

A

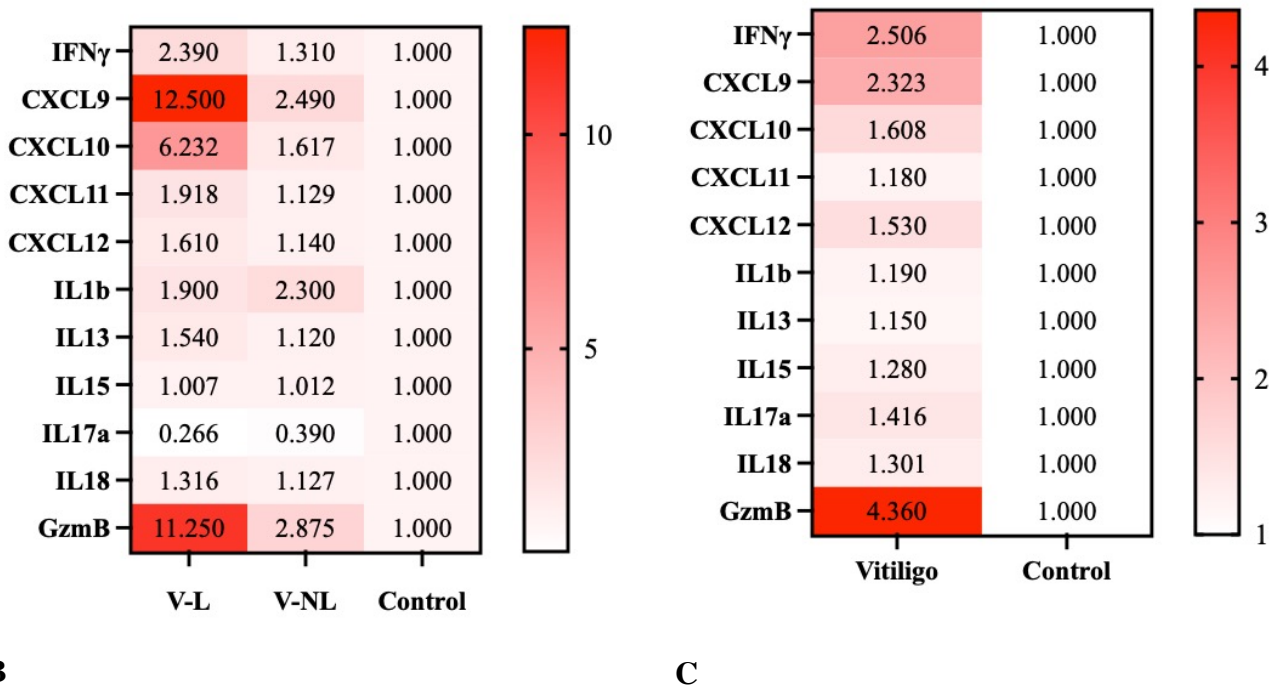


Figure 1 IFN γ , CXCL9, CXCL10 and Granzyme B are highly expressed in the skin lesion and plasma of vitiligo patients compare to healthy controls. **A.** Cytokine panel expression of paired lesion and non-lesion skin blister interstitial fluid and plasma analyte in vitiligo patients and healthy controls. **B.** Relative fold change cytokine panel in skin blisters interstitial fluid analyte in lesion and non-lesion skin of vitiligo patients compare to healthy controls. **C.** Relative fold change of cytokine panel in plasma analyte of vitiligo patients compare to healthy controls. (V:Vitiligo, L: lesion, NL: non-lesion; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; ns: non-significant)

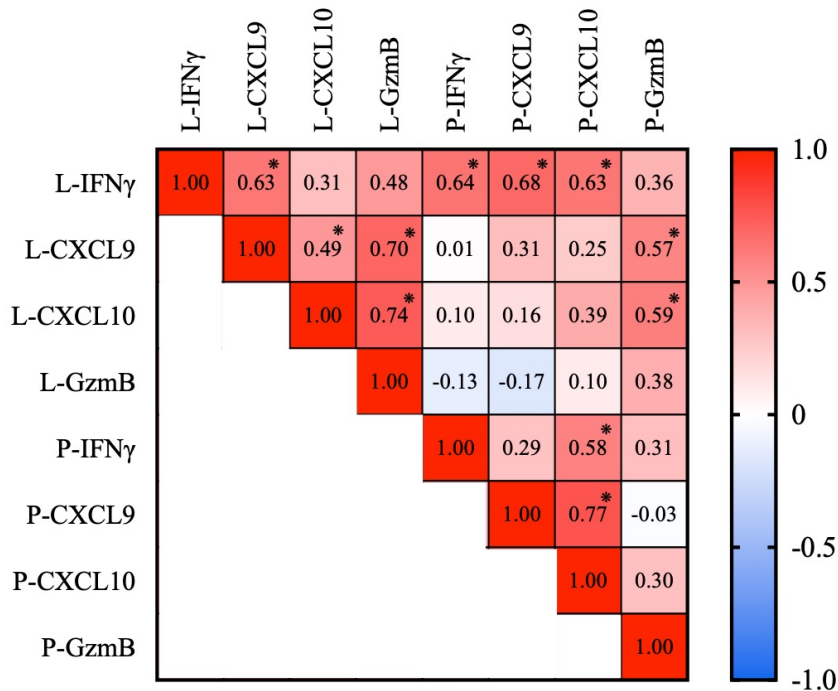
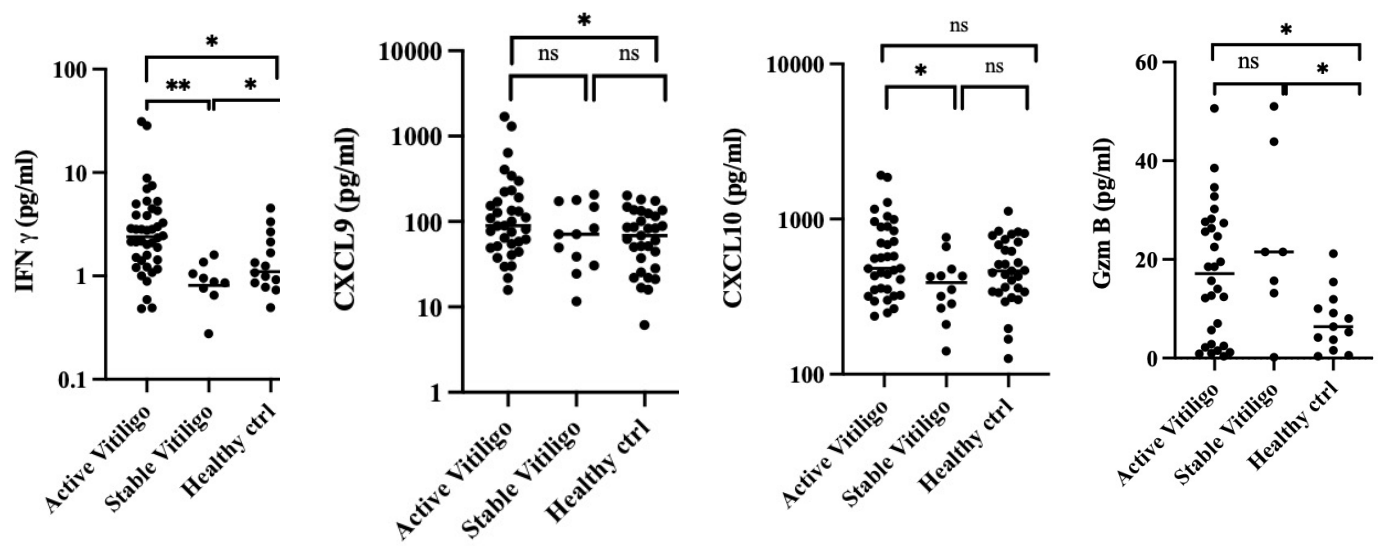
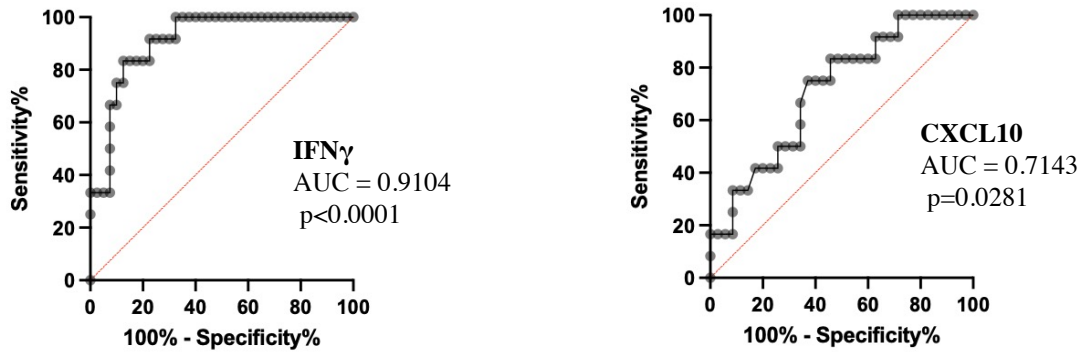


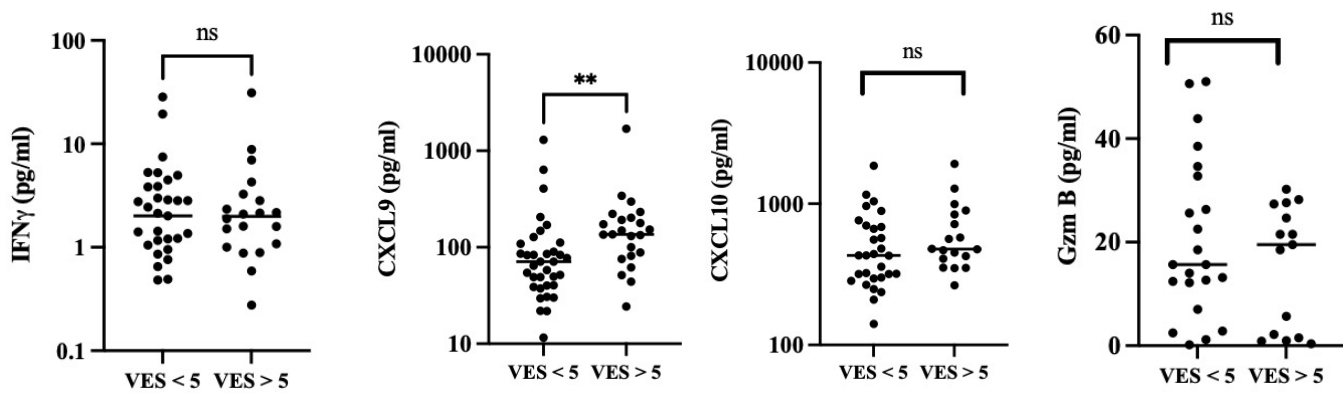
Figure 2. Pearson correlation analysis of IFN γ , CXCL9, CXCL10 and GzmB expression in skin blister interstitial fluid and plasma analyte in vitiligo patients. Plasma IFN γ , CXCL9 and CXCL10 expression is positively correlated with the skin lesion IFN γ expression. Plasma Granzyme B is correlated with skin lesion GzmB, CXCL9 and CXCL10. (* $p < 0.05$, L: lesion, NL: non-lesion, P: plasma)



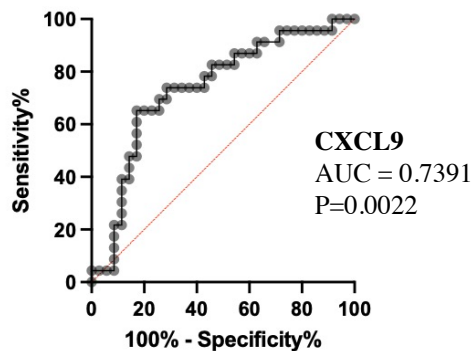
A.



B.

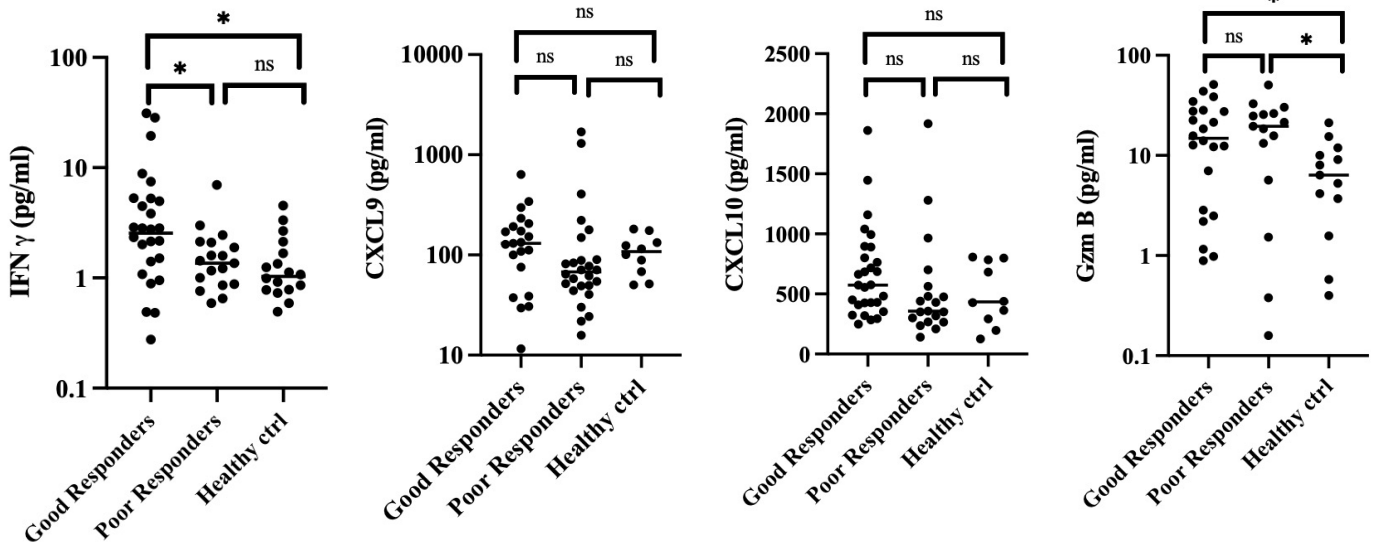


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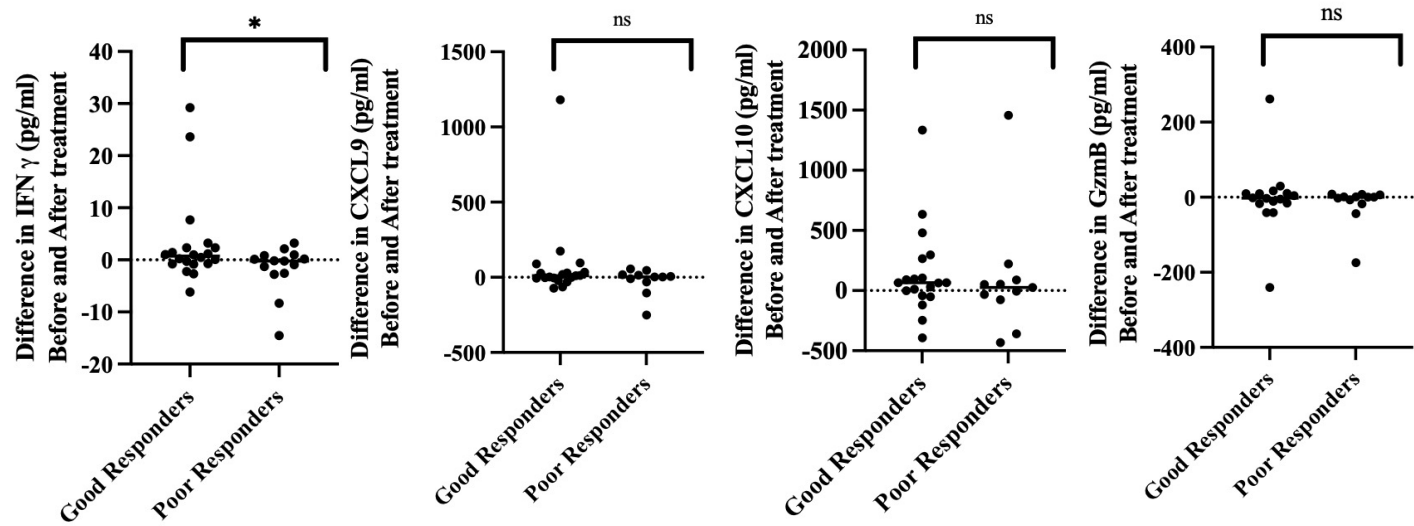


D.

Figure 3. IFN γ and CXCL10 are correlated with disease activity, whereas CXCL9 is associated with disease severity in vitiligo patients. **A.** Disease activity: IFN γ , CXCL9, CXCL10, and Gzm B in active and stable vitiligo and healthy control. **B.** ROC curve for disease activity in IFN γ and CXCL10, negative data of CXCL9 and Gzm B not shown. **C.** Disease severity: IFN γ , CXCL9, CXCL10, and Gzm B in VES < 5 and VES > 5 vitiligo patients. **D.** ROC curve for disease severity in CXCL9, negative data of IFN γ , CXCL10 and Gzm B not shown (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$)

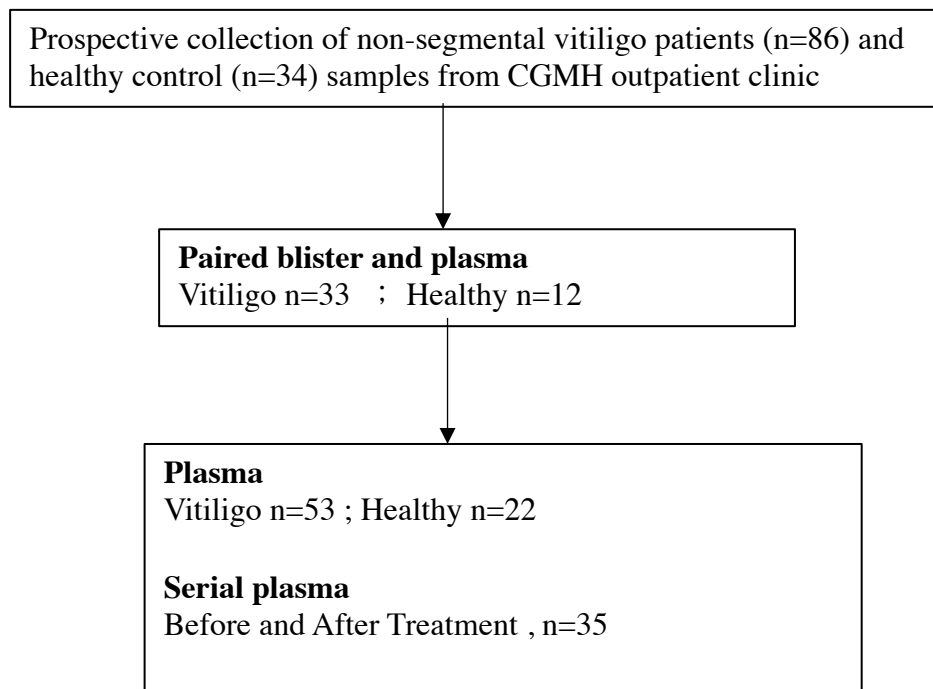


A.



B.

Figure 4. A decrease in IFN- γ expression level before and six months after treatment correlates with good treatment response. **A.** Cytokine expression of IFN- γ , CXCL9, CXCL10, and GzmB at the initial visit. **B.** Difference in IFN- γ , CXCL9, CXCL10, and GzmB expression before and six months after treatment. (* p < 0.05, ** p < 0.01, *** p < 0.001)



Supplement Fig 1. Patient collection flow chart.