

eTable 1. Association between asthma (restrictive definition) and CD (any age after the age of 1)

	CD absent	CD present	Total
Asthma absent	118,782 (99.57%)	518 (0.43%)	119,300 (100%)
Asthma present	27,685 (99.23%)	214 (0.77%)	27,899 (100%)
Total	146,467 (99.50%)	732 (0.50%)	147,199 (100%)

p-value for Pearson Chi square <0.001

CD: coeliac disease

eTable 2. Risk factors of CD according to asthma (restrictive definition) and antibiotic exposure for asthma occurring at any time and preceding CD

Risk factor	CD cases (n=732)	Person-years (n= 1,197,873)	Crude IRR (95% CI)	Adjusted IRR (95% CI)*
Asthma (at any time)				
No	518	912,472	1	1
Yes	214	285,402	1.48 (1.26-1.74)	1.45 (1.24-1.71)
Any antibiotic in the first year of life				
No	411	712,481	1	1
Yes	321	485,392	1.19 (1.03-1.38)	1.16 (1.00-1.38)
	CD cases [^] (n=660)	Person-years [^] (n= 1,197,712)	Crude IRR [^] (95% CI)	Adjusted IRR [^] (95% CI)*
Asthma (preceding CD) [^]				
No	518	912,472	1	1
Yes	142	285,240	0.97 (0.80-1.17)	0.95 (0.79-1.15)
Any antibiotic in the first year of life [^]				
No	378	712,397	1	1
Yes	282	485,315	1.14 (0.98-1.32)	1.14 (0.98-1.33)

Poisson regression models adjusted for sex and year of birth

*mutually adjusted for either asthma or antibiotic exposure

[^]excluding 72 asthma cases with CD diagnosis before asthma

CD: coeliac disease; CI: confidence interval; IRR: incident rate ratio

eTable 3. Risk factors of CD according to asthma (restrictive definition) and antibiotic exposure. Analysis stratified by age at CD identification for asthma occurring at any time and preceding CD

	CD identified at 1-3 years of age (n=200)		CD identified at (3-5] years of age (n=183)		CD identified at >5 years of age (n=349)	
RISK FACTOR	Crude IRR (95% CI)	adjusted* IRR (95% CI)	Crude IRR (95% CI)	adjusted* IRR (95% CI)	Crude IRR (95% CI)	adjusted* IRR (95% CI)
Asthma (at any time)	1.51 (1.10-2.09)	1.44 (1.04-1.99)	1.47 (1.06-2.05)	1.47 (1.05-2.04)	1.46 (1.16-1.83)	1.45 (1.16-1.83)
Any antibiotic in the first year of life	1.58 (1.20-2.09)	1.54 (1.16-2.03)	1.06 (0.79-1.43)	1.03 (0.76-1.38)	1.07 (0.87-1.33)	1.04 (0.84-1.29)
	CD identified at 1-3 years of age (n=162)^		CD identified at 4-5 years of age (n=159)^		CD identified at >5 years of age (n=339)^	
	Crude IRR (95% CI)	adjusted* IRR (95% CI)	Crude IRR (95% CI)	adjusted* IRR (95% CI)	Crude IRR (95% CI)	adjusted* IRR (95% CI)
Asthma (before CD diagnosis)^	0.40 (0.23-0.70)	0.38 (0.22-0.66)	0.76 (0.50-1.17)	0.76 (0.50-1.17)	1.33 (1.05-1.68)	1.33 (1.05-1.68)
Any antibiotic in the first year of life^	1.52 (1.11-2.06)	1.59 (1.17-2.17)	0.98 (0.71-1.34)	1.00 (0.72-1.37)	1.06 (0.86-1.32)	1.04 (0.84-1.68)

Poisson regression models adjusted for sex and year of birth

**mutually adjusted for either asthma or antibiotic exposure*

^ excluding 72 asthma cases with CD diagnosis before asthma

CD: coeliac disease; CI: confidence interval; IRR: incident rate ratio