

**Table 1.** Asthma Predictive Index (API) at 30m of age.

Parameters	Positive API	Negative API	p value*
Major criteria:			
Parental MD asthma	30.2	19.1	0.11
Eczema	90	46.2	<0.0001
Minor criteria:			
Rhinitis	100	74.3	<0.0001
Wheezing without colds	92.9	11.8	<0.0001
Blood eosinophils >4%	40.7	25.4	0.16

Numbers were express as %.

\*p value exact Fisher.

**Table 2.** Parental, home, and neonatal characteristic by groups.

n=307	Positive API n=44	Negative API n=263	*p value
<b>Maternal data:</b>			
Age (yr)	26.3 ± 4.9	25.4 ± 6.0	0.32
BMI (weight/height <sup>2</sup> )	29.06 ± 6.1	27.46 ± 5.5	<b>0.08</b>
C-section	29.5	25.1	0.66
Ever use oral contraceptive in the past	77.3	62.4	<b>0.06</b>
Ever use paracetamol during gestation	34.1	23.0	0.13
Ever use antibiotics during gestation	25	27.4	0.90
Highest education level completed:			<b>0.06</b>
Basic	7.1	21.4	
Secondary	71.4	63.4	
Higher	21.4	15.3	
Edinburgh Depression Scale	6.83 ± 5.8	7.82 ± 6.0	0.36
<b>Paternal data:</b>			
Higher education level:			0.88
Basic	14.6	17.2	
Secondary	63.4	64.0	
Higher	22	18.8	
<b>Neonatal data:</b>			
Gestational age (wk)	38.78 ± 0.9	38.96 ± 1.1	0.12
Sex (male)	52.3	51.3	1.0
Weight at birth (gr)	3612.4 ± 490	3461.1 ± 443	<b>0.07</b>
Respiratory problems at birth	2.3	1.1	0.46
Placenta weight (gr)	443.9 ± 85.4	421.6 ± 88.2	<b>0.09</b>
Placenta area (cm <sup>2</sup> )	293.8 ± 60.3	279.3 ± 53.1	0.10
<b>Home data:</b>			
Pets inside house	40.9	31.2	0.23
Never Smoking inside	86.4	93.9	0.11
Never Smoking outside	52.3	57.4	0.62
Dampness and mold at walls	22.7	23.6	1.0
Spray for cleaning	65.9	54.8	0.19
Carpets	32.4	22	0.2
Sibling or other children at home	70.3	67.6	0.85

Number expressed as percent (%) for categorical variables, and as mean ± SD or median [25-75 percentile] for continuous variables.

\*p value for t-test (continuous variables) or Fisher's exact test (categorical variables).

**Table 3.** Demographic characteristics at 6, 12, 18, 24 and 30 months of age, by groups.

	Survey at 6 months		Survey at 12 months		Survey at 18 months		Survey at 24 months		Survey at 30 months	
	Positive API n= 44	Negative API n=262	Positive API n= 44	Negative API n=244	Positive API n= 43	Negative API n=239	Positive API n= 42	Negative API n=217	Positive API n= 37	Negative API n=169
Age start day-care (mo)	0.40 ± 1.5	0.33 ± 1.3	2.29 ± 3.8*	0.97 ± 2.8	3.73± 5.2	2.53 ± 5.7	3.73± 5.2	2.53 ± 5.7	4.62 ± 7.0	6.04 ± 10.05
GERD	21.6	10.2	15.0 *	4.9	2.3	0.8	2.3	0.8	0.0	0.5
AOM	5.4	1.6	12.5	6.6	20.9 *	7.6	7.1	8.4	10.8	6.7
Bronchiolitis	86.5 ***	24.7	87.2 ***	38.6	81.4 ***	34.3	95.2 ***	48.4	97.3 ***	42.6
Croup	16.2 **	2.9	20.0	10.0	27.9 **	10.5	27.9 **	10.5	16.2 *	5.1
Pneumonia	13.9 **	2.9	25.0 *	9.9	18.6	8.9	47.6 ***	18.2	54.1 ***	16.5
Antibiotics use	43.2 ***	12.3	65.0 ***	36.0	69.8 **	43.9	54.8	41.4	40.5	41.5
AB respiratory illness	8.3	4.1	15.0	17.4	67.4 **	43.6	54.8	40.2	37.8	41.0
Acetaminophen use	94.6	91.8	87.5	90.2	86.0	82.0	86.0	82.0	59.5	63.3
Pets at home	45.9 **	23.0	17.5	24.8	25.6	24.5	26.2	26.9	24.3	30.4
Never smoking inside	94.4	94.7	95.0	95.9	95.3	96.6	95.2	98.1	94.6	96.4
Never smoking outside	37.8	42.6	35.0	43.0	34.9	42.2	40.5	48.1	43.2	40.0
Cough after crying, laughing, or agitation	32.4 ***	4.9	45.0 ***	8.3	46.3 ***	9.1	41.5 ***	7.9	54.1 ***	9.2
MD asthma diagnosis	2.7	0.8	20.0 ***	3.3	40.5 ***	7.5	36.6 ***	6.5	43.2 ***	7.2
Ever OCS use	83.8 ***	21.4	82.5 ***	34.9	70.7 ***	30.9	70.7 ***	29.8	86.5 ***	28.2
Ever ICS use	10.8 **	1.2	43.6 ***	7.1	45.2 ***	8.7	39.0 ***	9.3	37.8 ***	9.2
ED for WE	56.8 ***	16.5	70.0 ***	25.3	64.3 ***	23.4	43.9 ***	13.9	43.2 ***	9.2
Hospitalization for WE	21.6 **	7.0	17.5 *	5.8	14.3 **	2.2	7.3 *	0.9	10.8 *	1.5

Number expressed as percent (%) for categorical variables or mean ± SD for continuous variables.

AB= antibiotics; AOM= acute otitis media; ED= emergency department; GERD= gastroesophageal reflex; ICS= inhaled corticosteroids; OCS= oral corticosteroids; WE= wheezing episodes.

p < 0.05\*, p≤0.01\*\*, p≤0.001\*\*\*, for trend test ANOVA (continue variables) or exact Fisher (categorical variables) comparing with negative API.

**Table 4.** Logistic regression model for positive asthma predictive index at survey 30 months\*.

<b>n=218</b>	<b>Beta</b>	<b>Adjusted OR*</b>	<b>95% (IC)</b>	<b>p value</b>
API+	1.74	5.68	2.61-12.35	0.0001
Bronchiolitis	2.51	12.24	1.61-92.96	0.015
Pneumonia	1.44	4.21	2.09-8.51	0.0001
Constant	-4.57	0.010		0.000

\*Adjusted by gender; maternal BMI; C-section; maternal education; oral contraceptive; birthweight; placenta weight; tobacco smoking in and outside; pets at home at 6 months; age of daycare at 12m; GERD at 12m; AOM at 18m; bronchiolitis, croup and pneumonia before MD asthma diagnosis; vitamin D, CC16, adiponectin and IL12p40 in cord blood.