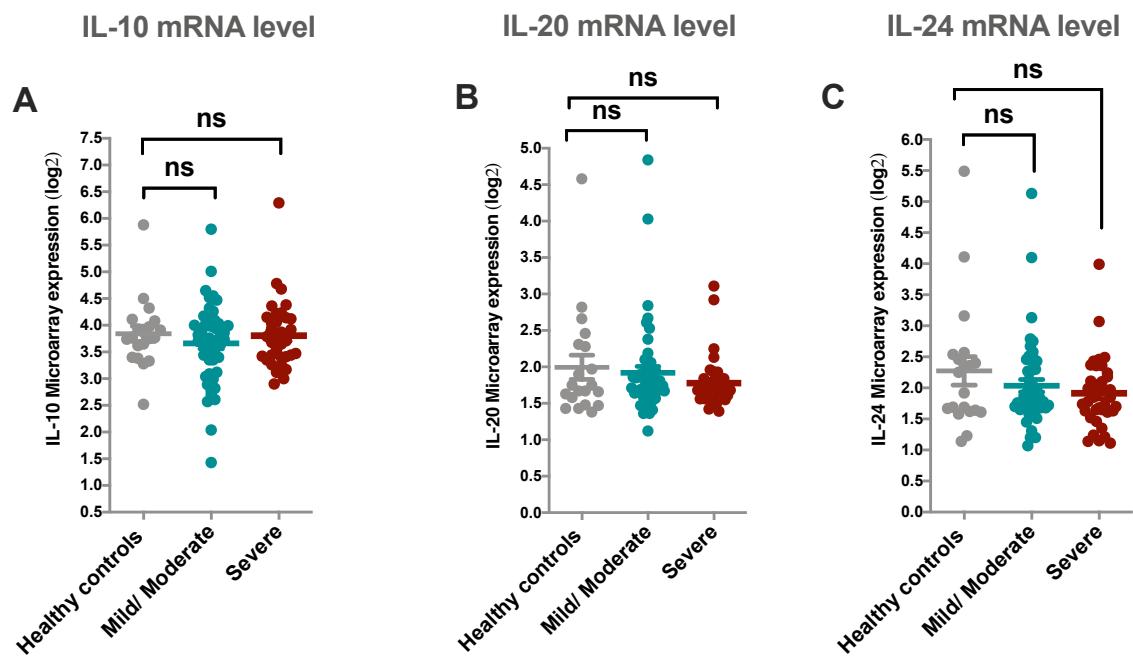


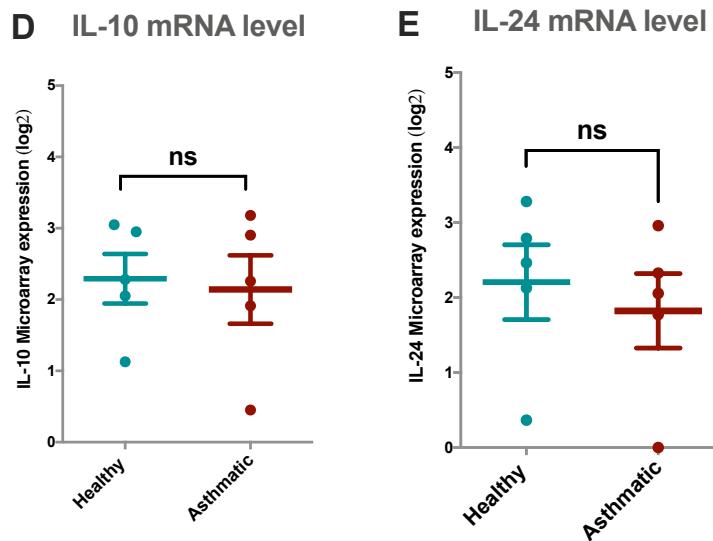
## **Upregulation of IL-19 cytokine during severe asthma: a potential saliva biomarker for asthma severity**

Fatemeh Saheb Sharif-Askari, Narjes Saheb Sharif Askari, Swati Goel, Bassam Mahboub, Abdul Wahid Ansari, Mohamad-Hani Temsah, Adel M Zakri, Elaref Ratemi, Rifat Hamoudi, Qutayba Hamid, Rabih Halwani

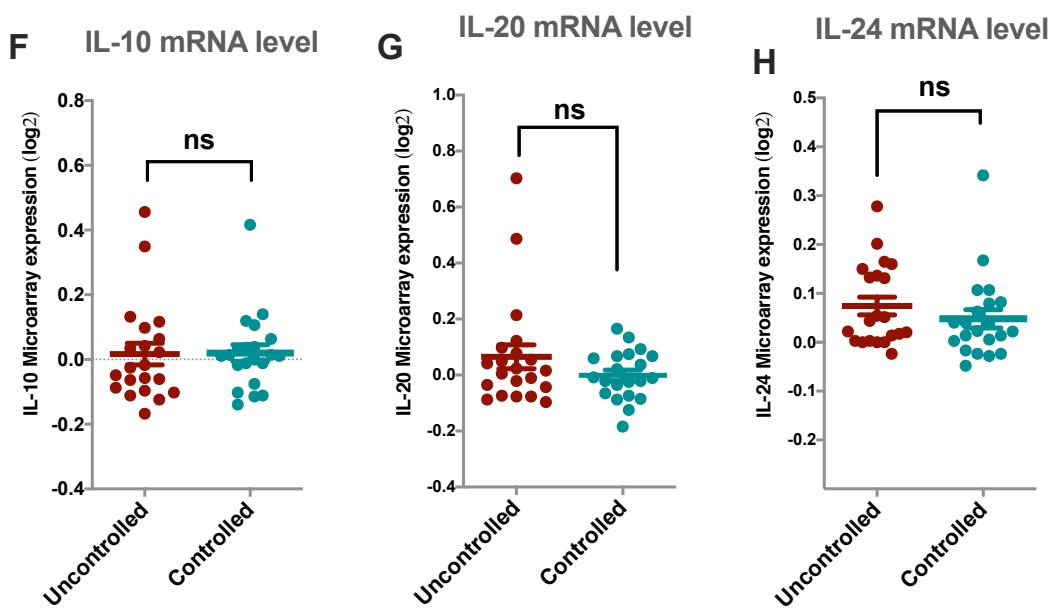
# Bronchial Brushing-SARP cohort



## Asthmatic PBMC



## Asthmatic Sputum



**Supplementary Figure 1. Gene expression of IL-10, IL-20, and IL-24 in bronchial brushing, blood, and sputum of asthmatics with different severity categories.**

The data is for bronchial brushing from severe asthma (n=38), mild/moderate asthma (n=50), and healthy controls (n=20) from the SARP cohorts (GSE43696).

**(A-C)** No distinct pattern in IL-10, IL-20, and IL-24 gene expression in bronchial brushing of severe and mild/moderate asthmatic compared to healthy controls; The dataset is for PBMCs (GSE132006) from allergic asthmatics (n=5) and healthy controls (n=5). **(D and E)** A decreasing trend in IL-10 and IL-24 gene expression in PBMCs of asthmatic compared to healthy controls; The data set is for sputum (GSE137268) from controlled asthma (n=21) and uncontrolled asthma (n=21) patients **(F-H)** No distinct pattern in IL-10, IL-20, and IL-24 gene expression in sputum of uncontrolled asthma compared to controlled asthma groups. Two-way comparison was done using two-tailed t-test (GSE43696).

*Limma adjusted P<0.05* (GSE132006 and GSE137268). ns: non-significant.