initial MRI edema score and the level of serum CK (p=0.028). However, no correlation was seen between the level of improvement in MRI ES and drop in CK or with any other clinical parameters after 3 months of treatment. The intensity of muscle edema at baseline was not predictive to improvement of any clinical parameters or CK, with a tendency to a better improvement of muscle disease activity in those who had higher MRI ES at baseline (corr. coeff. 0.445, p=0.073).

Conclusion: We proposed a new semi-quantitative scoring system for assessment of MR images in patients with PM and DM. This system was applied to record degree of muscle edema and fatty replacement in a subpopulation of patients treated in the Prometheus study. A significant reduction of MRI ES and no relevant progression of muscle atrophy and fatty replacement after 3 months of therapy was demonstrated. Initial MRI edema score correlated with some clinical and laboratory parameters (PGA, CK) but was not predictive to a degree of improvement during treatment. The results are limited by a small sample size, particularly in the subset with longitudinal MRI. **Acknowledgement:** Supported by the project (Ministry of Health, Czech Republic) for conceptual development of research organization 00023728 (Institute of Rheumatology).

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FRI0643

SPINE AND SACROILIAC JOINTS LESIONS ON MRI IN PATIENTS WITH EARLY AXIAL SPA: CORRELATION WITH CLINICAL AND DISEASE ACTIVITY INDICES IN 24-MONTHS FOLLOW UP (ITALIAN ARM OF SPACE STUDY)

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Background: Recently several studies have focused on the use of magnetic resonance imaging (MRI) that might facilitate early diagnosis and monitor the disease activity of axial spondyloarthritis (axSpA).

Objectives: Evaluate the prevalence of spine and pelvis MRI lesions in patients (pts) with low back pain (LBP) and suspected axSpA; investigate how MRI features evolve over time and relate to radiographic damage; identify the predictive factors for a more severe disease pattern with a higher probability of radiological progression.

Methods: Seventy-five pts with LBP (≥ 3 months, ≤ 2 years, onset ≤ 45 years) underwent a physical examination, questionnaires, laboratory tests, X-rays and MRI of the spine and sacroiliac joints (SIJ) at baseline (T0) and during a follow-up (FU) period of 24 months. Two expert rheumatologists defined axSpA diagnosis and assessed fulfillment of Assessment of SpondyloArthritis International Society ASAS criteria. Disease activity and physical functioning were assessed using: Bath Ankylosing Spondylitis Metrology Index (BASMI); Maastricht Ankylosing enthesitis Spondylitis Score (MASES); Bath Ankylosing Spondylitis Disease Activity Index (BASDAI); Bath Ankylosing Spondylitis Functional Index (BASFI); Ankylosing Spondylitis disease activity score (ASDAS); Visual Analogue Scale (VAS pain); VAS night pain; VAS disease activity; Bath Ankylosing Spondylitis Patient Global Score (BASG1); BASG2; Health Assessment Questionnaire (HAQ); ESR; serum ultrasensitive CRP (hs-CRP). Spine and SIJ MRI and X-

rays were scored independently by 2 readers following the SPARCC, mSASSS and score SIJ-mNY. Pts were classified in accordance ASAS criteria as: 21 pts classified according to axSpA imaging arm; 29 pts classified according to axSpA clinical+imaging arm; 25 pts not fulfilling ASAS criteria. The Kruskal Wallis test was used to compare all indices during FU. A regression analysis was performed to identify the predictors of inflammation and radiological progression of the disease evaluated using mSASSS, score SIJ-mNY, SPARCC-SIJ and SPARCC-spine. The following independent variables were considered in this analysis: female sex, age of LBP onset, duration of LBP, presence of HLA-B27, elevated ESR/CRP, BASDAI > 4 , use of NSAIDs.

Results: The median LBP onset was 28.51 ± 8.05 years, 45.3% were male, HLA-B27 was positive in 38.7% pts; 56% pts showed bone marrow edema (BME) in spine-MRI (19%, 39%, 33% in cervical/thoracic/lumbar region) and 61.3% pts in SIJ-MRI (respectively 58% on the right SIJ and 50% on the left SIJ). Signs of enthesitis were found in 62.7% pts (respectively 8%, 58%, 11% in the cervical/thoracic/lumbar spine). Eighteen (24%) pts presented a negative BME SIJ-MRI with a positive BME spine-MRI. Predictive factors of increased radiological activity were, respectively, for a higher SPARCC-spine score, a higher use of NSAIDs and for a higher SPARCC-SIJ score, the presence of HLA-B27 and increased ESR/CRP. The prevalence of BME lesions on MRI and SPARCC-SIJ decreased during the FU period in the 2 cohorts that met the ASAS criteria for axSpA (Table 1, Figure 1a-b).

Table 1. The prevalence of inflammatory and structural lesions at T0 and 24 months in three cohorts (axSpA imaging arm, axSpA clinical+imaging arm, not full ASAS axSpA).

	axSpA imaging arm	axSpA clinical+imaging arm	not full ASAS axSpA
T0 MRI evaluation			
Total number of patients	21 (100%)	29 (100%)	25 (100%)
SIJ total lesions	21 (100%)	27 (93%)	4 (16%)
BASMI lesions	21 (100%)	21 (72%)	0 (0%)
enthesitis lesions	10 (47%)	18 (62%)	0 (0%)
fatty lesions	7 (33%)	8 (28%)	4 (16%)
erosive lesions	0 (0%)	3 (10%)	0 (0%)
Spine total lesions	20 (95%)	28 (97%)	13 (52%)
BASMI lesions	18 (85%)	15 (52%)	9 (36%)
enthesitis lesions	17 (81%)	19 (65%)	11 (44%)
fatty lesions	6 (28%)	7 (24%)	4 (16%)
erosive/fundamental lesions	4 (20%)	6 (21%)	3 (12%)
erosive lesions	2 (10%)	2 (7%)	1 (4%)
24 months MRI evaluation			
Total number of patients	18 (100%)	22 (100%)	18 (100%)
SIJ total lesions	18 (100%)	15 (68%)	1 (6%)
BASMI lesions	17 (94%)	13 (59%)	0 (0%)
enthesitis lesions	7 (39%)	10 (45%)	0 (0%)
fatty lesions	4 (22%)	4 (18%)	1 (6%)
erosive lesions	1 (6%)	2 (9%)	0 (0%)
Spine total lesions	11 (61%)	4 (18%)	7 (39%)
BASMI lesions	7 (39%)	3 (14%)	5 (28%)
enthesitis lesions	7 (39%)	6 (27%)	7 (39%)
fatty lesions	4 (22%)	4 (18%)	4 (22%)
erosive/fundamental lesions	7 (39%)	5 (23%)	2 (11%)
erosive lesions	1 (6%)	2 (9%)	0 (0%)

Conclusion: At T0 a significant prevalence of BME lesions was observed both for SIJ and the spine, with predominant involvement of thoracic district. Since positive spine-MRI images were observed in absence of sacroiliitis, we can hypothesize that this finding could have a diagnostic significance in suspected axSpA. Further studies are warranted to assess in a more exhaustive manner the role of imaging in the monitoring of activity disease and radiological progression. **Disclosure of Interests:** None declared
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FRI0644

ANALYSIS OF CARDIOVASCULAR RISK AND CAROTID INTIMA-MEDIA THICKNESS IN PATIENTS WITH PSORIASIS

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Background: Psoriasis (Ps) is associated with atherosclerosis and an increased risk of cardiovascular disease (CVR). Currently, a new automated ultrasound software, based on radio frequency, called QIMT (quantitative intima media thickness) technology, proved to be a useful method for assessing subclinical atherosclerosis with the measurement of the intima-media thickness (IMT) in carotid arteries^{1,2}.

Objectives: To analyze the ultrasound results of the QIMT and Framingham score for psoriasis patients submitted to two types of treatments: methotrexate (MTX) and tumor necrosis factor inhibitor (TNF- α).

Methods: Fifty patients with psoriasis in plaques, were divided into two groups, using MTX and using TNF- α (infliximab and adalimumab). We