

Table S7. Risk of RA overall and by subgroups in patients with celiac disease at ≥ 18 years of age and their sibling comparators

Group	N (%)		N events (%)		Incidence rate (95% CI) per 10,000 PY		HR* (95%CI)	HR** (95%CI)
	Celiac disease	Siblings	Celiac disease	Siblings	Celiac disease	Siblings		
Overall	9 578 (100%)	17 067 (100%)	80 (0.8%)	86 (0.5%)	9.1 (7.1-11.1)	5.4 (4.3-6.6)	1.84 (1.31-2.57)	1.75 (1.23-2.47)
Follow-up								
0-<1y	9 578 (100%)	17 067 (100%)	7 (0.1%)	11 (0.1%)	7.3 (1.9-12.8)	6.5 (2.7-10.3)	1.06 (0.37-3.07)	0.94 (0.26-3.42)
1-<5y	9 466 (98.8%)	16 874 (98.9%)	42 (0.4%)	30 (0.2%)	11.6 (8.1-15.1)	4.6 (3.0-6.3)	3.05 (1.84-5.06)	2.97 (1.74-5.06)
5-<10y	8 080 (84.4%)	14 428 (84.5%)	23 (0.3%)	33 (0.2%)	7.6 (4.5-10.7)	6.1 (4.0-8.1)	1.33 (0.72-2.44)	0.98 (0.50-1.93)
$\geq 10y$	4 092 (42.7%)	7 486 (43.9%)	8 (0.2%)	12 (0.2%)	6.7 (2.1-11.4)	5.5 (2.4-8.5)	0.91 (0.28-2.94)	0.86 (0.27-2.73)
$\geq 1y$	9 466 (98.8%)	16 874 (98.9%)	73 (0.8%)	75 (0.4%)	9.3 (7.2-11.4)	5.3 (4.1-6.5)	1.97 (1.38-2.82)	1.87 (1.29-2.71)
Sex								
Females	6 026 (62.9%)	8 333 (48.8%)	57 (0.9%)	63 (0.8%)	10.2 (7.5-12.8)	8.1 (6.1-10.1)	1.78 (1.09-2.91)	1.84 (1.10-3.08)
Males	3 552 (37.1%)	8 734 (51.2%)	23 (0.6%)	23 (0.3%)	7.2 (4.2-10.1)	2.9 (1.7-4.0)	3.35 (1.40-8.05)	2.75 (1.07-7.08)
Age								
18y - <40y	4 382 (45.8%)	6 849 (40.1%)	19 (0.4%)	6 (0.1%)	4.7 (2.6-6.7)	1.0 (0.2-1.7)	5.42 (1.68-17.54)	5.76 (1.51-21.99)
40y - <60y	3 015 (31.5%)	6 050 (35.4%)	37 (1.2%)	35 (0.6%)	12.9 (8.7-17.1)	5.9 (3.9-7.9)	2.29 (1.24-4.21)	2.05 (1.10-3.83)
$\geq 60y$	2 181 (22.8%)	4 168 (24.4%)	24 (1.1%)	45 (1.1%)	13.0 (7.8-18.2)	12.4 (8.8-16.0)	1.09 (0.60-1.97)	0.93 (0.49-1.75)
Year								
2004-2009	4 479 (46.8%)	8 233 (48.2%)	59 (1.3%)	64 (0.8%)	10.8 (8.0-13.5)	6.4 (4.8-7.9)	1.67 (1.12-2.49)	1.60 (1.05-2.42)
2010-2017	5 099 (53.2%)	8 834 (51.8%)	21 (0.4%)	22 (0.2%)	6.3 (3.6-9.0)	3.8 (2.2-5.4)	2.15 (1.10-4.20)	2.01 (0.96-4.24)
Year – First 5 years of follow-up								
2004-2009	4 479 (46.8%)	8 233 (48.2%)	31 (0.7%)	28 (0.3%)	14.2 (9.2-19.1)	7.0 (4.4-9.6)	2.07 (1.17-3.65)	2.14 (1.17-3.89)
2010-2014	3 991 (41.7%)	6 914 (40.5%)	15 (0.4%)	12 (0.2%)	7.7 (3.8-11.6)	3.6 (1.5-5.6)	2.82 (1.22-6.49)	3.09 (1.15-8.28)
Country of birth								
Nordic	9 387 (98.0%)	16 648 (97.5%)	79 (0.8%)	86 (0.5%)	9.1 (7.1-11.2)	5.6 (4.4-6.7)	1.81 (1.29-2.54)	1.75 (1.23-2.47)
Other	191 (2.0%)	417 (2.4%)	1 (0.5%)	0	6.4 (0.0-18.9)	0	-	-
Level of education								
≤ 9 years	1 501 (15.7%)	3 088 (18.1%)	20 (1.3%)	18 (0.6%)	14.6 (8.2-21.0)	6.2 (3.3-9.1)	3.66 (1.07-12.56)	3.18 (0.79-12.82)
10-12 years	4 346 (45.4%)	8 048 (47.2%)	34 (0.8%)	42 (0.5%)	8.4 (5.5-11.2)	5.6 (3.9-7.2)	1.29 (0.72-2.31)	1.35 (0.74-2.45)
>12 years	3 711 (38.7%)	5 546 (32.5%)	26 (0.7%)	26 (0.5%)	7.7 (4.8-10.7)	5.2 (3.2-7.2)	2.04 (0.94-4.46)	2.04 (0.88-4.71)

*Conditioned on matching set (family) and adjusted for age and sex;

**Conditioned on matching set and further adjusted for age, sex, education, Nordic country of birth, and time dependent medical comorbidities (Type 1 diabetes, Autoimmune thyroid disease, Inflammatory bowel disease, and Systemic lupus erythematosus)

