

Supplementary online Table 1. Women diagnosed with inflammatory rheumatic diseases excluded from the population controls

Diagnosis	ICD-10 code
Spondyloarthritis	M45, M46.0, M46.1, M46.8, M46.9
Psoriatic arthritis	M07.0, M07.1, M07.2, M07.3 (+L40.5)
Rheumatoid arthritis	M05.0, M05.1, M05.2, M05.8, M05.9, M06.0, M06.8, M06.9
Polyarthritis, unspecified	M13.0, M13.1, M13.8, M13.9
Juvenile arthritis	M08.0, M08.1, M08.2, M08.3, M08.4, M08.8, M08.9
Systemic lupus erythematosus (SLE)	M32.1, M32.8, M32.9
Sjögrens syndrome	M35.0
Mixed connective tissue disease (MCTD)	M35.1
Other specified systemic involvement of connective tissue	M35.8
Systemic involvement of connective tissue, unspecified	M35.9
Polymyositis and dermatomyositis	M33.0, M33.1, M33.2, M33.9
Systemic sclerosis	M34.0, M34.1, M34.2, M34.8, M34.9
Adult-onset Still's disease	M06.1
Polyarteritis nodosa	M30.0
Granulomatosis with polyangiitis	M31.3
Takayasu arteritis	M31.4
Microscopic polyangiitis	M31.7
Behçets disease	M35.2

Supplementary online Table 2. Characteristics of patient groups and population controls with cesarean section, reported as n (%) unless specified as mean (SD)

Characteristic	Population controls	axSpA	p-value ^α	PsA	p-value ^α
Singleton births 2010 – 2019	89805	70		37	
Maternal age (years), mean (SD)	31.8 (5.3)	32.6 (4.6)	0.24	32.5 (4.4)	0.44
<35	64538 (71.9)	49 (70.0)	0.83	28 (75.7)	0.74
≥35	25267 (28.1)	21 (30.0)		9 (24.3)	
missing	-	-		-	
Parity					
No children	42902 (47.8)	26 (37.1)	0.097	15 (40.5)	0.47
≥ 1 child	46903 (52.2)	44 (62.9)		22 (59.5)	
missing	-	-		-	
Smoking in pregnancy	6825 (7.6)	3 (4.5)	0.48	3 (8.6)	0.75 ^δ
missing	11197	4		2	
BMI first trimester, mean (SD)	25.5 (5.4)	27.0 (6.2)	0.050	30.1 (6.6)	<0.001
≥25.0	27180 (44.0)	29 (61.7%)	0.022	19 (79.2%)	0.001
≥30.0	11241 (18.2%)	13 (27.7%)	0.14	13 (54.2%)	<0.001 ^δ
missing	28101	23		13	
Previous CS	28802 (32.1)	28 (40.0)	0.20	11 (29.7)	0.90
missing	-	-		-	
Diabetes ^δ	7199 (8.0)	8 (11.4)	0.41	5 (13.5)	0.22 ^δ
missing	-	-		-	
ART ^γ	4726 (5.3)	3 (4.3)	1.0 ^δ	7 (18.9)	0.003 ^δ
missing	-	-		-	

axSpA = axial spondyloarthritis, PsA = psoriatic arthritis, CS = cesarean section, ^αp-value for patient group compared to population controls, ^β pregestational or gestational, ^γ assisted reproductive technology, ^δ Fischers exact

Supplementary online Table 3. Health related quality of life in patient groups with no cesarean section and cesarean section, reported as mean (SD)

Characteristic	axSpA no CS	axSpA CS	MD ^α (p-value)	PsA no CS	PsA CS	MD ^α (p-value)
Singleton births 2010 – 2019	242	70		84	37	
Bodily pain*	48.7 (27.9)	43.3 (26.0)	5.4 (0.20)	59.8 (28.5)	54.3 (24.3)	5.5 (0.38)
missing	50	14		23	9	
Physical function*	54.1 (29.3)	47.4 (24.8)	6.6 (0.12)	64.1 (27.8)	59.0 (25.0)	5.2 (0.40)
missing	47	14		23	8	
General Health*	52.5 (24.2)	46.0 (23.8)	6.5 (0.081)	55.1 (19.4)	53.7 (17.3)	1.9 (0.66)
missing	47	15		22	9	
Mental health*	74.5 (15.2)	77.1 (12.6)	2.6 (0.25)	76.3 (15.8)	78.6 (14.4)	2.2 (0.53)
missing	49	14		25	8	
Vitality*	32.8 (21.4)	29.6 (21.0)	3.2 (0.32)	41.3 (22.1)	35.1 (22.0)	6.2 (0.22)
missing	48	14		25	8	

axSpA = axial spondyloarthritis, PsA = psoriatic arthritis, CS = cesarean section, * in 3rd trimester, ^α mean difference