

Supplementary Table 1. Operational definitions of inclusion and exclusion criteria, and comorbidities

Category	Disease	ICD-10 codes	Number of diagnosis/additional definition
Inclusion	Ankylosing spondylitis	M45	V140 (rare incurable disease registration code)
Exclusion	Systemic lupus erythematosus	M32	
	Rheumatoid arthritis	M05, M06	
	Bechet's disease	M352	
	Psoriatic arthropathy	M07	
	Inflammatory bowel disease	K51, K50	
Comorbidities	Charlson comorbidity index		ref. Quan 2005
	Diabetes mellitus	E10-E14	Admission or outpatient clinic ≥ 1 within a year
	Dyslipidemia	E78	Admission or outpatient clinic ≥ 1 within a year
	Hypertension	I10-I13, I15	Admission or outpatient clinic ≥ 1 within a year
	Ischemic heart disease	I20-25	Admission or outpatient clinic ≥ 1 within a year
	Stroke	I63, I64, I693, I694, G459	Admission or outpatient clinic ≥ 1 within a year
	COPD	J44	Admission or outpatient clinic ≥ 1 within a year
	Asthma	J45-46	Admission or outpatient clinic ≥ 1 within a year

ICD, International Classification of Diseases; COPD, chronic obstructive pulmonary disease.