

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).

Infant Characteristic	EAD (n=15)	LAD (n=20)	No AD (n=56)
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.

	EAD	LAD	NoAD	P-value EAD- LAD	P-value EAD- NoAD	P-value LAD- NoAD
IL-33 4-6M (pg/mL)	3121 (IQR 1167-6528) (n=15)	742 (IQR 219-1435) (n=20)	798 (IQR 401-2088) (n=56)	0.004	0.004	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	0.011	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)	0.001	0.001	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.

	Allergen sensitization at 1 year (n=48)	No sensitization at 1 year (n=34)	P value
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