

Figure S1. Total blood counts and blood ratios

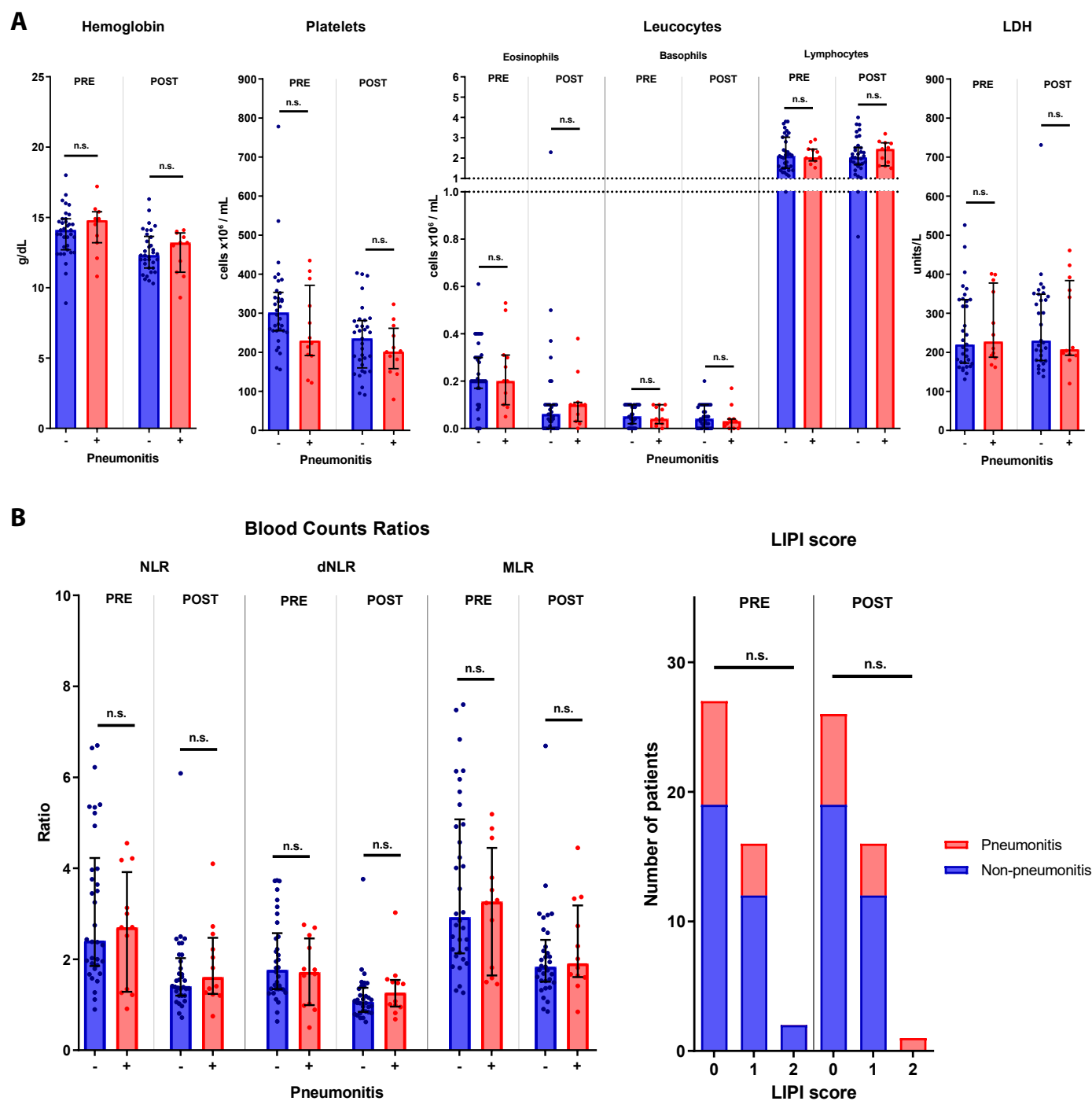


Figure S1. Total blood counts and blood ratios, $n=46$ in pre-treatment and $n=45$ in post-neoadjuvant treatment samples **A)** Total blood count parameters ($p=0.582/0.969$ for pre/post hemoglobin, $p=0.147/0.504$ for pre/post platelets, $p=0.980/0.280$ for pre/post eosinophils, $p=0.828/0.404$ for pre/post basophils, $p=0.348/0.317$ for pre/post lymphocytes and $p=0.521/0.835$ for pre/post LDH). **B)** Ratios derived from hemograms ($p=0.515/0.441$ for pre/post NLR, $p=0.453/0.311$ for pre/post dNLR, $p=0.565/0.505$ for pre/post MLR and $p=1/0.271$ for pre/post LIPI). LDH (lactate dehydrogenase), LIPI (lung immune prognostic index), NLR (neutrophil to lymphocyte ratio), dNLR (derived neutrophil to lymphocyte ratio) and MLR (monocyte to lymphocyte ratio). n.s.= not significant, * $P<0.05$; ** $P<0.01$; *** $P<0.001$.

Figure S2. Flow cytometry immunophenotyping of peripheral mononuclear cells (PMBCs).

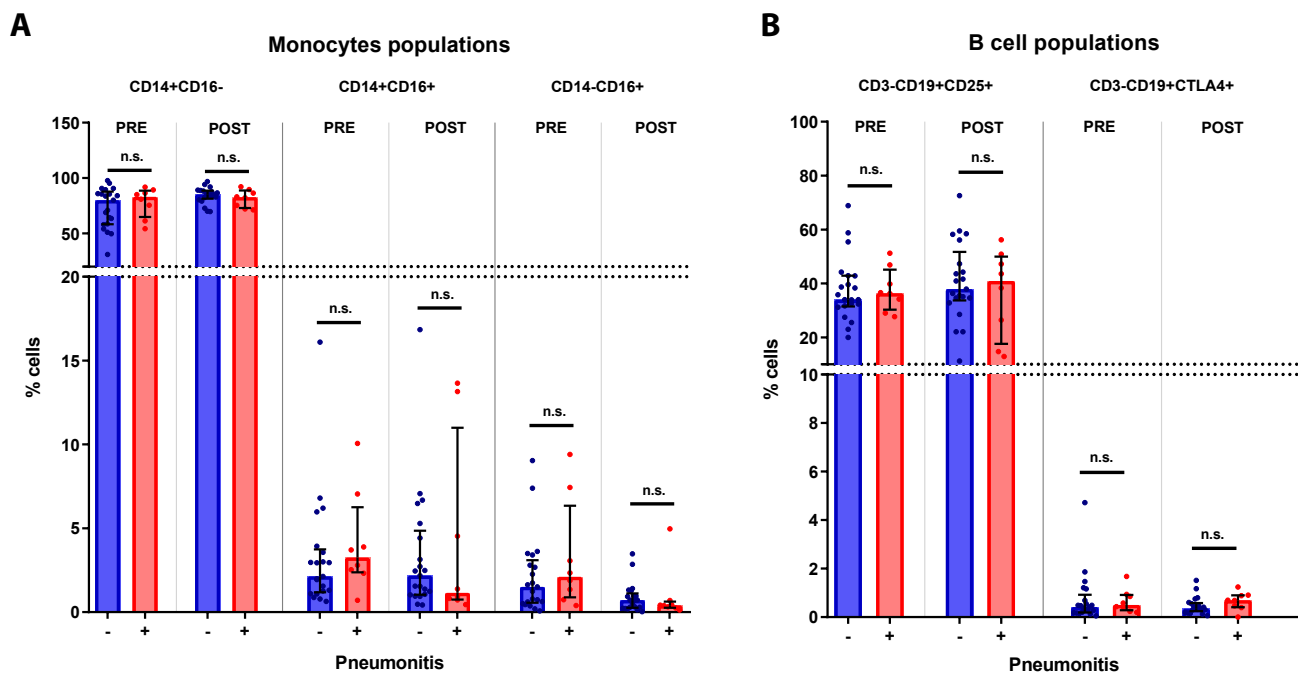


Figure S2. Flow cytometry immunophenotyping of peripheral mononuclear cells (PMBCs). (n=29 in pre- and post-neoadjuvant treatment samples) **A)** Monocyte subpopulations (Classical CD14+CD16-; p=0.591/0.407 pre/post, intermediate CD14+CD16+; p=0.283/0.526 pre/post, non-classical CD14-CD16+; p=0.317/0.526 pre/post) **B)** B cell subpopulations (CD3-CD19+CD25+; p= 0.626/0.751 pre/post; CD3-CD19+CTLA4+, p=0.479/0.107 pre/post).

Figure S3. T cells immunophenotyping and TCR repertoire in tissue and blood

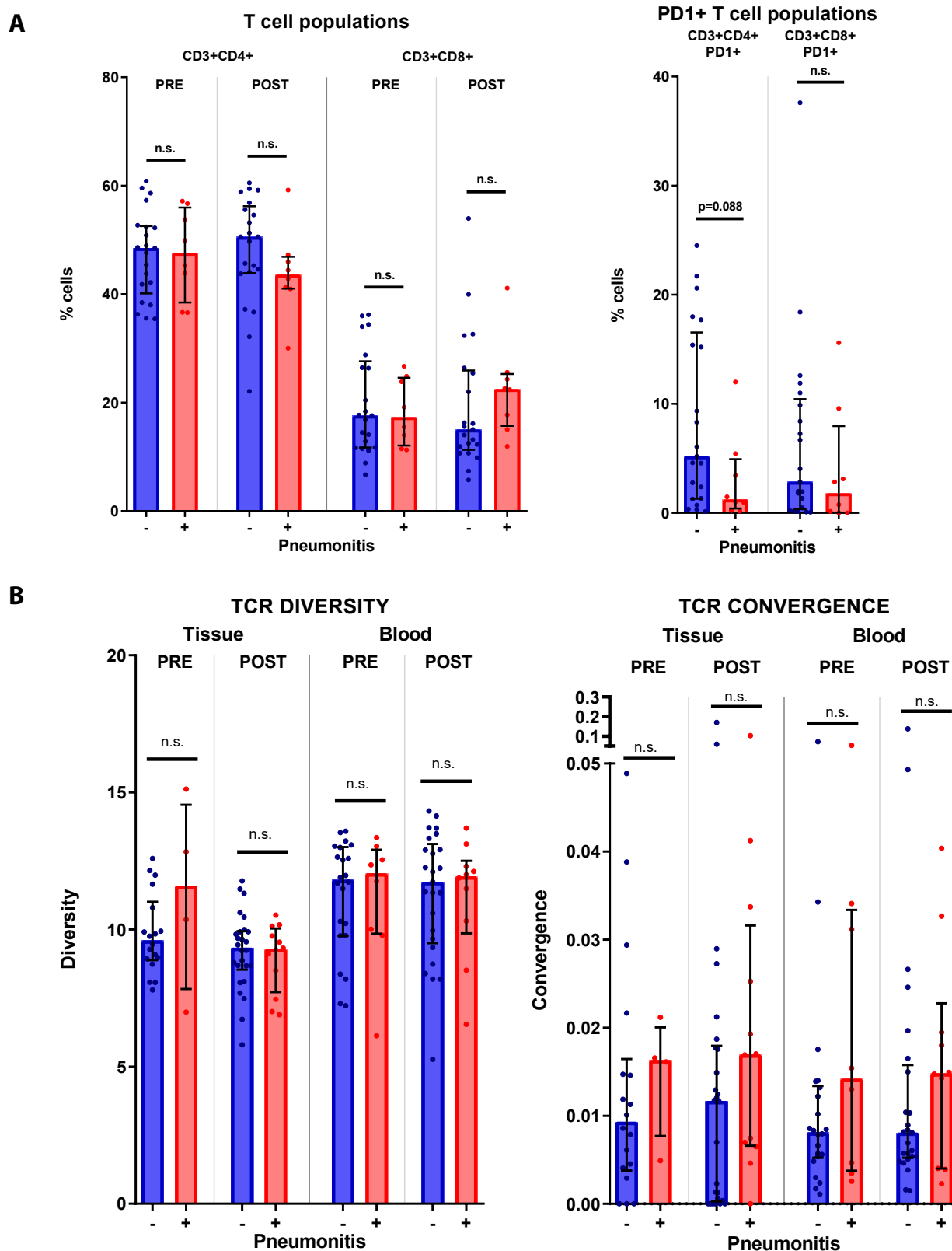


Figure S3. T cells immunophenotyping and TCR repertoire in tissue and blood. A) $n=29$; general T cell subpopulations (CD3+CD4+ helper T cells, $p=0.922/0.172$ pre/post; and CD3+CD8 cytotoxic T cells, $p=0.807/0.180$ pre/post) and PD1+ T cell subpopulations ($p=0.088$ for CD3+CD4+PD1+ and $p=0.329$ for CD3+CD8+PD1+) in pre-treatment samples. **B)** T cell receptor repertoire diversity and convergence at diagnosis and post-neoadjuvant treatment in both tissue (pre-treatment $n=22$; $p=0.268$ for diversity and $p=0.306$ for convergence; and post-treatment $n=38$, $p=0.706$ for diversity and $p=0.166$ for convergence) and blood (pre-treatment $n=30$; $p=0.963$ for diversity and $p=0.373$ for convergence; and post-treatment $n=35$, $p=0.913$ for diversity and $p=0.401$ for convergence). n.s.= not significant, * $P<0.05$; ** $P<0.01$; *** $P<0.001$.

Figure S4. Cytokine levels and pneumonitis development.

A

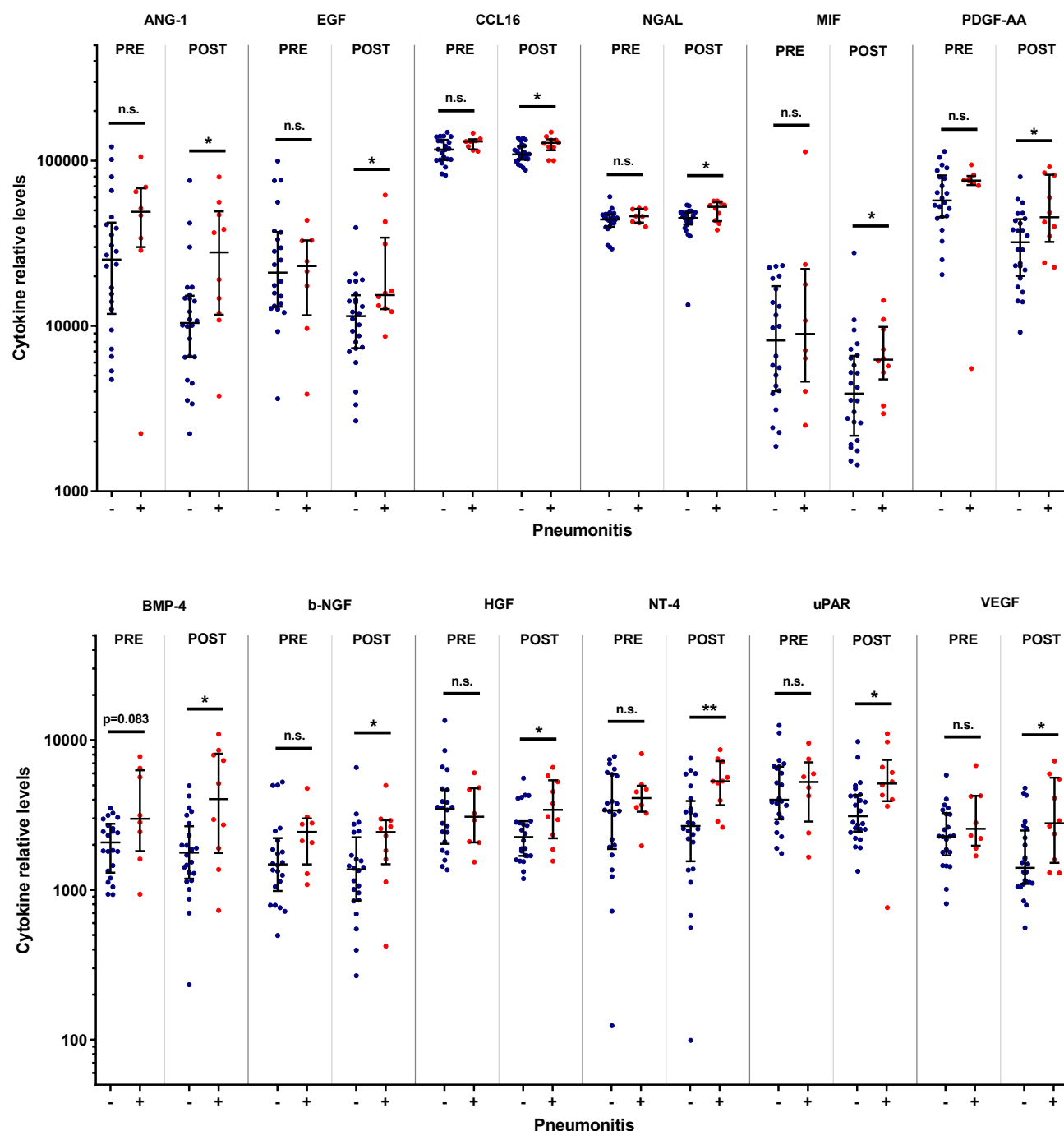


Figure S4. Cytokine levels and pneumonitis development. A) Relative levels of ANG-1 (angiopoietin 1; $p=0.122/0.019$ pre/post), EGF (epidermal growth factor; $p=0.815/0.028$), CCL16 (C-C motif chemokine ligand 16, $p=0.174/0.038$ pre/post), NGAL (Neutrophil gelatinase-associated lipocalin; $p=0.281/0.031$ pre/post), MIF (macrophage migration inhibitory factor; $p=0.482/0.049$ pre/post), PDGF-AA (platelet-derived growth factor AA; $p=0.260/0.028$ pre/post), BMP-4 (bone morphogenetic protein 4, $p=0.083/0.021$ pre/post), b-NGF (Beta-nerve growth factor; $p=0.111/0.049$ pre/post), HGF (hepatocyte growth factor; $p=0.925/0.038$ pre/post), NT-4 (neurotrophin-4, $p=0.399/0.005$ pre/post), uPAR (urokinase plasminogen activator receptor, $p=0.743/0.021$ pre/post) and VEGF (vascular endothelial growth factor, $p=0.223/0.014$ pre/post) in pre-treatment ($n=30$) and post-neoadjuvant treatment ($n=34$) blood samples.

Figure S5. Differential impact of neoadjuvant treatment between pneumonitis and non-pneumonitis patients in cytokine dynamics.

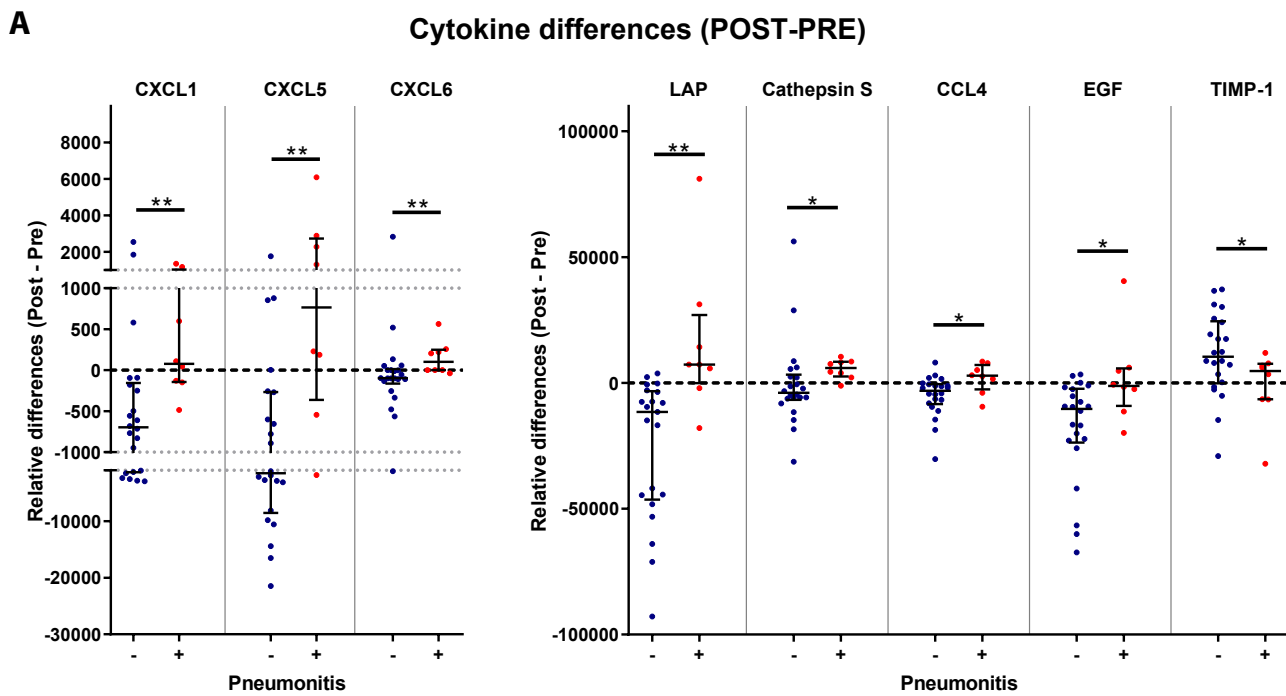


Figure S5. Differential impact of neoadjuvant treatment between pneumonitis and non-pneumonitis patients in cytokine dynamics. Differential impact of neoadjuvant treatment between pneumonitis (n=21) and non-pneumonitis patients (n=8) in cytokine relative levels calculated as POST-PRE differences for CXCL1 (p=0.006), CXCL5 (p=0.003), CXCL6 (p=0.010), LAP (p=0.001), Cathepsin S (p=0.015), CCL4 (p=0.015), EGF (p=0.022) and TIMP-1 (0.039).