

## Supplementary Online Content

Mitre E, Susi A, Kropp LE, Schwartz DJ, Gorman GH, Nylund CM. Association between use of acid-suppressive medications or antibiotics during infancy and allergic diseases in early childhood. *JAMA Pediatr*. Published online April 2, 2018. doi:10.1001/jamapediatrics.2018.0315

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

## eTable1. American Hospital Formulary System Codes Used in Study

### Antibiotics

08.12.06 cephalosporins

08.12.12 macrolides

08.12.16 penicillins

08.12.18 quinolones

08.12.20 sulfonamides

08.12.24 tetracyclines

08.12.28 miscellaneous antibiotics (including clindamycin)

08.14.08 azoles

(additionally, specific searches performed in the drug name field for linezolid, colistmethate sodium, and metronidazole)

Proton pump inhibitors: 56.28.36 (omeprazole, lansoprazole, esomeprazole, pantoprazole, dexlansoprazole, and rabeprazole)

H2 Receptor antagonists: 56.28.12 (cimetidine, famotidine, nizatidine, and ranitidine)

**eTable2. International Classification of Diseases, 9th revision, Clinical Modification Diagnostic Codes Used in Study**

Peanut allergy	V1501
Milk allergy	V1502
Egg allergy	V1503
Seafood allergy	V1504
Other food allergy	V1505, 9957
Anaphylaxis	9956, 99560, 99561, 99562, 99563, 99564, 99565, 99566, 99567, 99568, 99569, 9950
Asthma	4930, 49300, 49301, 49302, 4931, 49310, 49311, 49312, 4932, 49320, 49321, 49322, 4938, 49381, 49382, 4939, 49390, 49391, 49392
Atopic Dermatitis	6918, 6920, 6921, 6922, 6923, 6925, 6926, 6928, 69281, 69283,
Allergic Rhinitis	477, 4770, 4772, 4778, 4779
Allergic Conjunctivitis	37205, 37214
Urticaria	708, 7080, 7081, 7082, 7083, 7084, 7085, 7088, 7089
Other Allergy	V1507, V1509, 9994, 99941, 99949, 99527, 9953
Contact Dermatitis	6924, 69284, 69289, 6929, 6930, 6931, 6938, 6939,
Medication Allergy	V140, V141, V142, V143, V144, V145, V146, V147, V148, V149
Prematurity	76521, 76522, 76523, 76524, 76525, 76526, 76527, 76528
Cesarean section	V3001, V3101, V3201, V3301, V3401, V3501, V3601, V3701, V3901, 7634

**eTable3. Adjusted Hazard Ratios for Allergic Diseases by Gender, Cesarean Section, and Prematurity in Children. Ratios were adjusted for gender, prematurity, birth by Cesarean section, and effect of the other medication classes.**

	Male vs Female Adjusted Hazard Ratio (95% CI)	Cesarean Section Adjusted Hazard Ratio (95% CI)	Prematurity Adjusted Hazard Ratio (95% CI)
Any Food Allergy	1.13 (1.11-1.18)	1.07 (1.05-1.11)	1.04 (0.98-1.11)
Cow's Milk Allergy	1.24 (1.14-1.29)	1.1 (1.04-1.19)	1.12 (0.98-1.29)
Peanut Allergy	1.28 (1.22-1.35)	1.06 (1.004-1.13)	1.02 (0.89-1.16)
Egg Allergy	1.18 (1.08-1.28)	1.27 (1.14-1.40)	1.25 (1.004-1.55)
Seafood Allergy	1.20 (1.07-1.28)	1.20 (1.05-1.36)	1.18 (0.89-1.55)
Other Food Allergy	1.13 (1.09-1.16)	1.06 (1.02-1.09)	1.05 (0.97-1.13)
Anaphylaxis	1.31 (1.24-1.38)	1.06 (1.001-1.13)	1.03 (0.90-1.18)
Asthma	1.55 (1.53-1.58)	1.10 (1.09-1.12)	1.44 (1.39-1.50)
Atopic Dermatitis	1.10 (1.08-1.12)	1.06 (1.04-1.07)	0.98 (0.95-1.01)
Allergic Rhinitis	1.12 (1.11-1.13)	1.11 (1.10-1.13)	1.06 (1.03-1.09)
Allergic Conjunctivitis	1.24 (1.21-1.27)	1.09 (1.06-1.12)	1.09 (1.02-1.16)
Urticaria	1.03 (1.01-1.04)	1.03 (1.01-1.05)	0.98 (0.94-1.01)
Other Allergy	1.11 (1.10-1.13)	1.07 (1.05-1.09)	0.98 (0.93-1.03)
Contact Dermatitis	1.07 (1.06-1.08)	1.03 (1.02-1.04)	1.01 (0.98-1.03)
Medication Allergy	1.17 (1.11-1.23)	1.10 (1.06-1.14)	1.10 (1.02-1.20)

**eTable 4. Incidence Densities (in Cases per 10,000 Person-Years) of Food and Non-Food Allergic Diseases In Children Diagnosed With GERD During Infancy and Given Antibiotics, H2RAs, or PPIs Prior to 6 Months of Age.**

	<i>No Drug Exposure (n=33,634)</i>	<i>Antibiotics (n=22,626)</i>	<i>H2RA (n=49,681)</i>	<i>PPI (n=12,128)</i>
Any Food Allergy	73.8	101.3	118.8	153.0
Any Non-Food Allergy	2424.9	3322.5	2834.7	3006.3

**eTable 5. Adjusted Hazard Ratios for Food and Non-Food Allergic Diseases in Children Diagnosed With GERD During Infancy and Given Antibiotics, H2RAs, or PPIs Prior to 6 Months of Age.**

	<i>Antibiotics Adjusted Hazard Ratio (95% CI)</i>	<i>H2RA Adjusted Hazard Ratio (95% CI)</i>	<i>PPI Adjusted Hazard Ratio (95% CI)</i>
Any Food Allergy	1.02 (0.95-1.09)	1.50 (1.38-1.64)	1.93 (1.73-2.16)
Any Non-Food Allergy	1.44 (1.39-1.49)	1.07 (1.03-1.10)	1.16 (1.10-1.21)