**Supplementary table 1** A univariable association of comorbidities\* with disease activity and functional impairment in patients with axial spondyloarthritis (N=1,776)

	Reference	BASDAI	BASFI
		β (95% CI)	β (95% CI)
Hypertension (complicated)	not present	0.41 (0.04, 0.77)	1.08 (0.60, 1.56)
Hypertension (uncomplicated)	not present	0.42 (0.23, 0.61)	1.15 (0.92, 1.39)
Depression	not present	1.14 (0.93, 1.35)	1.12 (0.85, 1.38)
Chronic pulmonary disease	not present	0.46 (0.22, 0.69)	0.79 (0.51, 1.08)
Diabetes (complicated)	not present	0.47 (0.12, 0.82)	1.32 (0.90, 1.75)
Diabetes (uncomplicated)	not present	0.25 (-0.13, 0.62)	0.92 (0.46, 1.38)
Cardiac arrhythmias	not present	0.23 (-0.05, 0.51)	0.79 (0.44, 1.15)
Obesity	not present	0.61 (0.34, 0.88)	1.37 (1.04, 1.71)
Hypothyroidism	not present	0.31 (0.03, 0.59)	0.35 (0.00, 0.71)
Osteoporosis	not present	0.14 (-0.16, 0.44)	0.78 (0.44, 1.13)
Liver disease	not present	0.52 (0.23, 0.81)	0.59 (0.23, 0.95)
Peripheral vascular disorders	not present	0.39 (0.04, 0.73)	1.29 (0.85, 1.74)
Solid tumor without metastasis	not present	-0.09 (-0.41, 0.24)	0.63 (0.21, 1.05)
Valvular disease	not present	0.42 (0.08, 0.76)	0.39 (-0.03, 0.81)
Renal failure	not present	0.26 (-0.11, 0.64)	1.09 (0.63, 1.56)
Congestive heart failure	not present	0.49 (0.09, 0.89)	1.83 (1.34, 2.33)
Deficiency anemia	not present	0.28 (-0.16, 0.73)	0.37 (-0.20, 0.94)

<sup>\*</sup> with prevalence >5%.

 ${\tt BASDAI, Bath\ Ankylosing\ Spondylitis\ Disease\ Activity\ Index;\ BASFI,\ Bath\ Ankylosing\ Spondylitis\ Functional\ Index.}$