Supplementary figures and videos to Feng et al.

“The absence of Angiopoietin-2 leads to abnormal vascular maturation and persistent proliferative retinopathy” (Thromb Haemost 2009; 102.1)

Supplemental Figure 1: Epifluorescent image (A-F) and confocal images (G, H) of a p20 whole mount retina of an Ang2-/ mouse stained with lectin (green) and SMA (red). C: overview showing the defective branching of arterioles (strong SMA labeling) and of venules (weak SMA labeling) and the area of neovascularization (strong lectin labeling) in relation to the outgrowth of the intraretinal vessels. D-F: enlarged images. G: Confocal image of a higher magnification of * corresponding the encircled area marked by * in Figure 3 D and supplement 1 C, showing arterioles (SMA-labeled, red) and a preretinal neovascular network (strong lectin-labeled). H: depicts the corresponding area marked by the circle # of Figure 3 D and supplement 1 C. Scales: 25µm (A-F), 50µm (G, H).

Precise spatial orientation is provided by the concomitant confocal video 1 and 2.

Video 1: www.ma.uni-heidelberg.de/hidden/video1.avi
Video 2: www.ma.uni-heidelberg.de/hidden/video2.avi
Supplemental Figure 2: Confocal microscopic image of the co-staining of lectin (green) and Ki67 (red) of preretinal neovascularizations in Ang2-/- mice at p20 (A) and p60 (B) indicating persistent neovascularization activity. White arrows: proliferating endothelial cells in neovascular tufts. Scales: 50µm (A, B).
Supplemental Figure 3: Quantitative real time PCR of VEGF isoforms 164 and 188, the VEGF receptor flk-1, the endothelial marker CD 31, and the Ang-1/CD31 ratio of wt (white bars) and Ang2/- mice (black bars) at p10, p20, and p1year. Primers and probes of Flk1 (Mm01222431-m1) and CD31 (Mm00476702-m1) were purchased from Applied Biosystems. ** p<0.01, *** p<0.001.