AS, as both diseases belong to the spondyloarthritis group. 1100 patients with inflammatory rheumatic diseases provided the basis of RH-GIOP, a prospective study monitoring glucocorticoid (GC)-induced osteoporosis in patients with rheumatic diseases. RH-GIOP was established in 2015 at the Charité University Hospital. Bone mineral density data were measured by dual x-ray absorptiometry (DXA).

Methods: 92 patients with PsA (65% female) were compared with 51 patients suffering from AS (35% female). Potential risk and protective factors (e.g. data on GC treatment, anti-rheumatic therapy), laboratory parameters (e.g. Vitamin D, alkaline phosphatase, CRP and inflammatory markers) and functional status (e.g. Health Assessment Questionnaire, sporting activities, back pain) were compared between these groups. Statistical analysis was performed descriptively using mean and standard deviation, t-tests for metric variables, and chi-square tests for nominal variables. Due to the heterogeneous gender distribution, an additional statistical matching was performed to compare patients matched by age and gender.

Results: Patients with PsA displayed significantly higher minimal T-scores than patients with AS (p=0.003) even though patients with AS were younger and more often male (p<0.001). AS patients showed a higher frequency of osteoporoic bone densities (p<0.05), however, no differences in the frequency of osteoporotic bone densities were found. Body-mass-index (BMI) was significantly higher (p<0.001) in PsA patients. PsA patients were recruited at a higher frequency of csDMARD use (p<0.001). Additional analyses among PsA patients with and without csDMARDs revealed also significantly higher minimal T-scores in PsA patients taking csDMARDs (90% Methotrexate), and both groups showed the same average of age and gender distribution. Furthermore, AS patients complained significantly more often of back pain (96% vs. 74%; p=0.001) than PsA patients. No differences in GC use or cumulative GC dose were found. All results could be confirmed when groups were matched by age and gender.

Conclusion: Our results demonstrate that patients with PsA display higher bone density compared to age and gender matched patients with ankylosing spondylitis. Possible influencing factors could be the higher frequency of csDMARD use, higher BMI or the lower frequency of back pain in PsA patients. Multivariate tests and additional biomarker investigations in larger cohorts are necessary to corroborate these findings and to identify underlying pathogenic differences which could serve for an explanation.

Disclosure of Interests: Desiree Freier: None declared, Edgar Wiebe: None declared, Robert Riesen: None declared, Thomas Buttgereit: None declared, Sandra Hermann: None declared, Timo Gaber: None declared, Frank Buttgereit Grant/research support from: Amgen, BMS, Genereic Assays, GSK, Hexal, Horizon, Lilly, mediac, Mundipharma, Novartis, Pfizer, Roche, and Sanofi.

DOI: 10.1136/annrheumdis-2020-eular.4566

RESULTS: 9 axSpA patients were recruited from the COSPAR cohort (44% female, age 47±13 years, disease duration 18±14 years, BMI 29±4). Results PRE and POST are shown in Table: mean values (sd), statistical significance (NS, not significant; * p<0.05; ** p<0.01), and Effect Size. In the first rows, different scoring system for MRI inflammation appears: Area analyzed by s-SCAISS, s-SCAISS, Berlin and SPARCC (using only a semi-coronal slide). Activity and functional indexes were lower with significant differences and a large effect size. Correlations of s-SCAISS with Berlin (rho=0.78; p<0.05) and SPARCC (rho=0.96; p<0.001) were good; with clinical disease activity outcomes were poor, except with BASDAS (rho=0.70; p<0.05). The best correlation according improvements appeared comparing reduction of ASDAS with reduction of s-SCAISS (rho=0.57) but this difference was not significant. Although improvements in BASMI was not significant, a good correlation was found between improvement in s-SCAISS and BASMI (rho=0.72; p<0.05).
Background: Axial Spondyloarthritis (axSpA) is associated with a high degree of functional limitation in daily life activities. However, few studies have evaluated the social and family burden from the patient’s perspective.

Objectives: To describe the impact of axSpA on social and family life since disease onset, and the associated PROs.

Methods: Data from 2,846 unselected patients of the European Map of Axial Spondyloarthritis (EMAS) study through an online survey (2017-2018) across 13 European countries were analysed. The impact of axSpA on social and family life were assessed through four PROs: i) Impact on relationships with the spouse, family, friends, neighbours, and work colleagues since disease onset (5 point Likert scale; 1 “much better” – 5 “much worse”); ii) Frequency of social activities including outings to bars/restaurants, cinema/theatre/museums, practising sports, travel/excursions, and intimate relations since disease onset (5 point Likert scale; 1 “much more” – 5 “much less”); iii) Adaptations made to cope with axSpA since disease onset (yes/no question); iv) The degree of functional limitation in 18 daily activities (3 point Likert scale).

Results: Among 2,846 participants, mean age was 43.9 years, 61.3% were female, 48.1% had a university degree. The greatest impact on relationships was reported with the spouse, family, friends, neighbours, and work colleagues since disease onset (5 point Likert scale; 1 “much better” – 5 “much worse”); ii) Frequency of social activities including outings to bars/restaurants, cinema/theatre/museums, practising sports, travel/excursions, and intimate relations since disease onset (5 point Likert scale; 1 “much more” – 5 “much less”); iii) Adaptations made to cope with axSpA since disease onset (yes/no question); iv) The degree of functional limitation in 18 daily activities (3 point Likert scale).

Conclusion: For most participants the onset of axSpA marked the worsening of personal relationships in different areas, as well as the reduction of social, leisure, and entertainment activities.

Acknowledgments: Funded by Novartis Pharma AG

Disclosure of Interests: Marco Garrido-Cumbre: None declared. Victoria Navarro-Compán Consultant of: Abbvie, Lilly, Novartis, Pfizer. UCB, Speakers bureau: AbbVie, MSD, Lilly, Novartis, Pfizer. UCB. Christine Bundy Grant/research support from: Has received unrelated honoraria from Abbvie, Celgene, Janssen, Lilly, Novartis, and Pfizer. Raj Mahapatra: None declared. Souzi Makri: None declared. Sergio Sanz-Gómez: None declared. Laura Christen: None declared. Carlos Jesus Delgado-Dominguez: None declared. Denis Poduborny Grant/research support from: AbbVie, MSD, Novartis, and Pfizer. Consultant of: AbbVie, Bristol-Myers Squibb, Eli Lilly, MSD, Novartis, Pfizer, Roche. UCB, Speakers bureau: AbbVie, Bristol-Myers Squibb, Eli Lilly, MSD, Novartis, Pfizer, Roche, UCB

DOI: 10.1136/annrheumdis-2020-eular.4293

SAT0375 DETERMINANTS OF PATIENT’S GLOBAL ASSESSMENT OF WELL-BEING IN EARLY AXIAL SPONDYLOARTHRITIS: 5-YEAR LONGITUDINAL DATA FROM THE DESIR COHORT.

F Hirano1, D Van der Heijde1, F A Van Gaalen1, R B M Landewe2, C Gaujoux-Viala5, S Ramiro3, UJMCM, Leiden, Netherlands; 3UJMC, Amsterdam, Netherlands; 4Zuyderland MC, Heerlen, Netherlands; 5Nîmes University Hospital, Nîmes, France

Background: A framework has been proposed to explain in which disease outcomes impact quality of life or well-being in patients with axSpA; this was based on cross-sectional data and patients with radiographic axSpA.1

Objectives: To investigate the determinants of patient’s well-being over time, and the influence of contextual factors on these relationships in patients with early axSpA.

Methods: Five-year data from DESIR, a cohort of early axSpA, were analysed. Clinical data were collected every 6 months up to 2 years and annually thereafter. X-rays and MRI of the spine and SIJ were performed at baseline, 2, and 5 years. The outcome was BAS-G, the patient’s global assessment of the disease impact on well-being. Generalized estimating equations (GEE) were used to test the relationship between potential explanatory variables from 5 domains (disease activity, physical function, spinal mobility, structural damage, spinal and SIJ inflammation) and BAS-G over 5 years. Longitudinal relationships were analysed using an autoregressive GEE model. Contextual factors (patient’s educational level, gender and age) were tested as potential effect modifiers or confounders.

Results: A total of 708 patients were included, mean age 33.7 (SD 8.6) years, 46% male, 41% lower educated. Higher scores of the individual questions of BASDAI on fatigue (Q1) (β [95% CI]: 0.17 [0.13-0.22], back pain (Q2) (0.51 [0.46-0.56]), peripheral (joint pain (Q3) (0.08 [0.04-0.12]) and severity of morning stiffness (Q5) (0.08 [0.03-0.13]), and BASFI (0.14 [0.08-0.19]) were independently associated with a higher BAS-G over time (Table 1). In the autoregressive GEE model, all variables except for the BASDAI Q5 showed true longitudinal