

## SUPPLEMENTARY MATERIAL

**Table 1.** Infant characteristics of those infants who developed atopic dermatitis (AD) by 4-6 months of age (EAD) (n=15), between 6 months and 1 year of age (LAD) (n=20) and those who did not (noAD) (n=56).

<b>Infant Characteristic</b>	<b>EAD (n=15)</b>	<b>LAD (n=20)</b>	<b>No AD (n=56)</b>
Infant gender: male	10/15 (66.7%)	10/20 (50.0%)	23/56 (41.1%)
Infant age (months)	4.2 ± 0.4	5.3 ± 0.6	5.3 ± 0.7
Infant ethnicity: Caucasian	14/15 (93.3%)	18/20 (90.0%)	51/56 (91.1%)
Infant weight at birth (grams)	3594 ± 429	3433 ± 368	3419 ± 359
Maternal allergic disease	13/15 (86.7%)	20/20 (100%)	56/56 (100%)

EAD: Early atopic dermatitis commenced by 4-6 months; LAD: Late atopic dermatitis commenced between 6 months and 1 year; NoAD: No atopic dermatitis by 1 year.

**Table 2.** EC cytokine (IL-33, IL-25 and TSLP) levels at 4-6 months of age comparing infants who developed atopic dermatitis (EAD) by 4-6 months of age (n=15), between 6 months and 1 year of age (LAD) (n=20) and those who did not (NoAD) (n=56). P-value corresponds to the comparison among the three infant groups after applying Kruskal-Wallis with the Dunn-Bonferroni post-hoc analysis test.

	<b>EAD</b>	<b>LAD</b>	<b>NoAD</b>	<b>P-value EAD- LAD</b>	<b>P-value EAD- NoAD</b>	<b>P-value LAD- NoAD</b>
IL-33 4-6M (pg/mL)	3121 (IQR 1167-6528) (n=15)	742 (IQR 219-1435) (n=20)	798 (IQR 401-2088) (n=56)	<b>0.004</b>	<b>0.004</b>	0.524
IL-25 4-6M (ng/mL)	430 (IQR 101-1128) (n=15)	102 (IQR 49-227) (n=20)	50 (IQR 24-181) (n=56)	0.215	<b>0.011</b>	0.372
TSLP 4-6M (pg/mL)	28.8 (IQR 7.1-52.2) (n=13)	4.0 (IQR 4.0-4.0) (n=19)	4.0 (IQR 4.0-4.0) (n=53)	<b>0.001</b>	<b>0.001</b>	0.163

EAD: Early atopic dermatitis commenced by 4-6 months of age; LAD: Late atopic dermatitis commenced between 6 months and 1 year; NoAD: No atopic dermatitis by 1 year; IQR: interquartile range.

**Table 3.** EC cytokine (IL-33, IL-25 and TSLP) levels at 4-6 months of age in allergen sensitized compared to non-sensitized infants at 1 year of age. P-value corresponds to the comparison between the sensitized infants and non-sensitized infants at 1 year of age.

	<b>Allergen sensitization at 1 year (n=48)</b>	<b>No sensitization at 1 year (n=34)</b>	<b>P value</b>
IL-33 4-6M (pg/mL)	1095 (IQR 453-3392)	1104 (IQR 540-3496)	0.63
IL-25 4-6M (ng/mL)	98 (IQR 25-558)	80 (IQR 33-1392)	0.75
TSLP 4-6M (pg/mL)	4.0 (IQR 4.0-4.0)	4.0 (IQR 4.0-18.56)	0.10

4-6M: 4-6 months of age; IQR: interquartile range