Abstract OP0247 – Table 1 Performance of the referral strategies against the rheumatologist clinical diagnosis (N=3,877; pre-test probability: 1.6% – weighted national SpA prevalence)

	Sensitivity (%)	Specificity (%)	PPV (%)	1-NPV (%)
ASAS	85.4	38.8	2.2	0.6
EpiReumaPt	72.1	67.6	3.5	0.7
CafaSpA one	56.3	69.7	2.9	1.0
Brandt I	49.2	79.3	3.7	1.0
Braun IBP	47.5	78.7	3.5	1.1
MASTER	36.7	87.7	4.6	1.2
Brandt II	27.7	92.4	5.6	1.3
Hermann	22.4	93.2	5.1	1.3
CafaSpA two	15.2	95.2	4.9	1.4
Braun 2 step	15.1	95.7	5.3	1.4
Brandt III	7.9	98.4	7.6	1.5

ASAS (≥1/5+): IBP (ASAS definition), good response to NSAIDs, family history of SpA, peripheral manifestations (arthritis, enthesitis and/or dactylitis), extra-articular manifestations (uveitis, psoriasis and/or IBD); EpiReumaPt (≥1/5+): previous SpA/PsA diagnosis, IBP (≥ 3/8 features), CBP (≥ 3 months) starting <45 years and ≥ 1/6 SpA features, dactylitis, enthesitis; CafaSpA one (≥1/3+): IBP (ASAS definition), good response to NSAIDs, family history of SpA; CafaSpA two (≥2/3+): see CafaSpA one; Brandt I (≥ 1/1+): IBP (morning stiffness>30 min, pain at night/early morning, improvement by exercise; ≥1/3); Brandt II (≥ 1/1+): ≥2/3 IBP features (see Brandt I); Brandt III (≥ 1/1+): ≥3/3 IBP features (see Brandt I); Braun IBP (≥ 2/5+): start BP≤35 years, waking second half of the night, alternating buttock pain, improvement by movement, not rest; MASTER (≥ 2/3+): IBP (morning stiffness>30 min, improvement exercise, not rest, awakening in the night because of BP), good response to NSAIDs, family history of AS; Hermann (≥1/1): IBP (Calin's criteria); Braun 2 step (≥ 2/3): psoriasis, alternating buttock pain, improvement BP by exercise. HLA-B27 excluded from ASAS, Brandt I-III and Braun 2 step; elevated CRP/ESR excluded from ASAS.

Conclusions: For the first time, a wide range of SpA RS were tested head-to-head in a population-based setting where the ASAS and EpiReumaPt RS were shown to be the most sensitive. Our data suggest that these strategies can be effectively used as screening tools for SpA especially when laboratory and imaging data are not available.

Disclosure of Interest: None declared

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OP0248

POTENTIAL DIFFERENCES IN AXIAL SPONDYLOARTHRITIS DISEASE ACTIVITY CATEGORIZATION USING DIFFERENT MINIMUM VALUES FOR HIGH-SENSITIVITY CRP IN ANKYLOSING SPONDYLITIS DISEASE ACTIVITY SCORE CALCULATION AND DIFFERENT DEFINITIONS OF DISEASE FLARE

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Background: It has been recommended that the lower limit of high-sensitivity CRP (hsCRP) be restricted to 2 in the Ankylosing Spondylitis Disease Activity Score (ASDAS) calculation. Also, a definition of flare of ASDAS increase ≥0.9 was recently proposed.

Objectives: Using non-radiographic axial SpA (nr-axSpA) trial data, this analysis evaluated potential differences in patient (pt) categorization using different minimum values for hsCRP in the ASDAS calculation and different definitions of disease flare.

Methods: ABILITY-3 (NCT01808118) assessed the impact of continuation versus withdrawal of adalimumab (ADA) in nr-axSpA pts who achieved sustained remission with open-label ADA. All pts received open-label ADA 40 mg every other wk during a 28-wk lead-in period. Pts who achieved remission, defined as ASDAS inactive disease (ID, ASDAS <1.3) at wks 16, 20, 24, and 28 were randomised to 40-wk, double-blind ADA (continuation) or PBO (withdrawal). ASDAS was calculated with the full range of hsCRP (protocol-defined) and limiting hsCRP to the lowest possible value of 2 mg/L (rederived). Flare was calculated as 2 consecutive study visits with ASDAS >2.1 (protocol definition) or with ASDAS increase ≥0.9 (modified definition). Data are reported as observed (open label) and by nonresponder imputation (double blind).

Results: 673 pts were enrolled. At open-label baseline, mean ASDAS using the protocol-defined ASDAS calculation was 3.6 vs 3.7 when rederived. At wk 28, 295 (43.8%) pts achieved protocol-defined ASDAS ID vs 272 (40.4%) pts using the rederived ASDAS; mean ASDAS at double-blind baseline was 0.7 vs 0.9, respectively. At wk 68, significantly more pts treated with ADA vs PBO had no flare per protocol definition (69.7% vs 47.1%; p<0.001; table 1). Similar results were observed with modified definitions (table 1). At wk 68, significantly greater proportions of ADA vs PBO pts achieved ASDAS endpoints (all p<0.001), with similar results for protocol-defined and rederived ASDAS calculations, respectively: ID (57.2% vs 33.3% and 52.0% vs 29.4%), major improvement (58.6% vs 32.0% and 50.0% vs 30.7%), and clinically important improvement (67.1% vs 45.1% and 67.1% vs 44.4%).

Abstract OP0248 – Table 1 Percentage of patients not experiencing disease flare at week 68 using protocol-defined or rederived ASDAS and/or modified flare definitions

Variable, n (%)	Adalimumab (40 mg EOW) n=152*	Placebo n=153*	Difference, %	P value
Protocol-defined ASDAS and flare	106 (69.7)	72 (47.1)	22.7	<0.001
Rederived ASDAS, protocol-defined flare	100 (65.8)	69 (45.1)	20.7	<0.001
Protocol-defined ASDAS, modified flare definition	97 (63.8)	56 (36.6)	27.2	<0.001
Rederived ASDAS and modified flare definition	99 (65.1)	65 (42.5)	22.6	<0.001

ASDAS, Ankylosing Spondylitis Disease Activity Score; EOW, every other week; ID, Nonresponder imputation; P value using 2-sided Pearson chi-square test.

*Efficacy outcomes were calculated based on the number of patients randomized, rather than those who would have qualified for randomization based on rederived ASDAS calculations.

Conclusions: At both open-label and double-blind baseline, mean ASDAS was similar, regardless of the hsCRP value cut-off used. Fewer pts in both treatment groups were categorised as not experiencing a flare when limiting the lowest possible hsCRP value to 2 mg/L in the ASDAS calculation and/or using a modified flare definition. However, treatment differences remained similar compared with the protocol-defined methodology. Results suggest infrequent clinically relevant differences in ASDAS values with use of either definition for minimum hsCRP and that the use of ASDAS >2.1 or ASDAS increase ≥0.9 as the definition of flare is reasonable.

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OP0249

THE CONTRIBUTION OF STRUCTURAL MRI LESIONS TO DETECTION OF SACROILIITIS IN PATIENTS IN THE ASSESSMENTS IN SPONDYLOARTHRITIS INTERNATIONAL SOCIETY (ASAS) CLASSIFICATION COHORT

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Background: Active lesions typical of axial spondyloarthritis (axSpA) in the sacroiliac joint (SIJ) were reported by local site readers in about 40% of patients in the ASAS classification cohort (ASAS-CC) when this study was conducted over 10 years ago¹. There has been no data reported on the occurrence of structural lesions in this cohort. Since this study was conducted, there has been considerable progress in our understanding of SIJ lesions observed on MRI, which raises the possibility that MRI scans of patients in the ASAS-CC could now be interpreted substantially differently.

Objectives: To determine the added contribution of structural lesions in the SIJ to the evaluation of sacroiliitis in an inception cohort of patients with axSpA.

Methods: Recently updated MRI lesion definitions for axSpA (ASAS_MRI_def^m) were recorded in an eCRF that comprises global assessment (lesion present/absent) and detailed scoring (SPARCC SIJ inflammation, SPARCC SIJ structural). MRI scans were available in a variety of formats (DICOM (n=175), JPEG (n=71), DICOM film (n=32)) and sequences, axial and semicoronal orientations, from 278 of the 495 cases who had MRI performed in the ASAS-CC. Image quality