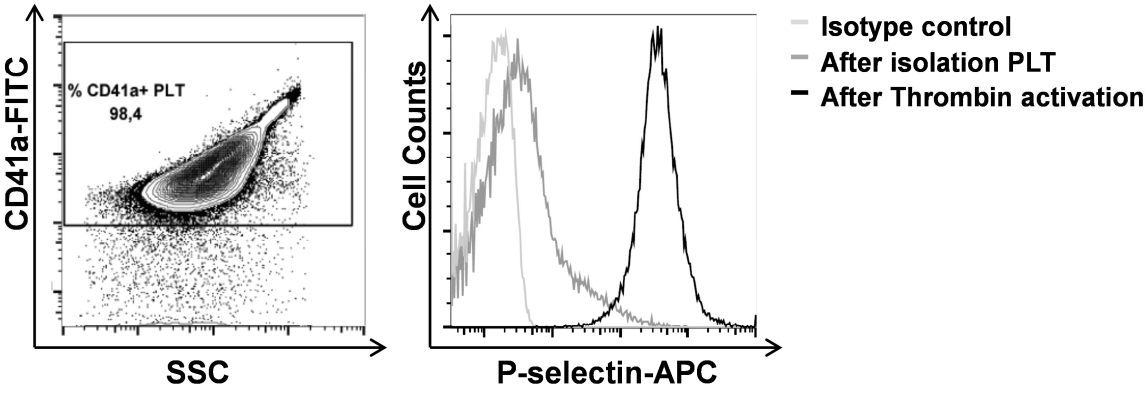
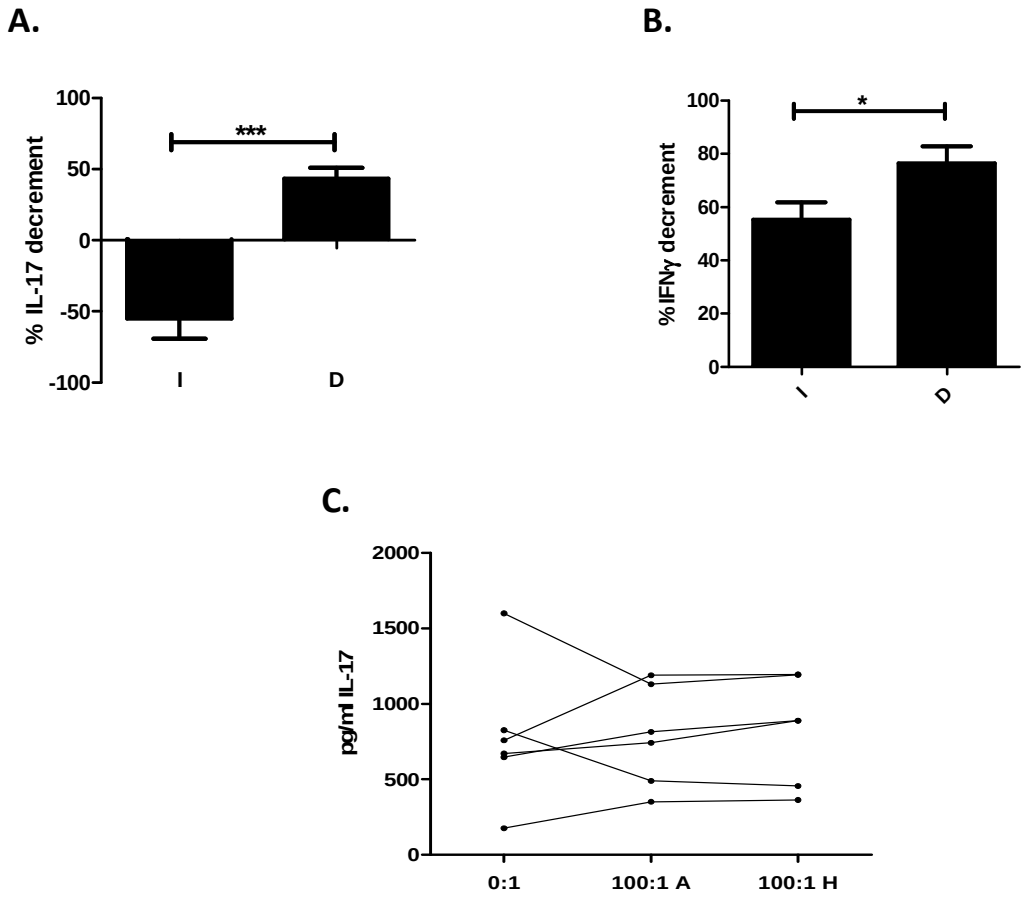
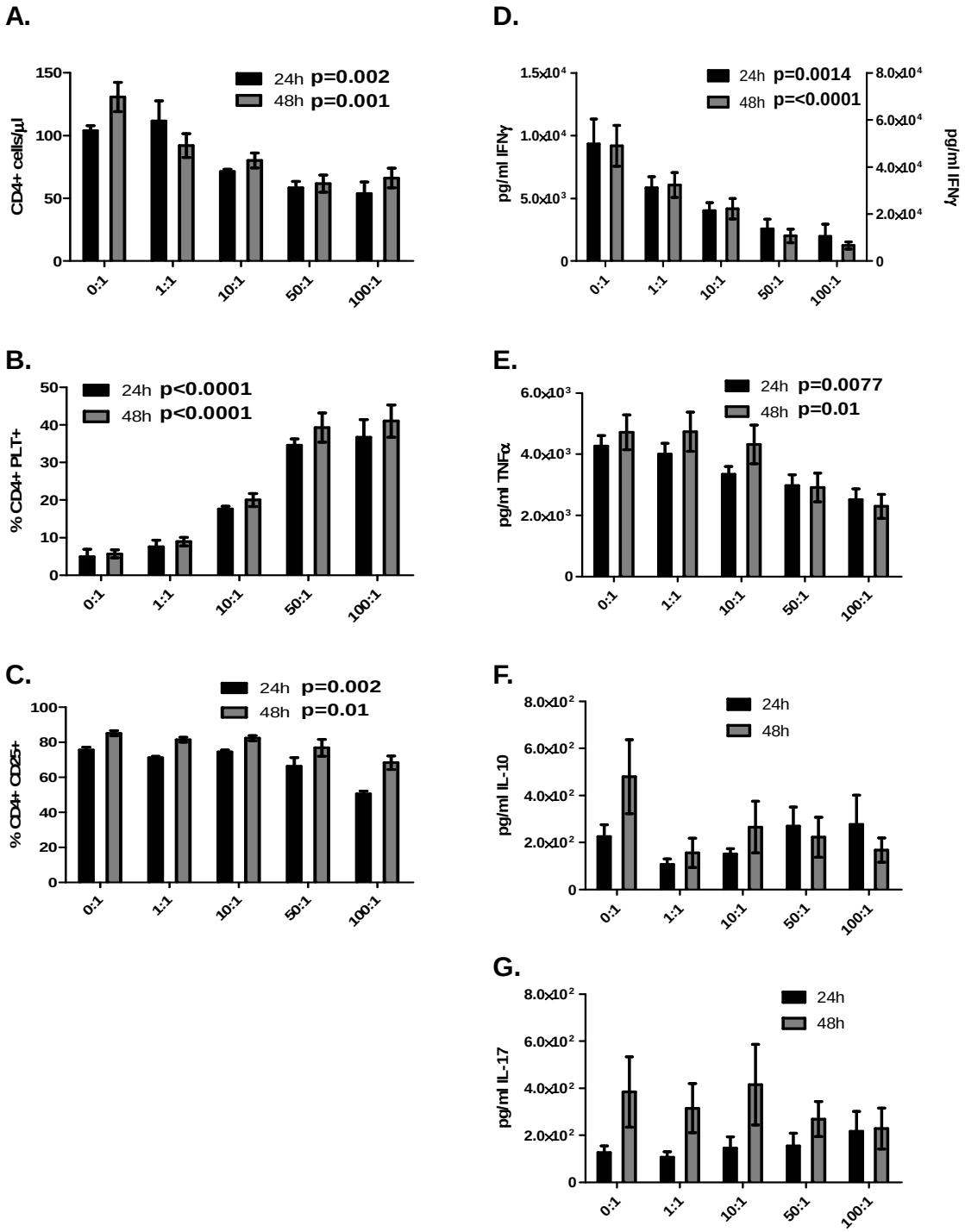


Supplementary figure 1. Purity and activation of platelets after isolation from PRP. After isolation of PLTs from PRP, PLTs were incubated with anti-CD41a-FITC and CD62P-APC. To test activation ability of PLTs after isolation, PLTs were incubated with 10 U/ml of thrombin for 5 minutes. A representative image of PLT purity (% CD41a+ events) and activation of PLTs (% CD62P+) are shown.

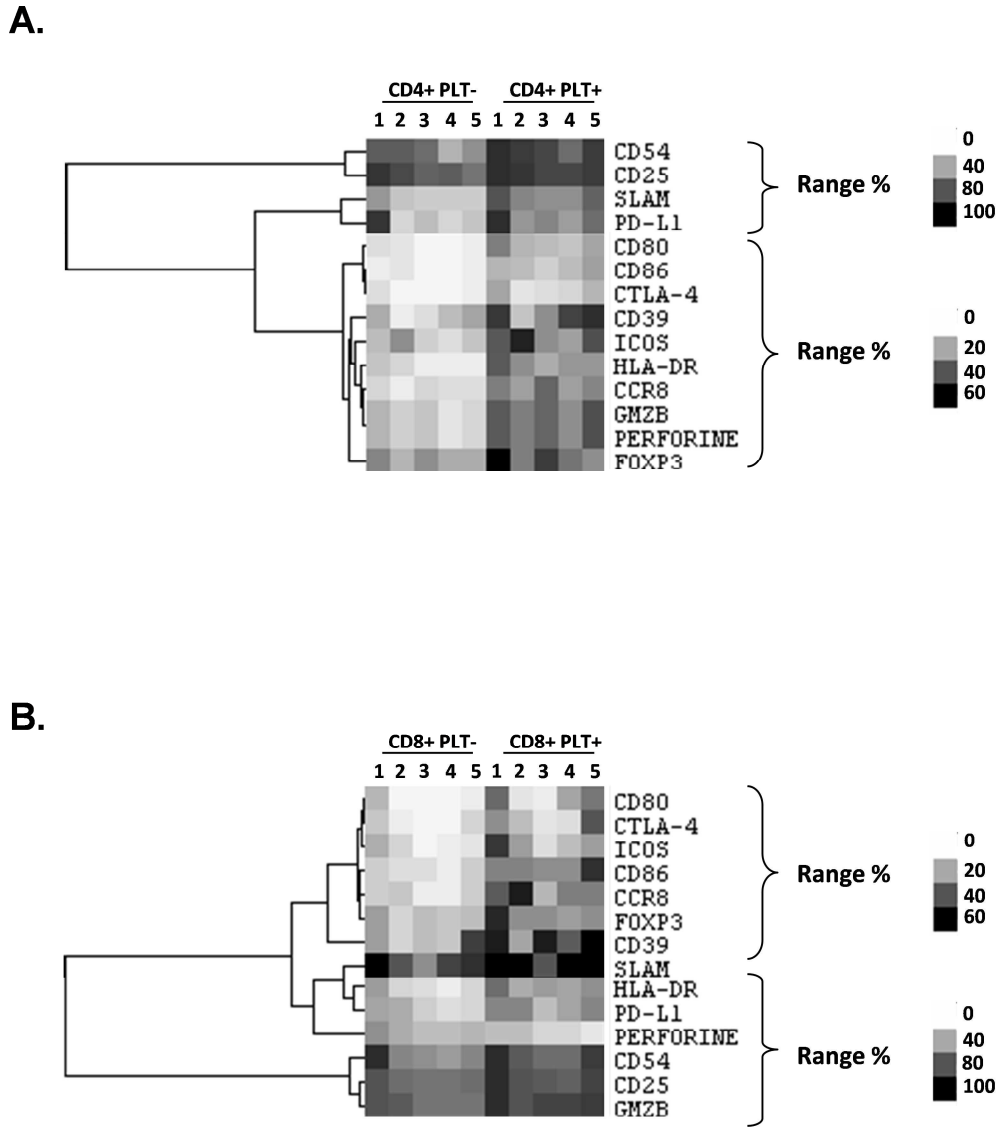


Supplementary figure 2. IL-17 levels in co-cultures with platelets depends on decreasing of IFNγ and is PBMC donor dependent. PBMCs from healthy donors were stimulated with anti-CD3, CD28, and CD2 in the absence (0:1) or presence of autologous (100:1 A) and heterologous (100:1 H) PLTs at a ratio of 100:1 for 72h. Culture supernatants were collected for ELISA analysis. (A) Percentage of IL-17 and (B) IFNγ decrement separated according increasing (I) or decreasing (D) of IL-17 levels in autologous PLT/PBMC co-cultures are shown. (C) IL-17 levels in co-cultures of PBMCs with autologous (100:1 A) and heterologous (100:1 H) platelets are shown. Data are presented as mean ± SEM. Statistical analysis was performed using t-test and t-test. *p<0.05, **p<0.01, and ***p<0.0001.



Supplementary figure 3. Inhibition of T cell functions depending on platelet doses in co-cultures. PBMCs from healthy donors (n=5) were stimulated with anti-CD3, CD28, and CD2 in the absence (0:1) or presence of

autologous PLTs at different PLT/PBMC ratios (1:1, 10:1, 50:1, and 100:1) for 24h and 48h. Culture supernatants were collected for ELISA analysis, and cells were stained with anti-CD3-PECy5, CD4-PECy7 and CD25-PE mabs for flow cytometry analysis. (A) CD4+ cells/µl, (B) percentage of CD4+ PLT+, (C) expression of CD4+ CD25+, (D) IFNγ, (E) TNFα, (F) IL10 and (G) IL-17 levels from co-cultures at different PLT/PBMC ratios are shown. Left axis of column bar plot of IFNγ levels correspond to 24h of culture, and right axis correspond to 48h of culture. Data are presented as mean ± SEM. Statistical analysis was performed using ANOVA.



Supplementary figure 4. Phenotype of CD4+ and CD8+ T cells with/without bound platelets. PBMCs were stimulated with anti-CD3, CD2 and CD28 for 72h. Cells were stained with anti-CD3-PECy5,CD4-PECy7, CD25-PE, CD39-PE, CD41a-FITC, CD41a-PE, CD54-PE, CD80-PE, CD86-PE, PD-L1-PE, SLAM-PE, CTLA-4-PE, ICOS-PE, HLA-DR-PE, CCR8-PE, Granzyme B (GMZB)-PE, Perforine-PE, and FOXP3-FITC for flow cytometry analysis. (A) Heat map of percentage of analyzed markers on CD4+ PLT- and CD4+ PLT+ and (B) CD8+ PLT- and CD8 PLT+ is shown.