

Supplementary Online Content

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eTable 1. Risk of Inflammatory Bowel Disease in Patients With Atopic Dermatitis Stratified by Disease Severity: Primary and Sensitivity Analyses

eTable 2. E-Value Computations for Both Relative Risk and Confidence Interval Closest to the Null

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Risk of Inflammatory Bowel Disease in Patients With Atopic Dermatitis Stratified by Disease Severity: Primary and Sensitivity Analyses

Outcome	Adjusted Hazards Ratio (95% Confidence Interval)							
	Pediatric Cohort (<18 y/o)				Adult Cohort (>= 18 y/o)			
	Atopic Dermatitis Disease Severity				Atopic Dermatitis Disease Severity			
	Overall AD	Mild	Moderate	Severe	Overall AD	Mild	Moderate	Severe
All inflammatory bowel disease								
Primary analysis	1.44 (1.31, 1.58)	1.36 (1.22, 1.51)	1.48 (1.24, 1.77)	2.59 (1.94, 3.45)	1.34 (1.27, 1.40)	1.18 (1.10, 1.26)	1.44 (1.34, 1.55)	2.27 (1.96, 2.64)
Excluding patients with asthma	1.44 (1.29, 1.61)	1.40 (1.24, 1.59)	1.40 (1.11, 1.76)	2.55 (1.75, 3.72)	1.33 (1.25, 1.40)	1.14 (1.06, 1.23)	1.47 (1.36, 1.59)	2.37 (2.00, 2.82)
Excluding patients with asthma or allergic rhinitis	1.44 (1.28, 1.62)	1.42 (1.24, 1.61)	1.29 (1.00, 1.66)	2.70 (1.84, 3.97)	1.32 (1.25, 1.41)	1.13 (1.05, 1.23)	1.47 (1.35, 1.60)	2.38 (1.99, 2.85)
Restricted to patients seen at least yearly during follow-up	1.37 (1.25, 1.51)	1.30 (1.17, 1.45)	1.39 (1.16, 1.67)	2.45 (1.84, 3.26)	1.31 (1.24, 1.37)	1.16 (1.08, 1.23)	1.41 (1.31, 1.51)	2.22 (1.91, 2.58)
Restricted to patients seen for >= 1 year prior to cohort entry	1.44 (1.31, 1.58)	1.36 (1.22, 1.51)	1.48 (1.24, 1.77)	2.59 (1.94, 3.45)	1.34 (1.27, 1.40)	1.18 (1.10, 1.26)	1.44 (1.34, 1.55)	2.27 (1.96, 2.64)
Restricted to patients with at least 5 years of follow-up	1.41 (1.28, 1.56)	1.33 (1.19, 1.49)	1.49 (1.23, 1.79)	2.41 (1.77, 3.27)	1.31 (1.24, 1.39)	1.15 (1.07, 1.24)	1.42 (1.31, 1.54)	2.18 (1.85, 2.57)
Excluding patients with IBD-related medications	1.47 (1.33, 1.61)	1.39 (1.25, 1.55)	1.52 (1.27, 1.82)	2.51 (1.86, 3.40)	1.35 (1.28, 1.42)	1.20 (1.13, 1.29)	1.47 (1.37, 1.58)	2.17 (1.81, 2.59)
Crohn's disease only								
Primary analysis	1.74 (1.54, 1.97)	1.59 (1.38, 1.83)	1.66 (1.30, 2.11)	4.80 (3.55, 6.49)	1.36 (1.26, 1.47)	1.14 (1.03, 1.27)	1.38 (1.23, 1.55)	3.50 (2.91, 4.20)
Excluding patients with asthma	1.79 (1.54, 2.07)	1.67 (1.41, 1.97)	1.72 (1.27, 2.32)	4.58 (3.06, 6.85)	1.38 (1.26, 1.50)	1.13 (1.00, 1.28)	1.42 (1.24, 1.61)	3.72 (3.03, 4.58)
Excluding patients with asthma or allergic rhinitis	1.78 (1.53, 2.08)	1.68 (1.41, 2.00)	1.60 (1.16, 2.23)	4.83 (3.20, 7.28)	1.35 (1.23, 1.49)	1.13 (0.99, 1.28)	1.37 (1.19, 1.58)	3.55 (2.84, 4.44)
Restricted to patients seen at least yearly during follow-up	1.67 (1.47, 1.88)	1.53 (1.33, 1.76)	1.56 (1.22, 1.98)	4.54 (3.36, 6.13)	1.33 (1.23, 1.44)	1.12 (1.01, 1.24)	1.35 (1.21, 1.52)	3.41 (2.84, 4.09)
Restricted to patients seen for >= 1 year prior to cohort entry	1.74 (1.54, 1.97)	1.59 (1.38, 1.83)	1.66 (1.30, 2.11)	4.80 (3.55, 6.49)	1.36 (1.26, 1.47)	1.14 (1.03, 1.27)	1.38 (1.23, 1.55)	3.50 (2.91, 4.20)

Restricted to patients with at least 5 years of follow-up	1.70 (1.49, 1.94)	1.56 (1.34, 1.81)	1.63 (1.27, 2.10)	4.38 (3.17, 6.04)	1.33 (1.22, 1.45)	1.12 (0.99, 1.26)	1.33 (1.17, 1.51)	3.31 (2.70, 4.05)
Excluding patients with IBD-related medications	1.86 (1.64, 2.11)	1.72 (1.49, 1.99)	1.83 (1.43, 2.33)	4.69 (3.37, 6.52)	1.41 (1.30, 1.53)	1.22 (1.10, 1.36)	1.49 (1.33, 1.67)	3.24 (2.56, 4.10)
Ulcerative colitis only								
Primary analysis	1.09 (0.94, 1.27)	1.07 (0.90, 1.27)	1.03 (0.77, 1.40)	1.65 (1.02, 2.67)	1.32 (1.24, 1.41)	1.14 (1.05, 1.24)	1.43 (1.31, 1.57)	2.40 (2.00, 2.88)
Excluding patients with asthma	1.06 (0.89, 1.27)	1.11 (0.91, 1.35)	0.78 (0.51, 1.19)	1.43 (0.74, 2.77)	1.29 (1.20, 1.38)	1.08 (0.98, 1.20)	1.45 (1.31, 1.61)	2.29 (1.85, 2.83)
Excluding patients with asthma or allergic rhinitis	1.04 (0.86, 1.25)	1.12 (0.92, 1.38)	0.59 (0.35, 0.99)	1.55 (0.80, 3.00)	1.30 (1.21, 1.41)	1.08 (0.97, 1.20)	1.47 (1.32, 1.64)	2.45 (1.97, 3.04)
Restricted to patients seen at least yearly during follow-up	1.05 (0.90, 1.22)	1.03 (0.87, 1.22)	0.98 (0.73, 1.32)	1.57 (0.97, 12.55)	1.29 (1.21, 1.38)	1.12 (1.02, 1.22)	1.40 (1.28, 1.53)	2.34 (1.96, 2.81)
Restricted to patients seen for >= 1 year prior to cohort entry	1.09 (0.94, 1.27)	1.07 (0.90, 1.27)	1.03 (0.77, 1.40)	1.65 (1.02, 2.67)	1.32 (1.24, 1.41)	1.14 (1.05, 1.24)	1.43 (1.31, 1.57)	2.40 (1.00, 2.88)
Restricted to patients with at least 5 years of follow-up	1.07 (0.91, 1.26)	1.05 (0.87, 1.26)	1.02 (0.75, 1.40)	1.55 (0.93, 2.59)	1.32 (1.23, 1.42)	1.13 (1.02, 1.24)	1.45 (1.31, 1.60)	2.31 (1.89, 2.82)
Excluding patients with IBD-related medications	1.11 (0.95, 1.29)	1.10 (0.92, 1.31)	1.07 (0.79, 1.44)	1.50 (0.88, 2.56)	1.33 (1.25, 1.42)	1.18 (1.08, 1.28)	1.48 (1.35, 1.62)	2.13 (1.69, 2.68)

eTable 2. E-Value Computations for Both Relative Risk and Confidence Interval Closest to the Null

Inflammatory Bowel Disease					
Age Cohort	AD¹ severity	Relative Risk	Lower limit CI²	E-value for RR³	E-value for lower limit CI
Pediatric cohort	Overall	1.44	1.31	2.24	1.95
Pediatric cohort	Mild	1.36	1.22	2.06	1.74
Pediatric cohort	Moderate	1.48	1.24	2.32	1.79
Pediatric cohort	Severe	2.59	1.94	4.62	3.29
Adult cohort	Overall	1.34	1.27	2.01	1.86
Adult cohort	Mild	1.18	1.10	1.64	1.43
Adult cohort	Moderate	1.44	1.34	2.24	2.01
Adult cohort	Severe	2.27	1.96	3.97	3.33
Crohn's Disease					
Age Cohort	AD severity	Relative Risk	Lower limit CI	E-value for RR	E-value for lower limit CI
Pediatric cohort	Overall	1.74	1.54	2.87	2.45
Pediatric cohort	Mild	1.59	1.38	2.56	2.10
Pediatric cohort	Moderate	1.66	1.30	2.71	1.92
Pediatric cohort	Severe	4.80	3.55	9.23	6.56
Adult cohort	Overall	1.36	1.26	2.06	1.83
Adult cohort	Mild	1.14	1.03	1.54	1.21
Adult cohort	Moderate	1.38	1.23	2.10	1.76
Adult cohort	Severe	3.50	2.91	6.46	5.27
Ulcerative Colitis					
Age Cohort	AD severity	Relative Risk	Lower limit CI	E-value for RR	E-value for lower limit CI
Pediatric cohort	Overall	1.09	0.94	1.40	1
Pediatric cohort	Mild	1.07	0.90	1.34	1
Pediatric cohort	Moderate	1.03	0.77	1.21	1
Pediatric cohort	Severe	1.65	1.02	2.69	1.16
Adult cohort	Overall	1.32	1.24	1.97	1.79
Adult cohort	Mild	1.14	1.05	1.54	1.28
Adult cohort	Moderate	1.43	1.31	2.21	1.95
Adult cohort	Severe	2.40	2.00	4.23	3.41