

Table S1. Association between atopic dermatitis and risk of RA at specific ages

Age, years	Adjusted* Odds Ratio (95% CI)		
	All RA (N = 3,115)	ACPA+ RA (N = 1,988)	ACPA- RA (N = 1,057)
20	0.67 (0.46,0.98)	0.71 (0.46,1.10)	0.60 (0.33,1.09)
30	0.78 (0.59,1.04)	0.80 (0.58,1.10)	0.75 (0.48,1.17)
40	0.91 (0.75,1.11)	0.89 (0.71,1.11)	0.94 (0.70,1.27)
50	1.07 (0.92,1.25)	1.00 (0.84,1.19)	1.18 (0.95,1.47)
60	1.25 (1.03,1.52)	1.12 (0.89,1.41)	1.48 (1.15,1.92)
70	1.46 (1.11,1.94)	1.25 (0.90,1.75)	1.86 (1.27,2.71)
80	1.71 (1.17,2.51)	1.41 (0.89,2.22)	2.33 (1.37,3.96)

ACPA = anti-citrullinated peptide antibodies, CI = confidence interval, RA = rheumatoid arthritis

*Adjusting for age, sex, residential area, body mass index, education, and smoking (never, non-regular, ex, current)

Table S2. Characteristics of the 111 EIRA participants missing one or more covariates compared to those missing none

Characteristic	Missing None (N=8,833)	Missing ≥1 (N=111)	p-value
Age, years, median (IQR)	55 (45,63)	58 (43,65)	0.23
Female sex, N (%)	6,259 (71)	72 (65)	0.17
BMI, kg/m ² , N (%)			0.20
<20	565 (6)	7 (9)	
20-25	4,108 (47)	42 (53)	
25-30	2,964 (34)	25 (32)	
30+	1,196 (14)	5 (6)	
Educational level, N (%)			0.04
Compulsory school only	1,887 (21)	32 (31)	
Upper secondary school	4,403 (50)	49 (48)	
University degree	2,543 (29)	22 (21)	
Smoking status, N (%)			<0.001
Never smoker	3,532 (40)	27 (71)	
Non-regular smoker	764 (9)	1 (3)	
Ex-smoker	2,699 (31)	9 (24)	
Current smoker	1,838 (21)	1 (2)	

BMI = body mass index, IQR = interquartile range, kg = kilograms, m = meters, RA = rheumatoid arthritis