactylitic digits count were similar across dactylitis groups and treatment groups, except for pts with dactylitis in both the hands and feet, who had higher DSS compared to those with dactylitis in the hands or feet only, likely due to having more dactylitic digits (data not shown). Regardless of location, pts treated with tofacitinib had cumulative improvements from BL to M6 in DSS (Figure 1a) and in the number of dactylitic digits (Figure 1b); improvements in DSS were greater at M1 and M3, compared with PBO. Pts treated with tofacitinib 10 mg BID typically had numerically greater improvements in DSS, compared with pts treated with 5 mg BID (Figure 1a). Most pts treated with tofacitinib experienced improvement of dactylitis across all fingers and toes (Figure 1c–f); mean dactylitis presence was ≤15% at M6 in pts treated with tofacitinib for all digits. Generally, at M1 and M3, fewer pts treated with tofacitinib had dactylitis in any digit, compared with PBO (Figure 1c–f).

**Conclusion:** Among pts with pre-existing dactylitis, treatment with tofacitinib resulted in improvements in dactylitis in hands, feet, or both, and in all digits as early as M1, and up to M6.
Background: There are still unmet needs in the treatment of psoriatic arthritis (PsA), including in terms of treatment persistence, which is a function of effectiveness, safety and patient satisfaction. Ustekinumab (UST) was the first new biologic drug to be developed for the treatment of PsA after tumour necrosis factor inhibitors (TNFi).

Objectives: To compare treatment persistence, effectiveness and safety of UST and TNFi in Italian patients within the PsABio cohort.

Methods: PsABio (NCT02627768) is an observational study of 1st/2nd/3rd-line UST or TNFi treatment in PsA in 8 European countries. The current analysis set includes 222 eligible patients treated in 15 Italian centres, followed to Month 12 (±3 months). Treatment persistence/risk of stopping was analysed using Kaplan–Meier (KM) and Cox regression analysis. Proportions of patients reaching minimal disease activity (MDA)/very low disease activity (VLDA) and clinical Disease Activity Index for PsA (cDAPSA) low disease activity (LDA)/reaching minimal disease activity (MDA)/very low disease activity (VLDA) were analysed using logistic regression, including propensity score analysis set includes 222 eligible patients treated in 15 Italian centres, followed to Month 12 (±3 months). Treatment persistence/risk of stopping was analysed using Kaplan–Meier (KM) and Cox regression analysis. Proportions of patients reaching minimal disease activity (MDA)/very low disease activity (VLDA) and clinical Disease Activity Index for PsA (cDAPSA) low disease activity (LDA)/remission were analysed using logistic regression, including propensity score analysis.

Results: Of patients starting UST and TNFi, 75/101 (74.3%) and 77/121 (63.6%), respectively, persisted with treatment at 1 year. The observed mean persistence of effectiveness endpoints if treatment was stopped/switched before 1 year. Last observation carried forward data are reported.

REFERENCES:

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