

## **Supplementary Materials**

**Figure S1.** No effect of IL-17A alone or in combination with thrombin, PAR1-AP, collagen or PAR4-AP in platelet aggregation. (**A-B**) Expression of the open conformation of GPIIb/IIIa (PAC-1) (A) or P-selectin (CD62P) (B) on the surface of IL-17A (50 ng/ml) stimulated platelets. **C**) Aggregation of IL-17A-stimulated platelets for 2 min at 37oC or co-stimulated with thrombin, PAR1-AP, collagen or PAR4-AP for 2 min at 37oC or 1 h at room temperature. Representative images from the platelet aggregation experiments using light transmission aggregometry (upper panel) and quantification as percentage of aggregation (%) from three independent experiments (lower panel). Data are presented as mean±SEM. With regards to statistics, \*P-value is determined by one-way ANOVA followed by Bonferroni's multiple comparison test is reported per indicated comparison. No statistical significance is denoted as n.s.



**Figure S2.** No effect of IL-17A alone in different doses or in combination with different doses of ADP in platelet aggregation. (**A**) Aggregation of platelets stimulated with various doses of IL-17A (10, 20, 200 ng/ml), ADP (5, 10, 20  $\mu$ M) or collagen (2, 4  $\mu$ g/ml) for 2 min at 37°C before aggregation is recorded. Upper panel includes the representative images from the platelet aggregation experiments using light transmission aggregometry and quantification as percentage of aggregation (%) documented in three independent experiments (lower panel). (**B**) Aggregation of platelets stimulated with various doses of ADP (2, 5, 10  $\mu$ M) and/or a high dose of IL-17A (200ng/ml). Representative images from the platelet aggregation experiments using light transmission aggregometry are depicted in the upper panel and quantification as percentage of aggregation experiments using light transmission aggregometry are depicted in the upper panel and quantification as percentage of aggregation (%) documented in three independent experiments (lower panel). Data are presented as mean±SEM. No statistical differences are present.

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## IL-17A-mediated platelet pro-angiogenic response



**Figure S3.** Pro- and anti- inflammatory factors that do not exhibit different levels in the platelet releasate following IL-17A stimulation of platelets. Washed platelets were incubated with IL-17A (50ng/ml) or PAR1-AP ( $100\mu M$ ) or PBS (resting platelets) for 10 minutes at  $37^{\circ}$ C. Using ELISA, the recovered releasates were then analyzed for A) stromal derived factor alpha (SDF1 $\alpha$ ), B) angiopoietin 2 (Ang2), C) interleukin-8 (IL-8), D) the anti-angiogenic, interleukin-10 (IL-10), E) platelet derived growth factor (PDGF), F) CXC motif chemokine ligand 1 (CXCL1), G) CC motif chemokine ligand 5 (CCL5). Values are presented as the mean concentration (pg/ml) ±SEM of six independent experiments. With regards to statistics, P-value of two-tailed t test is reported per indicated pairwise comparison as normality test was passed. No statistical significance is denoted as n.s. No detectable levels are denoted as n.d.

IL-17A-mediated platelet pro-angiogenic response



**Figure S4.** Direct effect of IL-17A on capillary-like tube formation of endothelial cells. (**A**) Representative images from the capillary tube formation in Matrigel-coated wells following exposure of human umbilical vein endothelial cells (HUVECs) to IL-17A (50 ng/ml) or PBS (control) for 18 hours. (**B**) Quantification of cumulative tube length was determined in 10 non-overlapping fields. Values are presented as the mean of total tube length ( $\mu$ m) ±SEM of three independent experiments. With regards to statistics, P-value was determined by a two-tailed t test. Scale bars indicate 500  $\mu$ m.