

Supplemental Table 1. Nr-axSpA among axial SpA in Asian countries

	JAPAN	SOUTH KOREA	CHINA	TAIWAN	SINGAPORE
N (axial SpA)	77	178	210	171	144
nr-axSpA (%)	11 (14.3)	14 (7.9)	15 (7.1)	36 (21.1)	36 (25.0)
r-axSpA (%)	66 (85.7)	164 (92.1)	195 (92.9)	135 (78.9)	108 (75.0)
HLA B27 measured (%)	49 (63.6)	155 (87.1)	198 (94.3)	165 (96.5)	135 (93.8)
HLA B27 positive among measured (%)	39 (79.6)	142 (91.6)	183 (92.4)	161 (97.6)	122 (90.4)

Supplemental Table 2. Nr-axSpA diagnosed by clinical arm only; Asia vs. non-Asia

Variables	Asia	Non-Asia	p value
N	63	145	
Age at disease diagnosis, yrs	27.9 [23.5, 39.1]	35.4 [27.2, 42.0]	0.010
Age at disease onset, yrs	22.9 [18.8, 30.6]	25.5 [18.1, 33.7]	0.55
Age at enrollment, yrs	36.1 [26.3, 44.7]	45.0 [36.3, 53.1]	<0.001
Diagnostic delay, yrs	2.00 [0.25, 8.00]	4.75 [1.00, 12.50]	0.030
Male (%)	47 (74.6)	87 (60.0)	0.06
Body mass index, kg/m ²	24.0 [20.8, 26.5]	25.8 [22.9, 30.1]	0.001
Smoking status			
Never (%)	39 (61.9)	69 (47.6)	0.08
Past (%)	12 (19.0)	49 (33.8)	0.048
Current (%)	12 (19.0)	27 (18.6)	1
Family history of SpA (%)	25 (39.7)	75 (51.7)	0.15
Meeting ASAS axial SpA criteria			
Imaging arm only (%)	0 (0.0)	0 (0.0)	NA
Clinical arm only (%)	63 (100.0)	145 (100.0)	NA
Both (%)	0 (0.0)	0 (0.0)	NA
MRI tested (%)	24 (38.1)	74 (51.0)	0.12
Sacroiliitis among MRI tested (%)	0 (0.0)	0 (0.0)	NA
HLA B27 measured (%)	63 (100.0)	145 (100.0)	NA
HLA B27 positivity among measured (%)	63 (100.0)	145 (100.0)	NA
Inflammatory back pain (%)	58 (92.1)	141 (97.2)	0.13
Arthritis, enthesitis, or dactylitis (%)	32 (50.8)	124 (85.5)	<0.001
Peripheral arthritis (%)	29 (46.0)	106 (73.1)	<0.001
Heel enthesitis (%)	16 (25.4)	67 (46.2)	0.008
Peripheral enthesitis (%)	17 (27.0)	86 (59.3)	<0.001
Dactylitis (%)	1 (1.6)	26 (17.9)	0.001
Psoriasis (%)	4 (6.3)	28 (19.3)	0.020
CASPAR criteria (%)	2 (3.2)	8 (5.5)	0.73
Uveitis (%)	13 (20.6)	50 (34.5)	0.07
Inflammatory bowel disease (%)	4 (6.3)	10 (6.9)	1
Erythrocyte sedimentation rate (ESR), mm/h	10.0 [5.0, 20.3]	10. [5.0, 21.0]	0.95
C-reactive protein (CRP) level, mg/dl	0.50 [0.30, 1.30]	0.55 [0.10, 2.90]	0.99
Elevated CRP (%)	20 (31.7)	69 (47.6)	0.049
Physician global assessment (0-10)	3.0 [1.0, 5.0]	3.0 [1.0, 4.0]	0.68
Patient global assessment (0-10)	4.5 [1.3, 6.0]	4.0 [2.0, 6.0]	0.85
ASDAS-CRP	1.41 [0.97, 2.18]	1.91 [1.13, 2.81]	0.10
BASDAI	3.0 [1.9, 4.9]	3.4 [2.0, 5.6]	0.22
BASFI	1.0 [0.1, 4.1]	3.0 [0.8, 5.4]	0.003
Presence of bamboo spine (%)	0 (0.0)	1 (0.7)	1

History of SpA related surgeries (%)	0 (0.0)	8 (5.5)	0.11
Treatment			
NSAIDs use since onset (%)	59 (93.7)	139 (95.9)	0.50
Good response to NSAIDs (%)	49 (77.8)	106 (73.1)	0.59
Current glucocorticoid use (%)	6 (9.5)	23 (15.9)	0.28
Conventional synthetic DMARDs use (%)	34 (54.0)	86 (59.3)	0.57
Methotrexate use (%)	5 (7.9)	46 (31.7)	<0.001
Sulfasalazine use (%)	33 (52.4)	69 (47.6)	0.55
Biological DMARDs (TNF antagonists) use (%)	9 (14.3)	67 (46.2)	<0.001
Comorbidities			
Obesity (%)	14 (22.2)	38 (27.0)	0.59
Hypertension (%)	10 (15.9)	33 (22.8)	0.35
Diabetes (%) (%)	2 (3.2)	12 (8.3)	0.24
Dyslipidemia (%)	7 (11.1)	22 (15.2)	0.52
Ischemic heart disease or stroke (%)	0 (0.0)	5 (3.4)	0.33
Vertebral or fragility fractures (%)	2 (3.2)	4 (2.8)	1

Supplemental Table 3. Nr-axSpA in Asia by sex

Variables	Male	Female	p value
n	85	27	
Age at disease diagnosis, yrs	24.7 [20.4, 36.0]	36.1 [27.6, 41.9]	0.005
Age at disease onset, yrs	21.5 [18.2, 28.1]	29.9 [21.3, 37.9]	0.011
Age at enrollment, yrs	28.8 [24.0, 42.0]	40.4 [34.7, 47.3]	0.008
Diagnostic delay, yrs	1.41 [0.25, 4.00]	5.66 [1.12, 10.00]	0.034
Body mass index, kg/m ²	24.4 [21.6, 26.8]	21.2 [19.0, 24.1]	0.005
Smoking status			
Never (%)	45 (52.9)	22 (81.5)	0.016
Past (%)	15 (17.6)	2 (7.4)	0.24
Current (%)	25 (29.4)	3 (11.1)	0.07
Family history of SpA (%)	24 (28.2)	12 (44.4)	0.18
Meeting ASAS axial SpA criteria			
Imaging arm only (%)	11 (12.9)	8 (29.6)	0.07
Clinical arm only (%)	47 (55.3)	16 (59.3)	0.89
Both (%)	27 (31.8)	3 (11.1)	0.045
MRI tested (%)	56 (65.9)	17 (63.0)	0.96
Sacroiliitis among MRI tested (%)	38 (67.9)	11 (64.7)	1
HLA B27 measured (%)	83 (97.6)	23 (85.2)	0.029
HLA B27 positivity among measured (%)	76 (91.6)	20 (87.0)	0.79
Inflammatory back pain (%)	81 (95.3)	26 (96.3)	1
Arthritis, enthesitis, or dactylitis (%)	43 (50.6)	17 (63.0)	0.37
Peripheral arthritis (%)	39 (45.9)	14 (51.9)	0.75
Heel enthesitis (%)	24 (28.2)	9 (33.3)	0.63
Peripheral enthesitis (%)	27 (31.8)	11 (40.7)	0.53
Dactylitis (%)	1 (1.2)	1 (3.7)	0.43
Psoriasis (%)	7 (8.2)	5 (18.5)	0.16
CASPAR criteria (%)	3 (3.5)	3 (11.1)	0.15
Uveitis (%)	13 (15.3)	7 (25.9)	0.25
Inflammatory bowel disease (%)	3 (3.5)	2 (7.4)	0.59
Erythrocyte sedimentation rate (ESR), mm/h	8.0 [4.0, 17.5]	15.0 [9.5, 21.0]	0.024
C-reactive protein (CRP) level, mg/dl	0.50 [0.30, 1.40]	0.30 [0.15, 0.85]	0.053
Elevated CRP (%)	27 (31.8)	10 (37.0)	0.64
Physician global assessment (0-10)	2.0 [1.0, 5.0]	2.0 [1.0, 5.0]	0.81
Patient global assessment (0-10)	3.0 [1.0, 6.0]	4.0 [1.5, 5.0]	0.93
ASDAS-CRP	1.40 [0.84, 2.10]	1.34 [1.01, 1.98]	0.96
BASDAI	2.7 [1.3, 4.2]	2.9 [2.4, 4.3]	0.43
BASFI	0.8 [0.1, 2.5]	0.9 [0.1, 3.9]	0.69
Presence of bamboo spine (%)	0 (0.0)	27 (0.0)	NA
History of SpA related surgeries (%)	0 (0.0)	0 (0.0)	NA

Treatment			
NSAIDs use since onset (%)	78 (91.8)	25 (92.6)	1
Good response to NSAIDs (%)	62 (72.9)	18 (66.7)	0.70
Current glucocorticoid use (%)	5 (5.9)	5 (18.5)	0.06
Conventional synthetic DMARDs use (%)	46 (54.1)	14 (51.9)	1
Methotrexate use (%)	14 (16.5)	4 (14.8)	1
Sulfasalazine use (%)	40 (47.1)	11 (40.7)	0.72
Biological DMARDs (TNF antagonists) use (%)	19 (22.4)	8 (29.6)	0.45
Comorbidities			
Obesity (%)	20 (23.5)	4 (14.8)	0.43
Hypertension (%)	13 (15.3)	2 (7.4)	0.52
Diabetes (%) (%)	2 (2.4)	0 (0.0)	1
Dyslipidemia (%)	7 (8.2)	4 (14.8)	0.46
Ischemic heart disease or stroke (%)	1 (1.2)	0 (0.0)	1
Vertebral or fragility fractures (%)	2 (2.4)	0 (0.0)	1