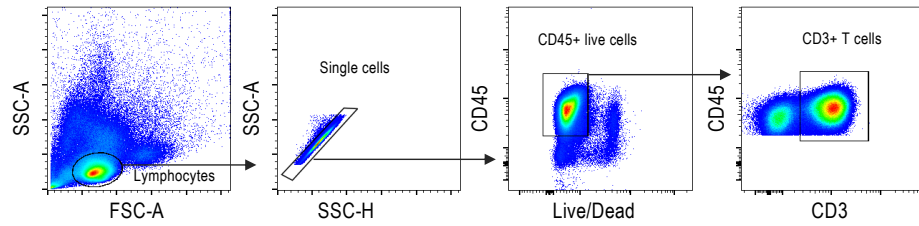
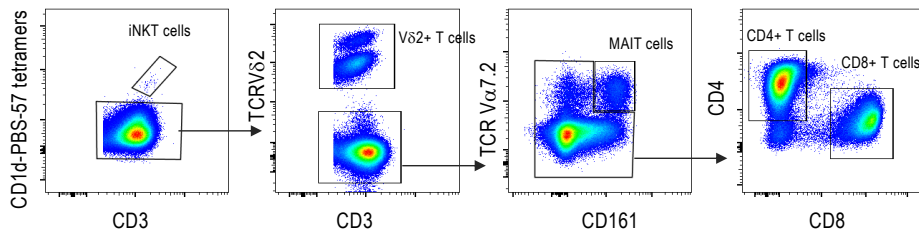


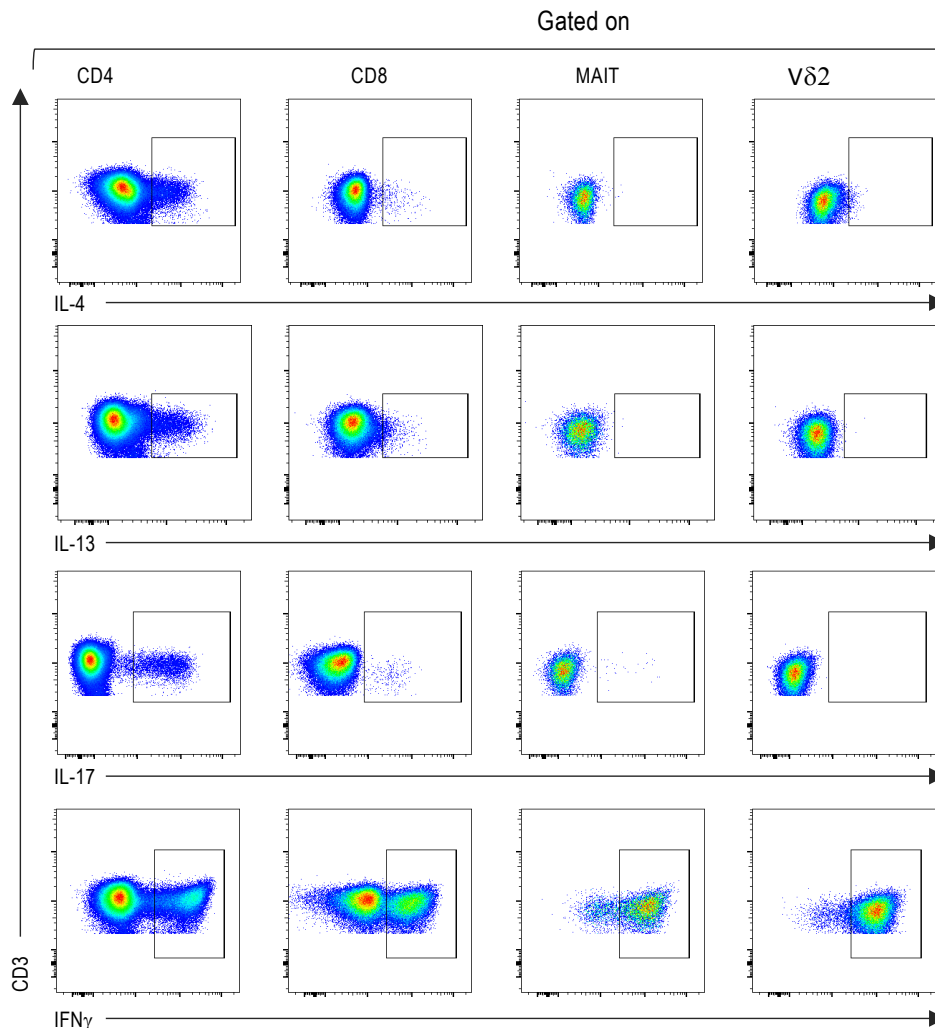
**A** Gate strategy: CD3+ T cells



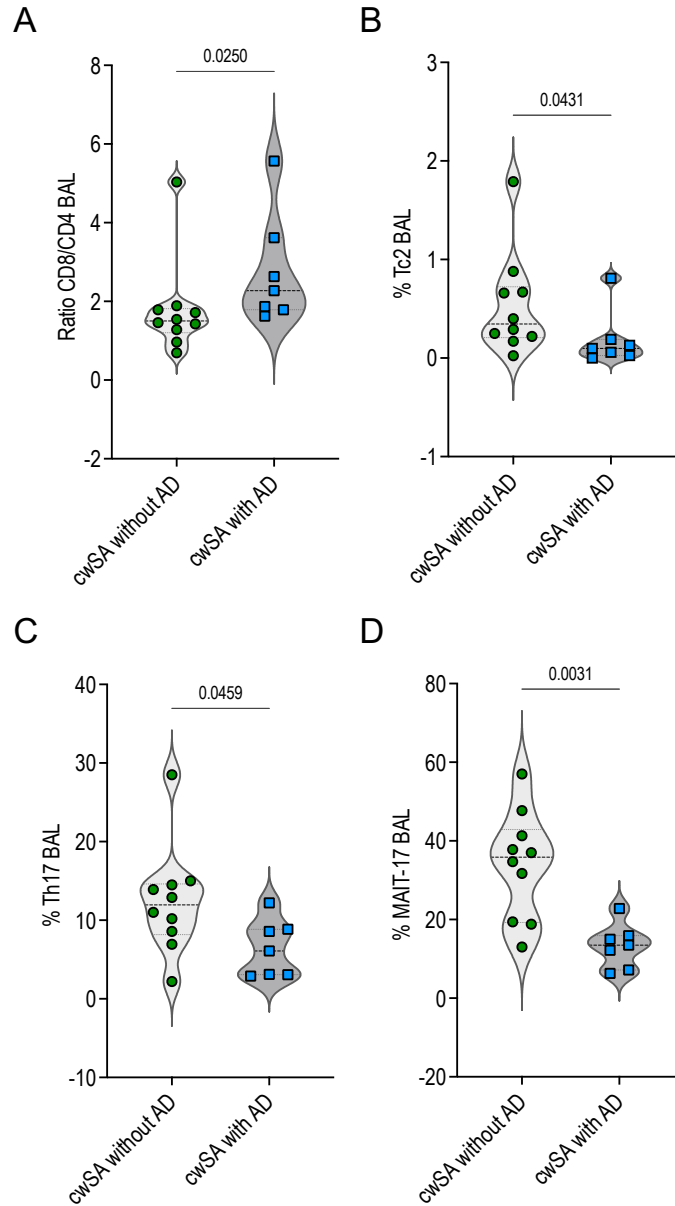
**B** Gated on CD3+ T cells : iNKT, Vδ2 γδ T, MAIT, CD4+ and CD8+ T cell populations



**C**

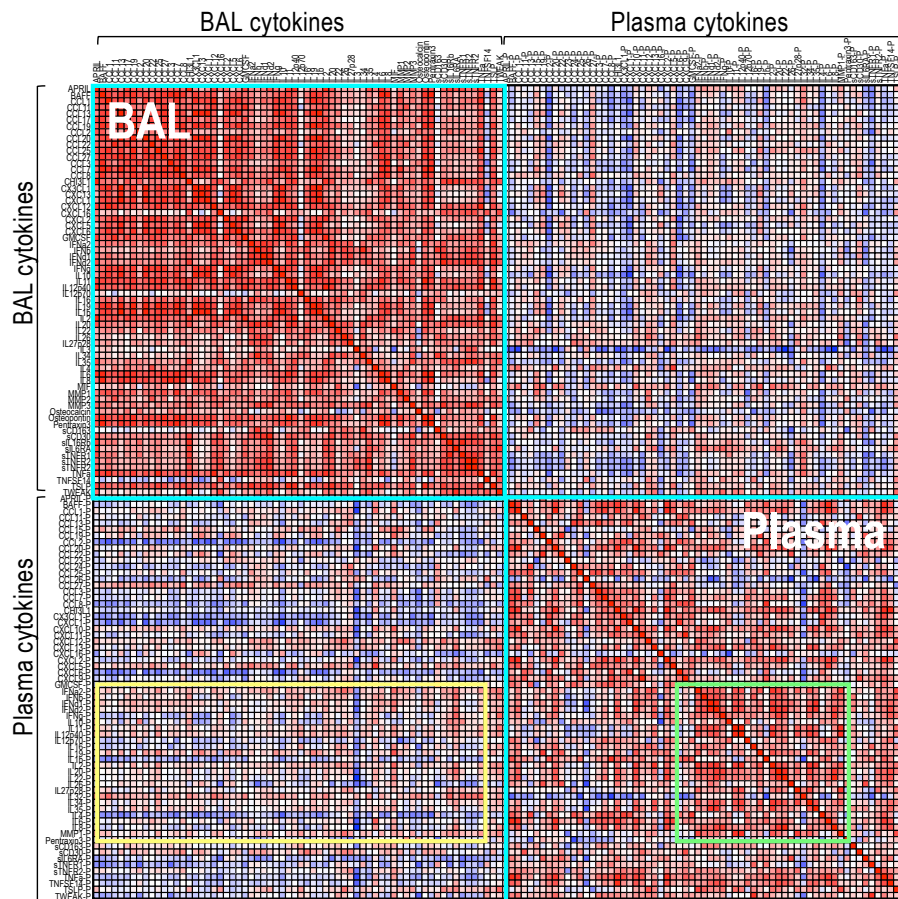


**Figure 1. Representative flow cytometric gating strategies used to identify distinct BAL and circulating T cell populations. (A)** Flow cytometric gating strategy to identify CD3+ T cells among gated CD45+ cells. Debris, dead cells and doublets were gated out. **(B)** Flow cytometric gating strategy to identify invariant Natural Killer T (iNKT) (CD1d-PBS-57 tetramers+CD3+), Vδ2+ γδ T cells, mucosal-associated invariant T (MAIT) (TCRVα7.2+CD161+iNKT-Vδ2-), CD4+ and CD8+ cells within CD3+ T cells (MAIT-iNKT-Vδ2-). **(C)** Gate strategy to identify IL-4-, IL-13-, IL-17A- and IFNγ-producing cells among gated CD4+, CD8+, MAIT, Vδ2+ as represented in **B**. Data represent PBMC cells.

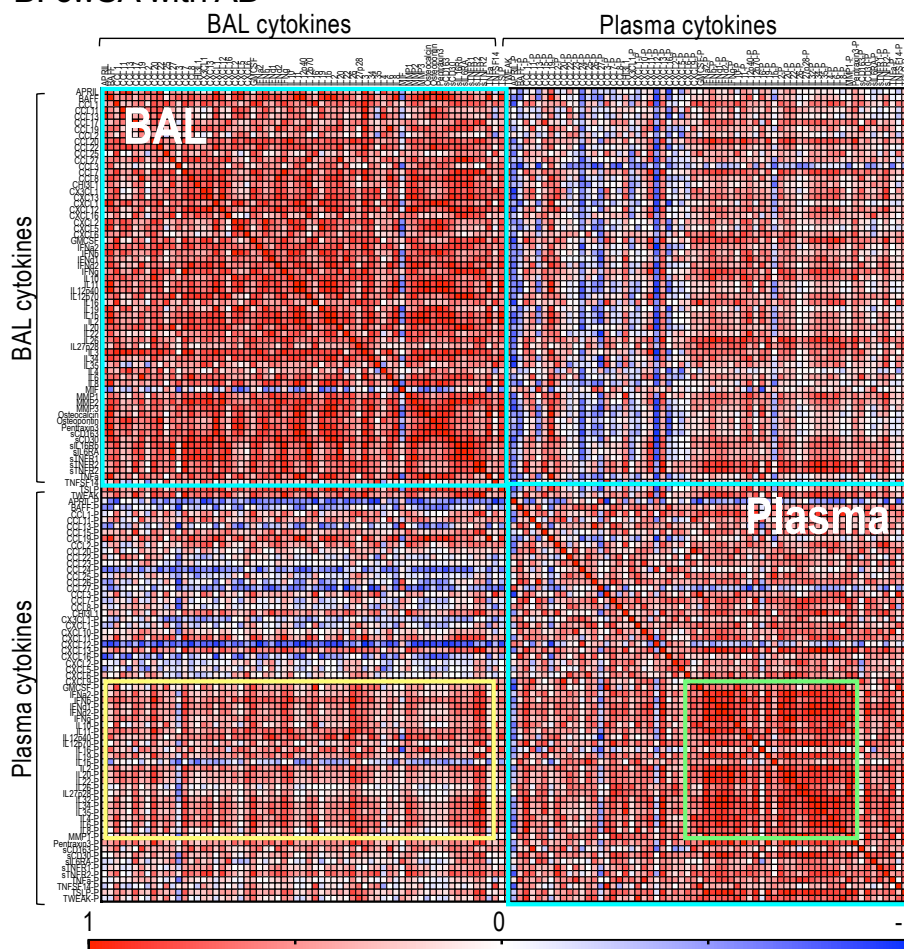


**Figure 2:** Ratio and frequency of distinct T cell populations present in BAL from cwSA without (green circles) and with AD (blue squares). **A.** Ratio of CD8+/CD4+ among gated CD3+ T cells. **B-D.** Percentages of Tc2 (IL-4+ among gated CD8+ T cells), Th17 (IL-17A+ among gated CD4+ T cells) and MAIT-17 (IL-17+ among gated CD3+TCRV $\alpha$ 7.2+CD161+ MAIT cells) in BAL of cwSA with or without AD. p values are indicated.  $p < 0.05$  was considered as significant.

A. cwSA without AD



B. cwSA with AD



**Figure 3.** Heatmap of Spearman correlations for all soluble components analyzed in BAL and plasma from cwSA without (**A**) and with (**B**) AD. Positive correlations are shown in red, the absence of a correlation in white, and negative correlations in blue. The intensity of the color indicates the intensity of the correlation. Blue squares indicate correlations between soluble components from BAL and BAL and plasma and plasma, while yellow and green squares indicate respectively the major correlations between soluble components from BAL and plasma or plasma and plasma.