Figure 1. Difference in BMI in the person with unstable height and stable body mass.

Objectives: To evaluate changes in height and BMI over time in patients with axSpA, treated with tumor necrosis factor- α inhibitors (TNF- α).

Methods: The study included 51 patients with axSpA (ASAS criteria 2009). All the patients were treated with TNF- α for one and > years. The patient's height and weight measured before the beginning TNF- α inhibitors and during the treatment. Only patients with stable weight (variability ± 2.0 kg from baseline) were included in the study.

Results: Mean age of axSpA patients at baseline was 40.22 ± 13.51 , 38 (74.5%) were male, disease duration 12.77 ± 6.82 , duration of TNF- α inhibitors treatment 5.64 ± 2.21 years, all the patients had inactive disease. In 19 patients with axSpA diagnostic delay was 8 years.

Patients' height varied between 1.55 – 1.92 m (average height 1.73 ± 0.07 m). Male's mean height was 1.78 ± 0.05 m, women's – 1.63 ± 0.05 m. Height decrease over time in patients with AxSpa was 3.74 ± 1.83 cm (from 1.0 to 15.0 cm). Maximal decrease in height was shown in patients with 10 years after the first symptoms emerged. Mean weight in patients who had height loss was 79.75 ± 12.7 kg. Among patients who had decrease of height and stable body mass the difference between BMI at subsequent measurement and the time of treatment initiation (Δ BMI) was 1.15 kg/m^2 : BMI at baseline = $26.25 \pm 3.34 \text{ kg/m}^2$, over time of observation BMI = $27.39 \pm 3.38 \text{ kg/m}^2$.

Conclusion: Height loss in axSpA is significant even in patients with inactive disease. Height loss affects BMI calculation that could lead to overestimation of cardiovascular risk, obesity and could change all of the BMI-dependent areas. Correction of BMI calculation for the patients with unstable height is needed.

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AB0734B

BONY BRIDGE ON FACET JOINT OR LATERAL SIDE OF LUMBAR VERTEBRA IS MORE FREQUENT AND CORRELATED WITH LUMBAR FLEXION FUNCTION THAN THAT ON ANTERIOR SIDE OF LUMBAR VERTEBRA IN ANKYLOSING SPONDYLITIS; ANALYSIS OF ANKYLOSIS REGISTRY OF AXIAL SPONDYLOARTHRITIS (ANKAS)

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Background: Ankylosing spondylitis (AS) is a form of chronic inflammatory arthritis characterized by sacroiliitis and a marked propensity for sacroiliac joint and spinal fusion. The modified Stoke Ankylosing Spondylitis Spinal Score (mSASSS) has been used when measuring radiographic progression in AS, which only measures bony changes of anterior side in vertebral body (AV). Variation of this score is too small to assess radiographic progression in AS. Some patients have syndesmophytes on lateral side in vertebral body (LV) or ankylosis in facet joints (FJ).

Objectives: We planned this study to know which side of lumbar vertebra ankylosis more frequently develops in and is more correlated with lumbar flexion function.

Methods: We analyzed ANKylosis registry of Axial Spondyloarthritis (ANKAS). In this cohort, the patients with AS are examined by antero-posterior and lateral view of X-ray every 2 years and low dose whole spine computed tomography (CT) every 5 years to determine radiographic progression. We analyzed the location of near total or total bony bridge at each level of lumbar spine by X-ray and CT in 518 patients with AS.

Results: Male was 78% and mean age was 38.8 ± 2.8 . Ankylosis or bony bridge in sacroiliac joint (SIJ), FJ, LV and AV was respectively 55.2%, 22.8%, 21.6% and 13.1%. T12L1 was the most frequent level of ankylosis in FJ (31.7%) and LV (30.3%). For FJ and LV, there was a tendency that upper levels of spine have more ankylosis, but not in AV. The patients who didn't have SIJ ankylosis also have a tendency of not having any bony bridge in lumbar spine (negative predictive value: 92.24%, OR 28.1, 95% CI:16.3-48.4, $p=0.000$). We analyzed the correlation between the flexion score of Bath AS Metrology Index (BASMI) 10 and the site of ankylosis. FJ ankylosis showed the strongest correlation with lumbar flexion range ($R^2=0.456$, $p=0.000$), but bony bridge of LV and AV showed weak correlation with that (respectively, $R^2=0.288$, $R^2=0.155$, $p=0.000$). We analyzed the correlation between ankylosis of FJ and bony bridge of AV or LV respectively. Ankylosis of FJ and bony bridge of LV showed a stronger correlation ($R^2=0.712$, $p=0.000$) than that of AV ($R^2=0.515$, $p=0.000$).

Conclusion: Bony bridge in LV is not only more developed and correlated with ankylosis in FJ, but also more correlated with limitation of anterior lumbar flexion than that in AV. We suggest bony changes of LV should be also included in radiographic score system for more sensitive detection of radiographic progression in AS.

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AB0734C

REMISSION IN AXIAL SPONDYLOARTHRITIS: A DELPHI-METHOD QUESTIONNAIRE AMONG EXPERTS TO EVALUATE THE AVAILABLE ASSESSMENT TOOLS TO MEASURE DISEASE ACTIVITY AND TO DEVELOP A CONSENSUS DEFINITION OF REMISSION

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Background: Several definitions of remission in axial spondyloarthritis (axSpA) have been proposed based on the available disease activity assessment tools, but to date we lack a universally accepted definition of remission for the development of clinical trials or routine clinical practice.

Objectives: To explore the degree of agreement that exists among the experts managing patients with axSpA regarding the assessment tools available to evaluate disease activity in these patients and to develop a consensus definition of clinical remission in axSpA.

Methods: As a consensus method, we followed the modified Delphi methodology. A scientific committee developed 80 statements that were submitted in 2 rounds (in September and October 2018, respectively) to a panel of 152 rheumatologists from GRESSER (GRupo de Estudio de ESpondyloarthritis de la Sociedad Española de Reumatología), the Spanish working group with common interests in spondyloarthritis, addressing controversial issues regarding the current assessment of remission; clinical features, laboratory and imaging tests results, and if they should be

included in the definition of remission; general recommendations for out-patient visits and the use of disease activity scores.

Results: Agreement was reached for 56 of the 80 proposed items (70%). The panelists concluded that although a definition of remission in axSpA is not currently available, there is consensus that it is possible to achieve remission in this disorder. There was agreement that the definition of remission in axSpA should include: pain, fatigue, functional impairment, mobility, extra-articular manifestations, peripheral involvement, joint inflammation, disease activity, laboratory tests, quality of life, need for treatment, progression of the disease, and both physician and patient global assessments. It is recommended to set a therapeutic goal when starting treatment in patients with axSpA, the ideal objective being remission, but low disease activity (LDA) may also be acceptable as an alternative objective, being ASDAS the preferred tool to assess disease activity with cut-off values of < 1.3 for remission and ≥ 1.3 to < 2.1 for LDA. A proposal for clinical remission in axSpA based on the ASDAS cut-off value associated to the absence of extra-articular (psoriasis, uveitis, inflammatory bowel disease) and peripheral (arthritis, enthesitis, dactylitis) activity, as well as the absence of inflammation assessed by the normalization of CRP levels and absence of radiographic progression.

Conclusion: This work offers consensus recommendations and a proposal of clinical remission that may be useful in the management of patients with axSpA.

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Psoriatic arthritis

AB0735

SAFETY AND EFFECTIVENESS OF USTEKINUMAB IN PSORIATIC ARTHRITIS. A MULTICENTRIC STUDY

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Background: Ustekinumab (UST) is an anti-interleukin (IL) 12/23 monoclonal antibody that has been shown to be effective and safe in psoriatic arthritis (PsA) in two phases III clinical trials. However, we have very few UST data in a real-life setting.

Objectives: To assess the effectiveness, safety and survival of UST among patients with PsA treated under routine clinical care.

Methods: Retrospective and multicentric study. Epidemiological and clinical data were collected through the electronic medical record of all patients with PsA who started UST due to rheumatological indication in 14 hospitals of Catalonia and the Balearic Islands (Spain).

Results: 152 patients were included, 116 (76.3%) with 45mg and 36 (23.8%) with 90mg. 55.9% were women, mean age 54.79 (12.5) years, and mean disease duration 209 months. 132 patients (87%) had oligo (30.3%) or polyarticular involvement (56.6%). 26.8% had enthesitis and 36.2% dactylitis. 48p(35.6%) had erosions. 94p (61.8%) had previously received another biological therapy, and 39 of them (38.8%) had received 2 or more. 54.6% of the patients were taking DMARDs and 39.5% glucocorticoids. The baseline DAS 28 was 3.97 (1.45), C reactive protein (CRP) was 2 mg/dl (2), SJC was 4.0 (5.4), and PASI was 6.5 (8.4). There were no significant differences in clinical and epidemiological data between patients at 45 or 90 mg except in obese patients (58.4% in

90mg vs 40% in 45mg, $p = 0.038$). Overall, there was a significant decrease in DAS28, SJC, TJC and PASI in the first month of treatment, with more pronounced improvement in skin (PASI and BSA) than in joints outcomes, where the curves reached a plateau at 6 months. There were no significant differences between joint and/or skin outcomes between 45 and 90 mg doses.

Patients naive to biological therapy had an earlier skin improvement than patients with previous biological failure. Likewise, the improvement in joint outcomes was also faster in naive vs biological experienced patients (DAS28 and SJC 4m, $p = 0.01$ and 0.01 , respectively).

After an average of 19m of follow-up, 94 out of 152p (61.8%) continued with UST, 54.4% started at 45mg and 72.2% at 90mg ($p = 0.04$). 42p (28.2%) stopped UST due to joint inefficacy, 8p (5.4%) for skin inefficacy and 4 (2.7%) for adverse effect. Although survival was better in patients with fewer previous biological agents, no significant differences were achieved ($p = 0.233$ for naive and $p = 0.072$ for patients with 1 biological failure).

Conclusion: This analysis demonstrates that UST, administered to PsA patients in a routine clinical care setting, is safe and effective in improving skin and joint outcomes. 61.2% of the patients continued with the treatment after an average of 19m of follow-up. Joint and skin outcomes reached significant differences from the first month. The efficacy seems faster in those patients with fewer lines of previous biological therapies. One third of the patients interrupted the therapy due to joint inefficacy.

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AB0736

GENDER INFLUENCE ON TREATMENT EFFECTIVENESS IN PSORIATIC ARTHRITIS

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Background: Gender has been lately suggested as influential in the response to treatment with biological drugs in spondyloarthritis, such as psoriatic arthritis (PsA). However, data about the association between gender and treatment response in axial PsA (axPsA) or peripheral PsA (pPsA) are scarce.

Objectives: To analyze the association between gender and clinical response to biological therapy in patients with axPsA and pPsA.

Methods: An observational cohort study was conducted, prospectively collecting data from 108 patients treated with biological therapy (93% TNFi and 7% IL-17i) from 2002-2018. Patients were divided into two groups according to their clinical predominant manifestation: axPsA or pPsA. Disease activity indexes (ASDAS and BASDAI for axPsA and DAPSA and DAS28 for PsA) were collected before starting drug and 6 months later (baseline and 6m visit, respectively). Low disease activity (LDA) was defined as ASDAS < 2.1 or BASDAI < 4 (axPsA) and DAPSA ≤ 14 or DAS28 ≤ 3.2 (pPsA). Clinical improvement was defined as an improvement ≥ 1.1 points in ASDAS (dASDAS) or 50% in BASDAI (BASDAI50) for axPsA, and an improvement of 50% in DAPSA (DAPSA50) or dDAS28 ≥ 1.2 . First, the frequency of male- and female-patients achieving LDA and clinical improvement at 6m were compared using Fisher test, separately for axPsA and pPsA. Second, the association between gender and each of the clinical outcomes was analyzed using logistic regression models adjusted for confounders (age, disease duration, previous biologics, smoking habit, body mass index (BMI), baseline DMARDs and baseline disease activity (ASDAS or BASDAI for axPsA and DAPSA or DAS28 for pPsA).

Results: Out of 108 included patients, 55 (51%) had predominant axPsA and 54 (49%) pPsA. In the group of axPsA, 35 (64%) were males, 33