Figure 1 online suppl.

Double immunostaining showed co-expression of von Willebrand factor (Factor VIII, red) and NF-κB (brown, panel A), smooth muscle cell actin (red) and HIF-1α (brown, panel B) as well as smooth muscle cell actin (red) and NF-κB (brown, panel C); magnifications: x20 and x100.

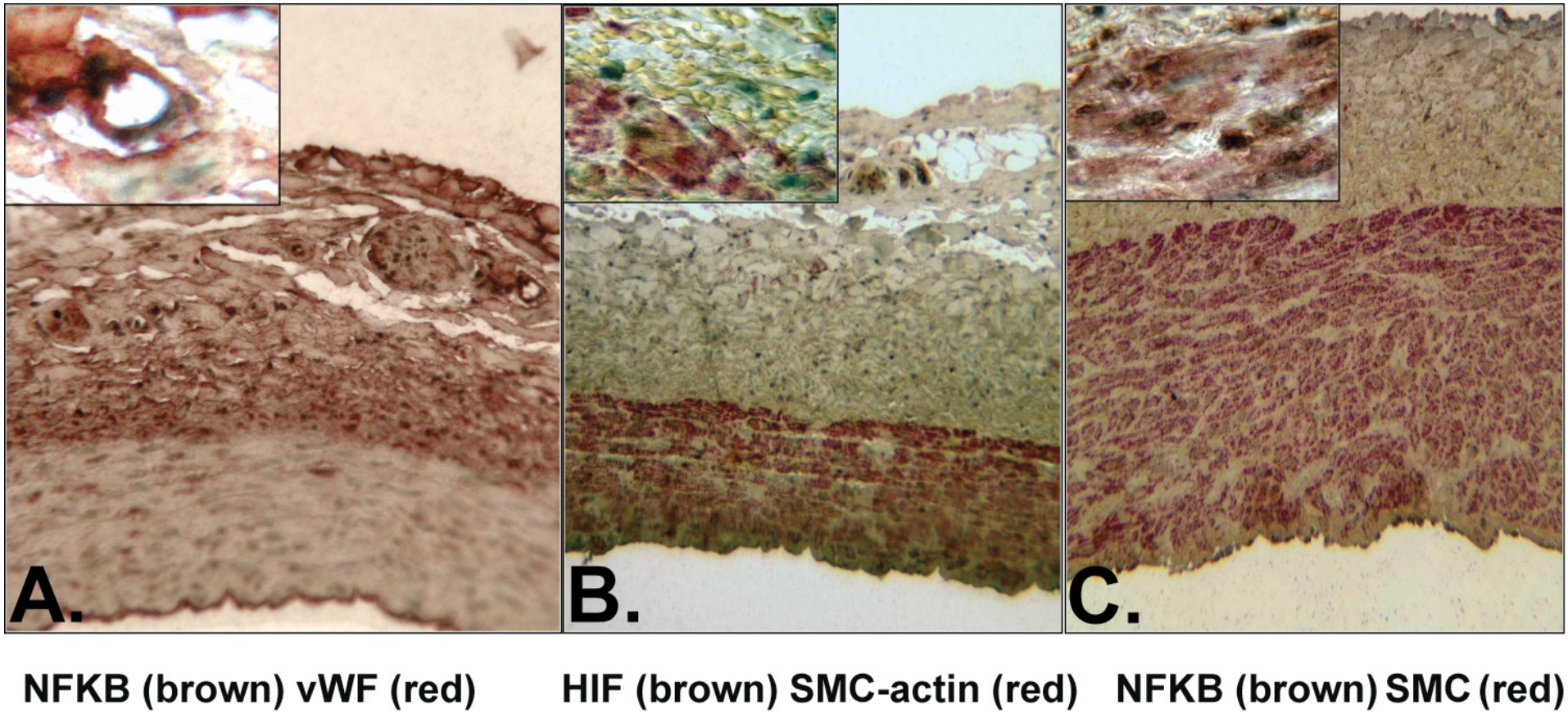


Figure 2 online suppl.

Correlation between intima/media ratios and vasa vasorum spatial density and NF-κB positive cells. The graph shows that in control pigs there is neither a correlation between intima/media ratios nor NF-κB positive cells and vasa vasorum spatial density respectively. In high-cholesterol animals, however, there is a strong negative correlation between intima/media ratio and vasa vasorum spatial density and a strong positive correlation between intima/media ratio and NF-κB positive cells.

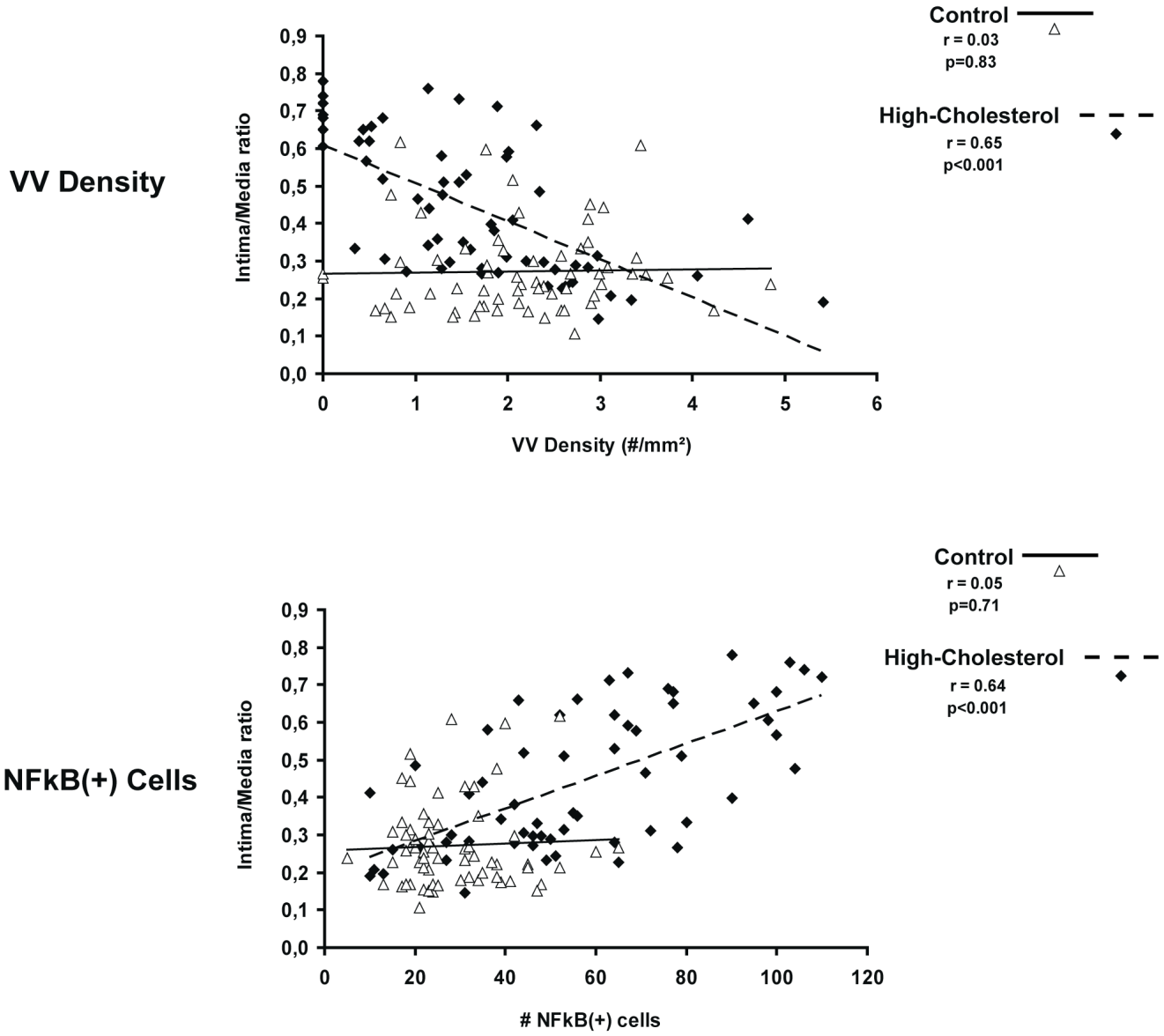
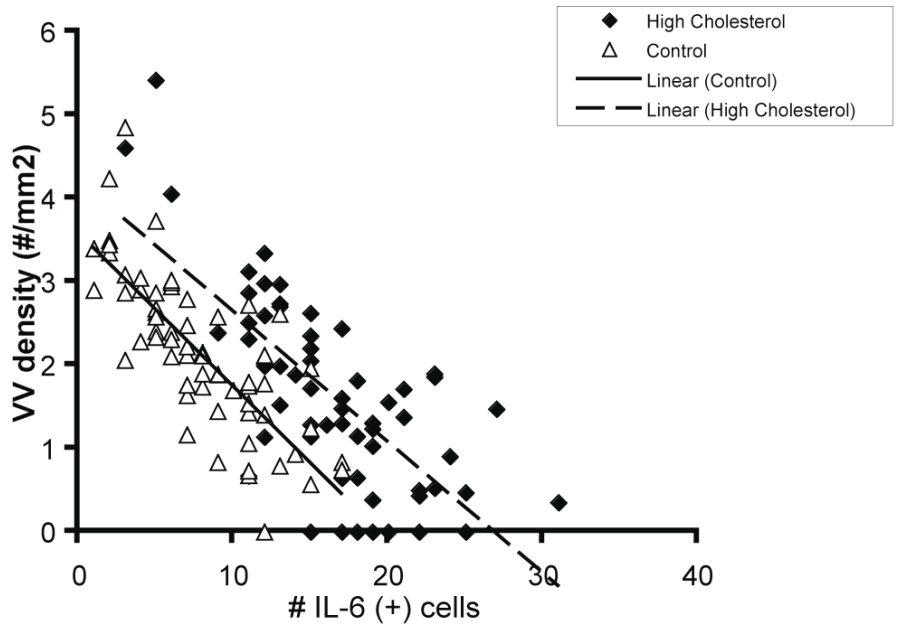


Figure 3 online suppl.

Correlation between VV density and IL-6 (top panel) and TNF-alpha (bottom panel) positive cells. VV density correlated inversely with IL-6 expression in HC (r=0.72, p<0.001) and control animals (r=0.70, p<0.001). VV density also inversely correlated with TNF-alpha expression in HC (r=0.72, p<0.001) and control animals (r=0.58, p<0.001).



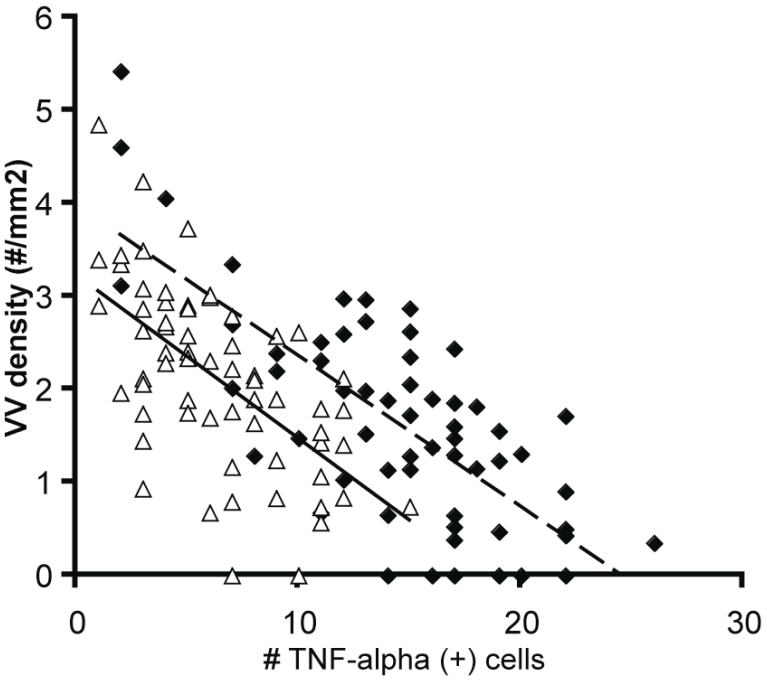


Figure 4 online suppl.

Interleukin-6 (IL-6) and tumor necrosis factor-alpha (TNF-α) staining in hypercholesterolemic porcine right coronary arteries. Panels A and B (magnification x20) show representative examples of vessel wall areas with high vasa vasorum densities and minimal staining for IL-6 and TNF-α. In contrast, vessel wall areas with low vasa vasorum densities (panels C and D, magnification x40) show significantly more staining for both inflammatory markers.

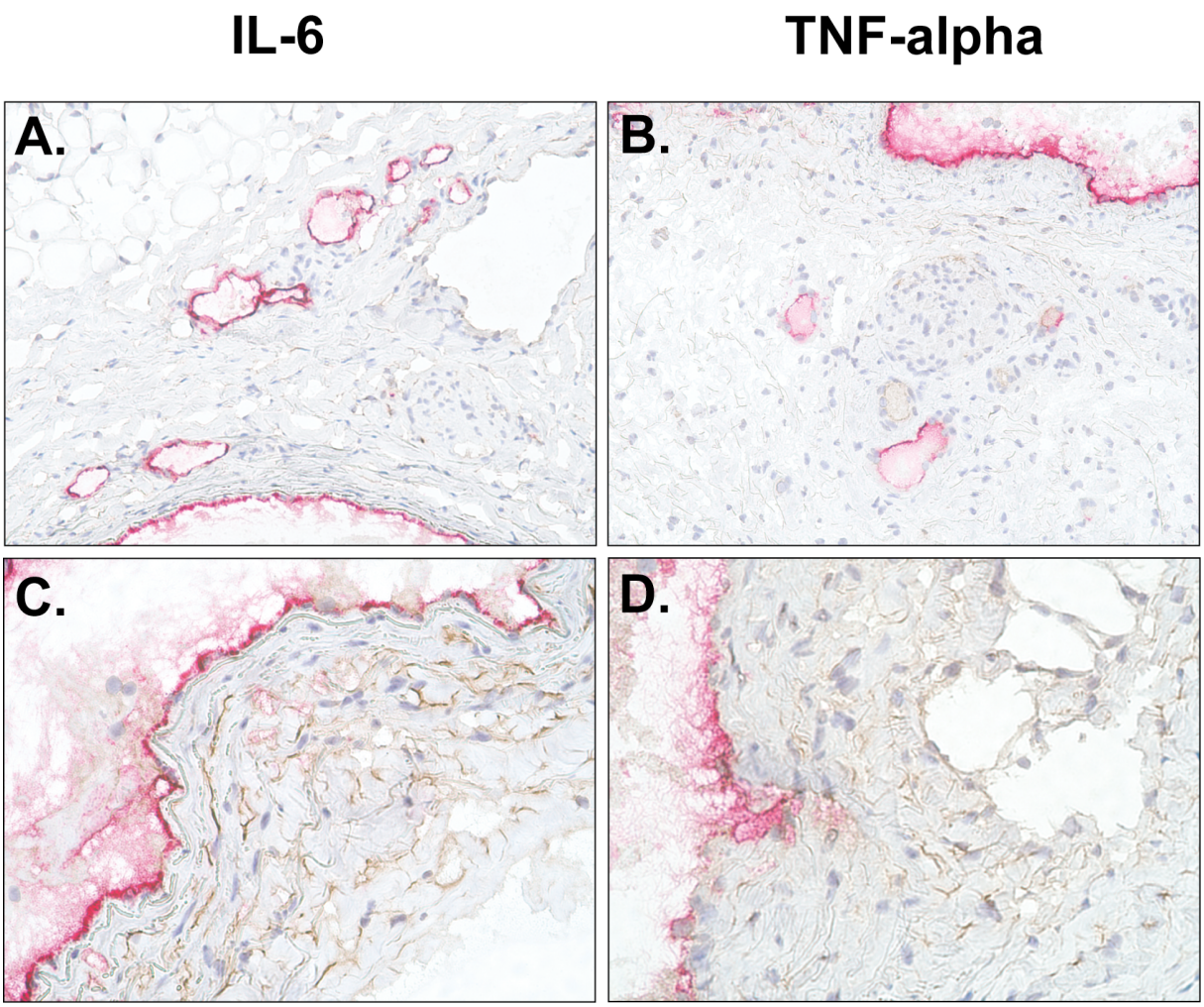


Figure 5 online suppl.

Vasa vasorum in high magnification (x60) in normal (panel A, TNF-α staining) and hypercholesterolemic (panel B, TNF-α staining) coronaries. Vasa vasorum in control coronaries did not show signs of inflammation in their close proximity, whereas in hypercholesterolemic coronaries we occasionally observed early inflammation in endothelial and vessel wall cells surrounding the vasa vasorum (arrow).

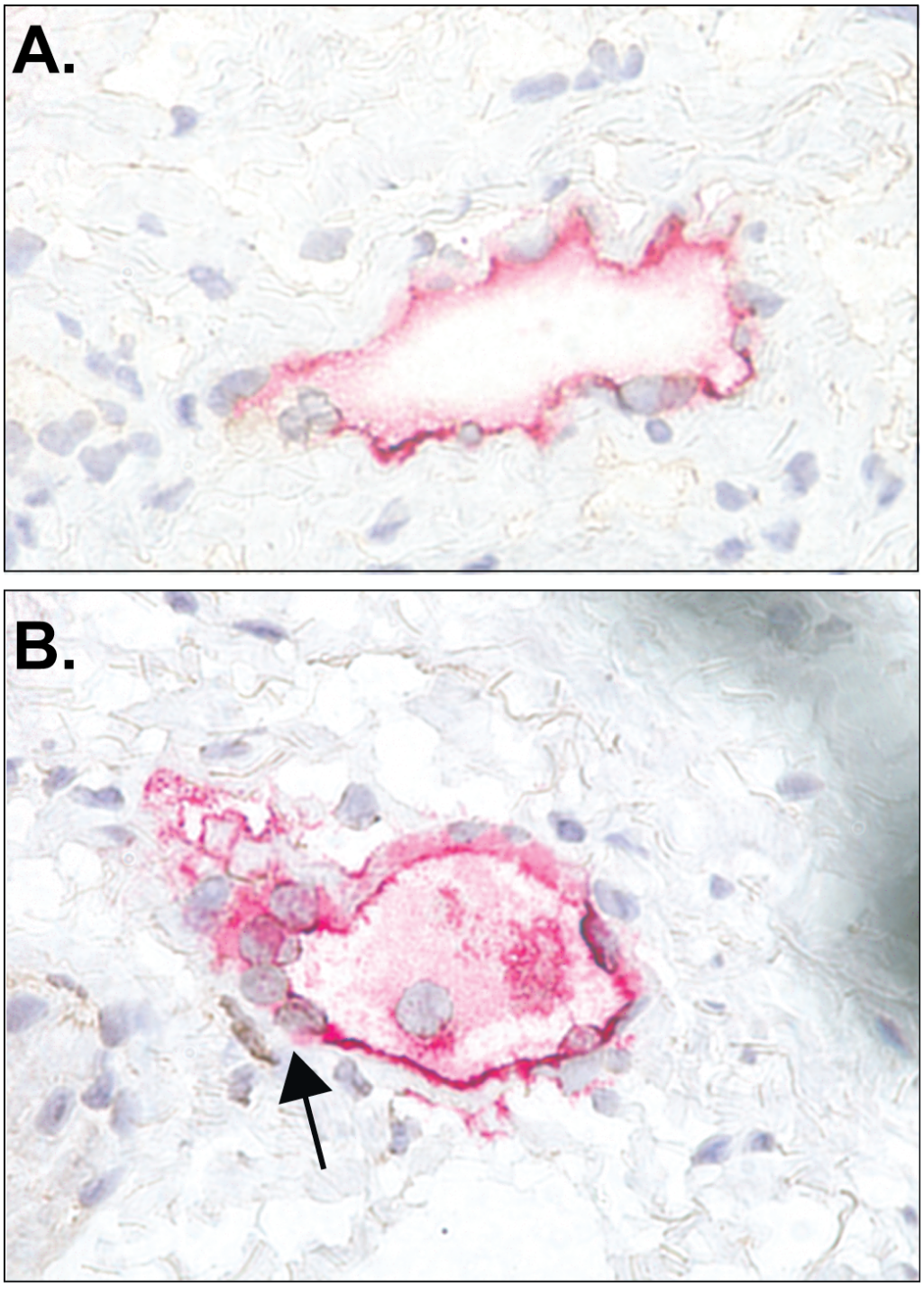


Figure 6 online suppl.

Western Blot analysis for NF-κB (top panel, n=3 per group) and HIF-1α (lower panel, n=3 per group) showed a significantly higher expression of both proteins in the high-cholesterol group. Housekeeping gene, β-actin. # $p<0.01$, * $p<0.001$