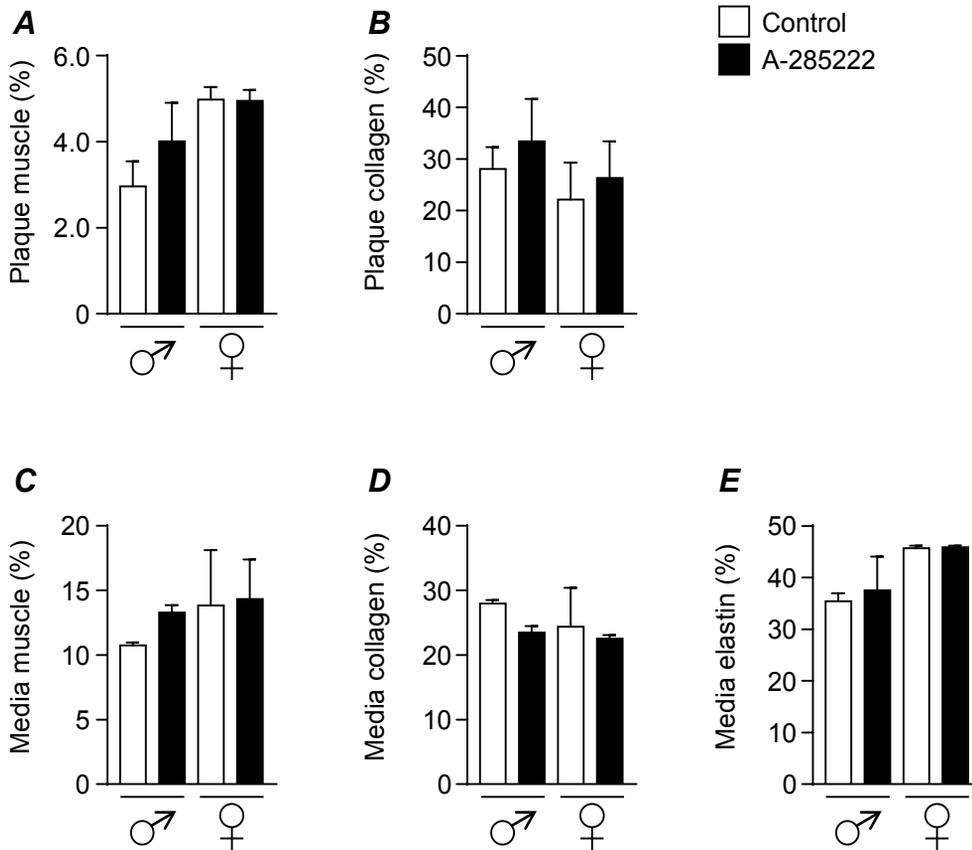
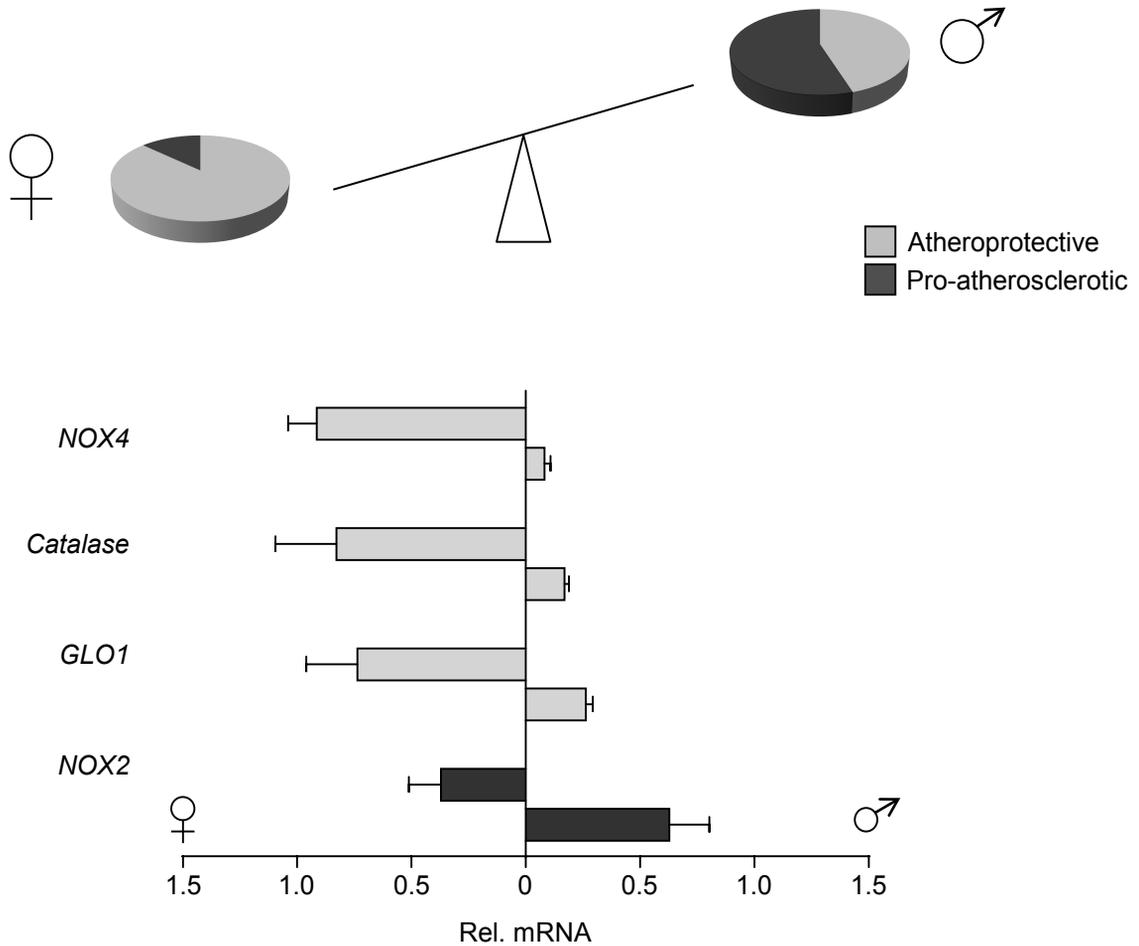


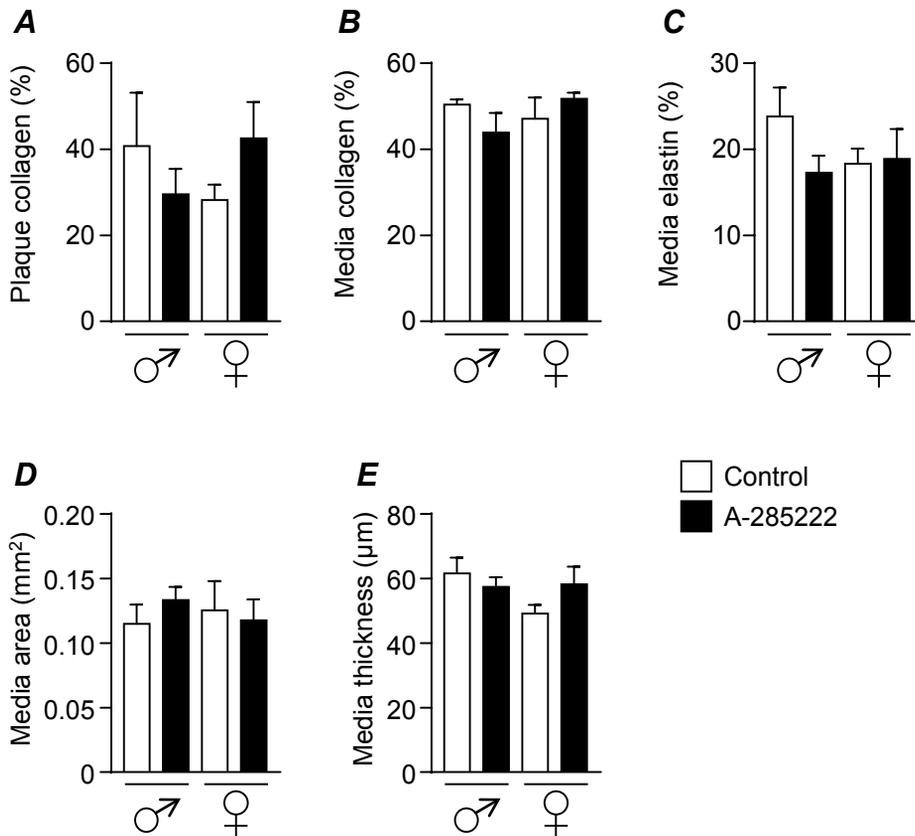
Supplemental figure 1. Summarized morphometric data showing plaque size (**A-B**), degree of stenosis (**C-D**), media area (**E-F**) and media thickness (**G-H**) determined histologically in the brachiocephalic arteries of young mice from study I (left graphs **A**, **C**, **E** and **G**; N=7-8 mice/group) and from study II (right graphs **B**, **D**, **F** and **H**; N=2-3 mice/group). *p<0.05.



Supplemental figure 2. Summarized histological data showing muscle and collagen contents in plaques (A-B), and muscle, collagen and elastin contents in the media (C-E) of brachiocephalic arteries from young mice in study II, determined in sections stained with Elastin van Gieson (N=2-3 mice/group).



Supplemental figure 3. Sex-dependent differences in oxidative stress burden in mouse aorta. The bar graph shows the relative mRNA expression of the oxidative stress targets NOX4, catalase, GLO1 and NOX2 in the aortas of female (left side of x-axis) and male (right side of x-axis) IGF-II/LDLR^{-/-}-ApoB100/100 mice from studies I and II. HPRT and β -actin were used as endogenous controls (N=5-8 mice/group). For comparison of expression between genders, the sum of female and male expression levels is set to 1 for each target. The pie charts in the upper part of the figure are for visualization purposes only and show the abundance of the pro-atherosclerotic oxidative stress target NOX2 relative to the three measured atheroprotective targets (NOX4, catalase and GLO1) for each gender.



Supplemental figure 4. Summarized histological data showing collagen contents in plaques (A), collagen and elastin contents in the media (B-C), as well as media area and media thickness (D-E) of brachiocephalic arteries from old mice, determined in sections stained with Elastin van Gieson (N=2-3 mice/group).