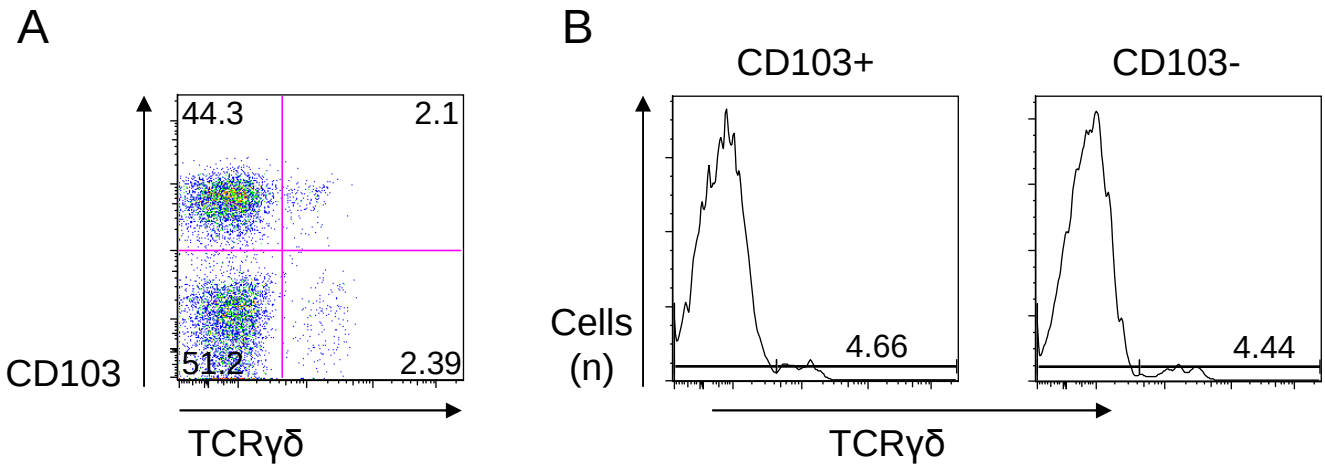
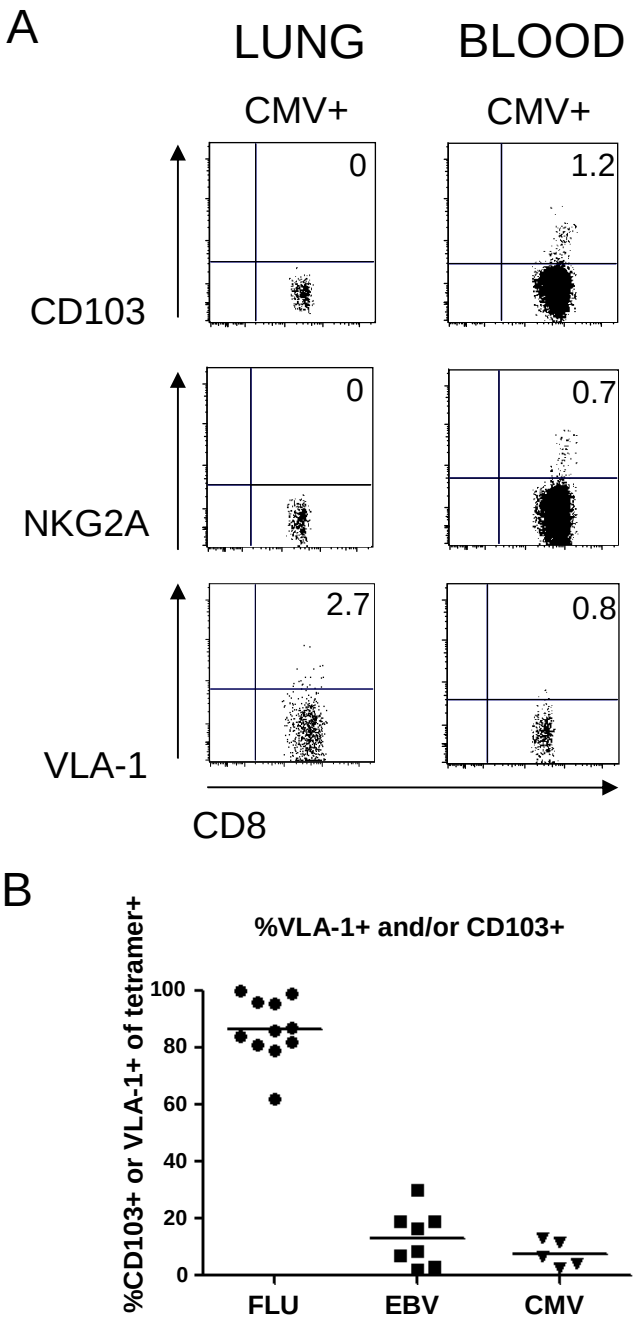
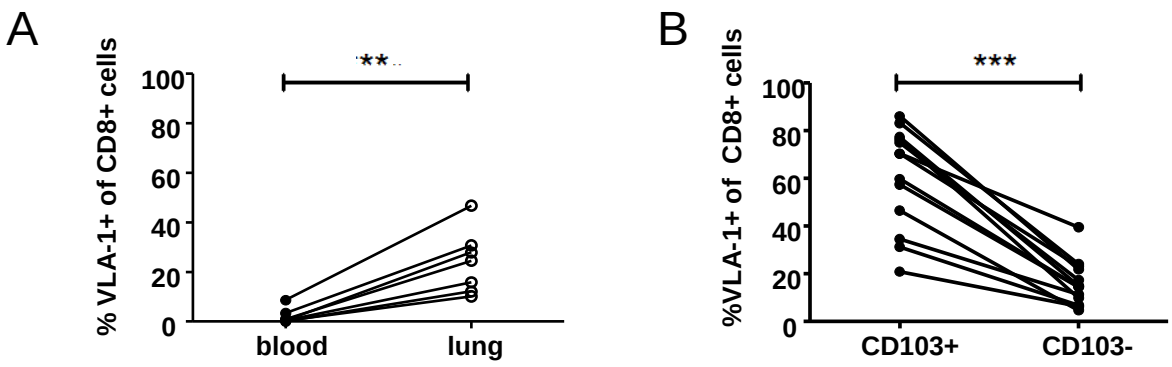


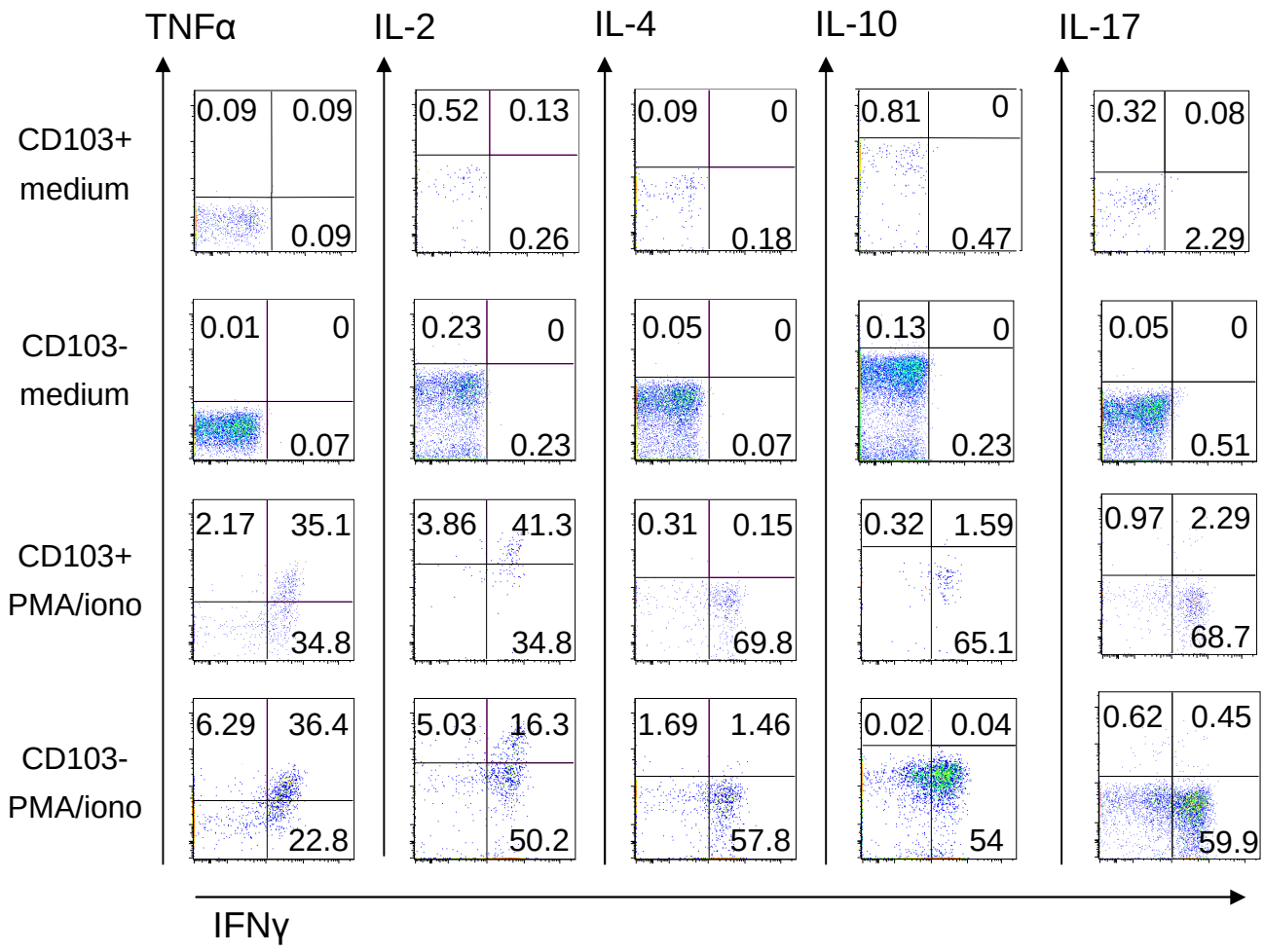
SUPPLEMENTAL FIGURE 1. γδ-T cells form a minor population within the lung CD8+ T cells and contribute equally to the CD103+ and CD103- CD8+ T cell subsets. A: FACS-plot showing TCRγδ and CD103 expression on lung CD3+CD8+ T cells. Numbers indicate % of CD3+CD8+ cells within each quadrant. B: Histogramplots showing the percentage of γδ-T cells within lung CD103+ CD8+ (left) and CD103- CD8+T cell population (right). Histogramplots show CD3+CD8+CD103+ (left) and CD3+CD8+CD103- (right) T cells within the lymphocytegate. All FACS-plots are representative for 5 patients.



SUPPLEMENTAL FIGURE 2. CMV-specific lung CD8+ T cells lack the expression of CD103, VLA-1 and NKG2A. A: Representative FACS-plots for phenotype of lung (left) and peripheral blood (right) CMV-specific CD8+ T cells. Plots are representative for 5-6 patients per staining. Facs-plots are gated on tetramer+ cells. Numbers indicate % of tetramer+ cells that is CD103+, NKG2A+ or VLA-1+. B: Percentages of influenza specific (mean 87%), EBV-specific (mean 13%) and CMV-specific (mean 8%) lung CD8+ T cells expressing CD103 and/or VLA-1, as assessed by flow cytometry (n = 5-9 per virus-specificity). Bars represent the mean.

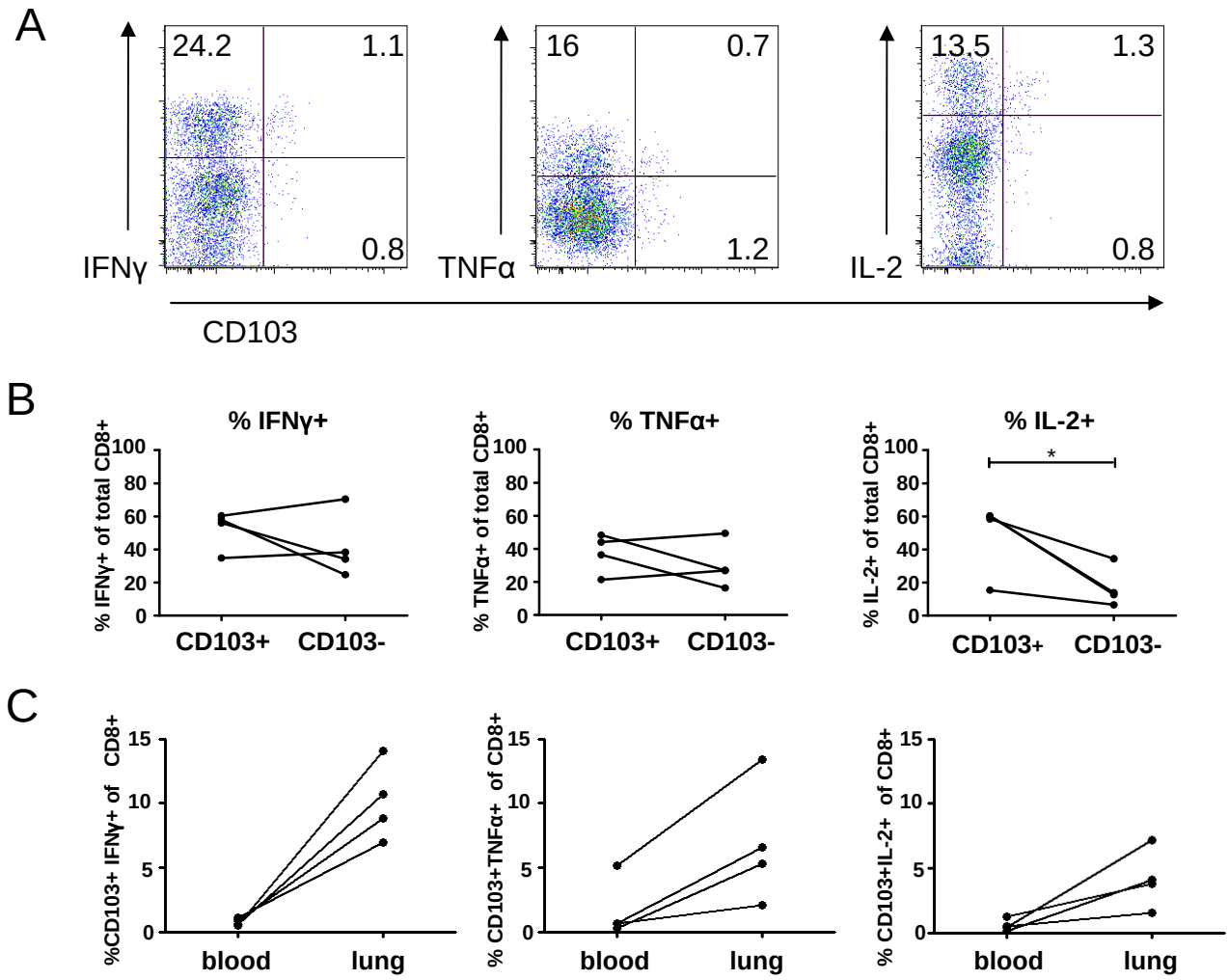


SUPPLEMENTAL FIGURE 3. VLA-1 is expressed higher on lung CD8+ T cells than on blood CD8+ T cells and is mainly expressed on CD103+CD8+ T cells. A: The percentage of CD8+ T cells in paired blood and lung samples expressing VLA-1 (n=7). B: The percentage of CD103+ and CD103- lung CD8+ T cells expressing VLA-1 (n=13). Expression was measured by flow cytometry. CD8+ T cells were gated as the CD3+CD8+ fraction within the lymphocytegate. ** p=0.001, ***p<0.0001.

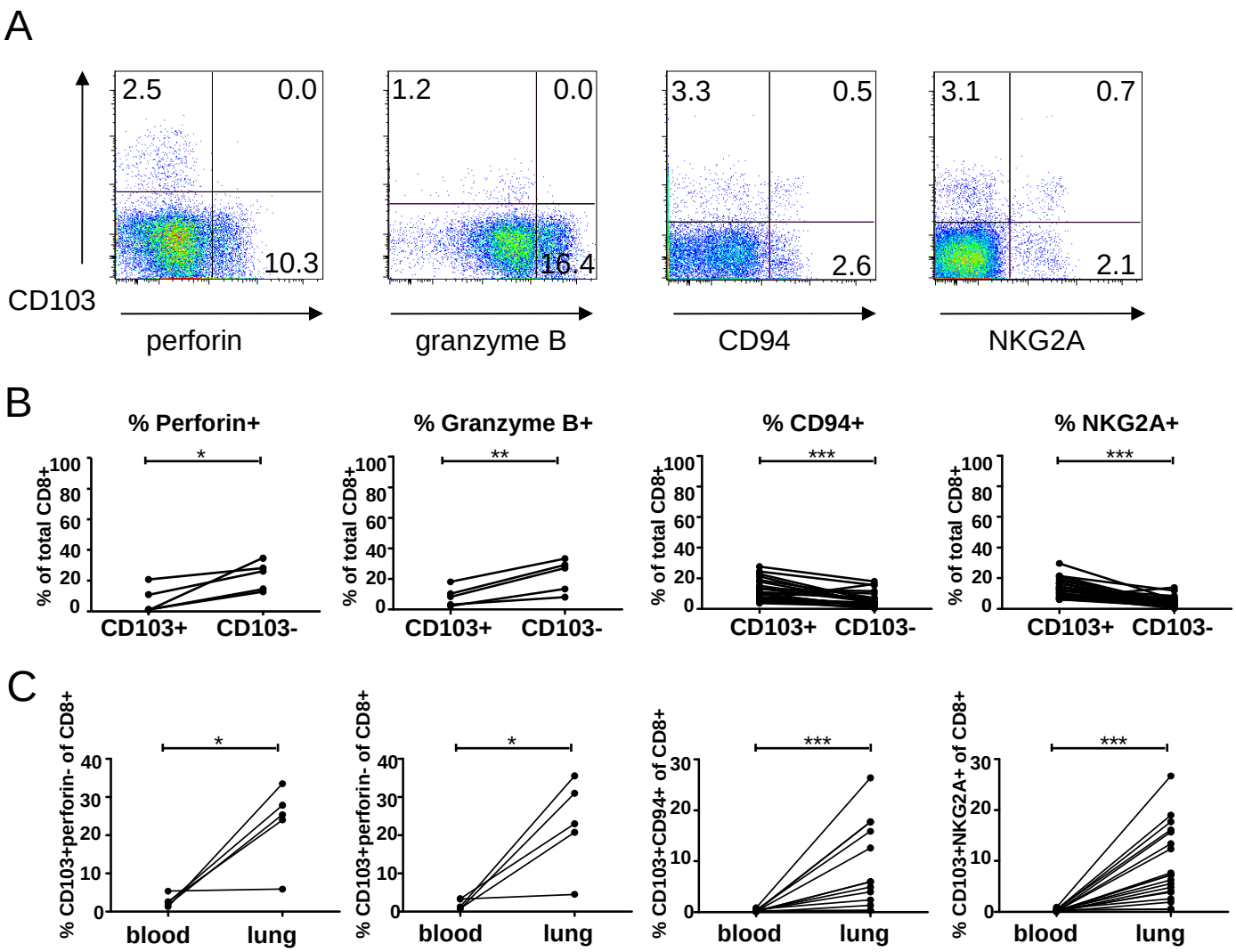


SUPPLEMENTAL FIGURE 4. CD103+ and CD103- lung CD8+ T cells produce high amounts of IFNγ and other Th1 cytokines, but hardly any Th2 cytokines, IL-10 or IL-17.

FACS-plots representative for Figure 4A (4-10 patients). Dotplots were gated on CD3+CD8+CD103+ or CD3+CD8+CD103- cells within the lymphocytegate. Numbers indicate % of CD3+CD8+ cells within eacht quadrant. PMA/iono: cells stimulated with PMA and ionomycin.



SUPPLEMENTAL FIGURE 5. Equal percentages of CD103+ and CD103- peripheral blood CD8+ T cells produce IFNγ. A: FACS-plots show the expression of IFNγ, TNFα and IL-2 plotted against CD103 expression. Plots show CD3+CD8+ peripheral blood T cells within the lymphocyte gate and are representative for 4 patients. Intracellular cytokine production of lung CD8+ T cells was measured by flow cytometry after 4 hours stimulation with PMA and ionomycin in the presence of Brefeldin A. Numbers indicate % of CD3+CD8+ cells within each quadrant. B: The percentage of CD103+CD8+ and CD103-CD8+ peripheral blood T cells expressing IFNγ, TNFα and IL-2 (n = 4). C: The percentage of blood and lung CD8+ T cells that is double positive for CD103 and IFNγ, TNFα or IL-2 (n = 4). All expression data were collected with flow cytometry. * p= 0.04.



SUPPLEMENTAL FIGURE 6. The small population of CD8+CD103+ peripheral blood T cells has a lower expression of cytotoxic molecules and a higher expression of CD94/NKG2A than CD8+CD103- T cells. A: FACS-plots show the expression of perforin, granzyme B, CD94 and NKG2A plotted against CD103 expression. Plots show CD3+CD8+ peripheral blood T cells within the lymphocyte gate and are representative for 5-25 patients. Numbers indicate % of CD3+CD8+ cells within each quadrant. B: The percentage of CD103+CD8+ and CD103-CD8+ peripheral blood T cells expressing perforin, granzyme B, CD94 and NKG2A (n = 5-25). C: The percentage of blood and lung CD8+ T cells that is CD103+ and perforin-, granzyme B-, CD94+ or NKG2A+ (n = 5-25). All expression data were collected with flow cytometry. *** $p < 0.001$, ** $p = 0.007$ and * $p = 0.02$.