FIG E1. LA and AA metabolism. Lipid mediators evaluated by (ultraperformance LC)-MS are highlighted in boxes.
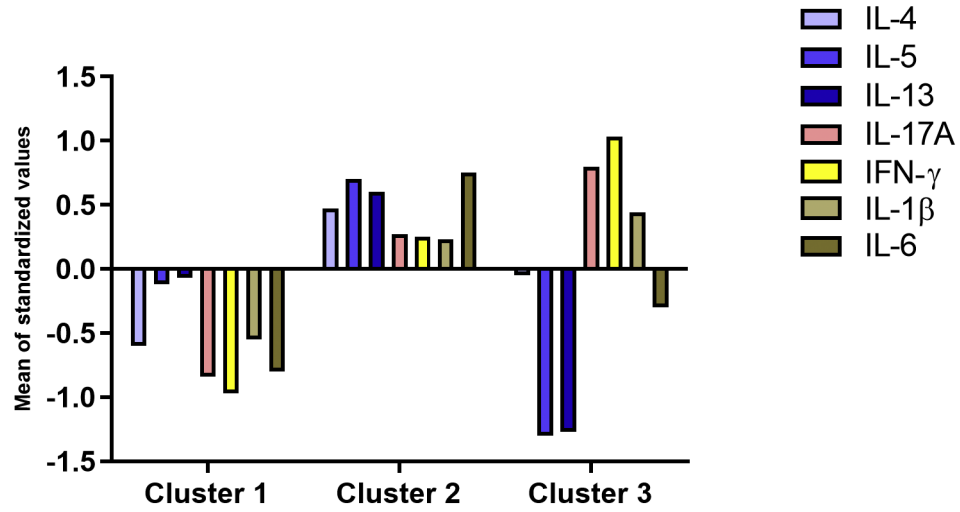
FIG E2. Cytokine signature in AERD inflammatory clusters. The mean standardized levels of representative cytokines representing type 1 (IFN-γ), type 2 (IL-4, IL-5, IL-13), type 3 (IL-17A), and innate immune (IL-1β, IL-6) signatures are shown for each disease cluster.

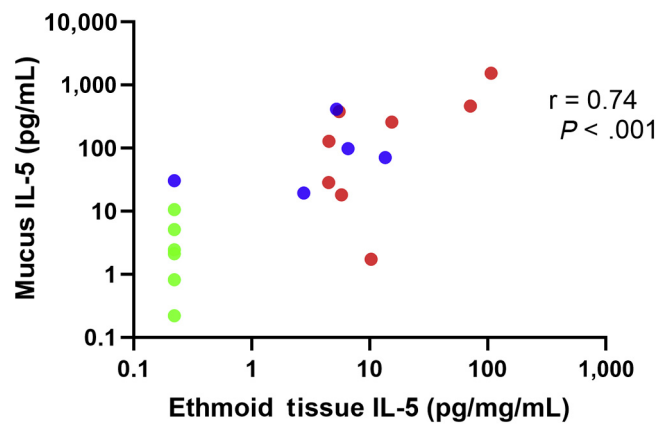**FIG E3.** Correlation of IL-5 levels in mucus and ethmoid tissue. Green, control (n = 7); Blue, CRSwNP (n = 5); Red, AERD (n = 8). *R* value calculated via Spearman correlation.

TABLE E1. Mucus cytokine levels in patients with AERD, patients with CRSwNP, and non-CRS control patients

Cytokine	Control (n = 64)	CRSwNP (n = 109)	AERD (n = 30)	*P* value
IL-1β	84.8 (30.1-300.7)	128.1 (23.1-521.1)	108.0 (17.7-1097.2)	.67
IL-4	0.28 (0.28-1.04)	0.28 (0.28-1.92)*	1.85 (0.28-3.70)*	**<.001**
IL-5	0.92 (0.22-3.56)	30.2 (9.6-82.1)*	168.0 (46.3-374.1)*†	**<.001**
IL-6	73.4 (25.9-181.4)	184.5 (58.9-521.5)*	636 (206-2346)*†	**<.001**
IL-13	10.4 (3.7-28.6)	19.5 (7.7-46.0)	95.7 (37.7-222.7)*†	**<.001**
IL-17A	0.06 (0.06-2.25)	0.99 (0.06-5.11)	3.75 (1.39-6.05)*	**.004**
IFN-γ	0.39 (0.36-2.90)	0.61 (0.36-3.50)	4.02 (1.46-7.79)*†	**.002**

Median cytokine levels of control subjects and patients with CRSwNP and AERD are shown for 7 cytokines. All cytokine values are presented as pg/mL. Significant differences between groups were identified by the Kruskal-Wallis test followed by Dunn's test for multiple comparisons. Data are presented as medians with interquartile range. Boldface text indicates *P* value of less than .05.

*P < .05 compared with control.

†P < .05 compared with CRSwNP.

TABLE E2. SNOT-22 score correlation with lipid mediator levels in subjects with AERD

Mediator	Spearman r	P value
12,13-EpOME	−0.003	.99
9,10-DiHOME	0.201	.35
12,13-DiHOME	0.159	.46
9,10-EpOME	0.130	.55
13-HODE	0.054	.80
8-HETE	0.018	.93
12-HETE	−0.014	.95
15-HETE	0.000	.99
11,12-EET	−0.130	.54
14,15-EET	−0.053	.81
20-HETE	−0.060	.78
TxB_2	0.087	.69
PGD_2	0.017	.94
15-keto-PGE_2	−0.139	.52
PGE_2	−0.070	.75
PGF_{2a}	0.023	.92
9a,11b-PGF_{2a}	−0.181	.40
LTB_4	0.330	.11
LTC_4	0.018	.93
LTD_4	0.174	.42
LTE_4	0.444	**.03**

The correlation of lipid mediator levels with total SNOT-22 score was evaluated using Spearman correlation. Boldface indicates a P value of less than .05.