

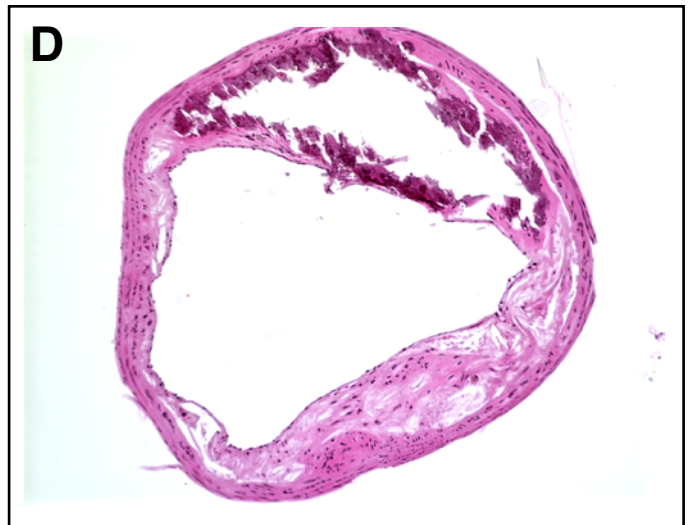
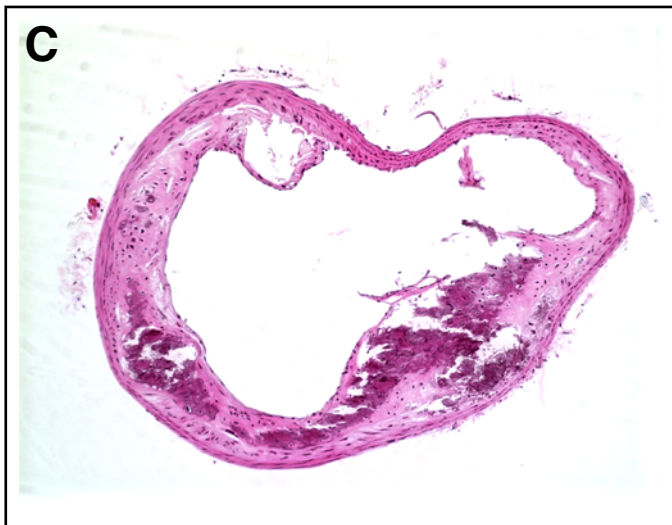
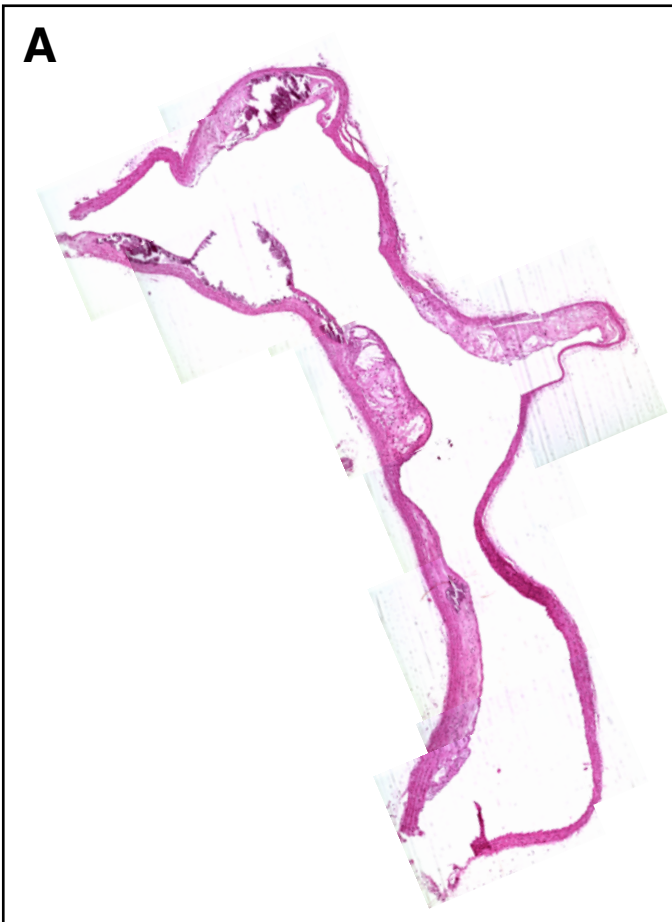
SUPPLEMENTARY METHODS

Histochemical stain for fibrin

A modification of Carstairs' method to distinguish platelets and fibrin in histological sections was used to detect fibrin (orange-red), red blood cells (yellow), and collagen (bright blue). Tissue sections were hydrated, stained in 5% ferric alum for 5 minutes, washed in tap water and stained in Mayer's hemotoxylin solution for 5 minutes. After washing in tap water, the sections were stained in picric acid-orange G solution for 40 minutes and rinsed once in distilled water. They were then stained in Ponceau-fuchsin solution for 5 minutes, rinsed in distilled water and differentiated with 1% phosphotungstic acid and rinsed in distilled water. The final stain is with 1% methyl blue in 1% acetic acid for 15 minutes followed by several changes of distilled water, dehydration, clearing in xylene and coverslipping. As originally described by Carstairs (37), the exact colour of fibrin and platelets is dependent upon fixation time. With sections from tissue fixed less than 48 hours, fibrin is orange-red but is bright red in tissues fixed more than 48 hours. Since smooth muscle cells also stain red, albeit a clearly distinguishable shade, only areas with the characteristic fibrin color following Carstairs' staining, that were also detected by immunostaining with an anti-fibrin/fibrinogen antibody, were scored positive for fibrin.

non-irradiated

irradiated and transplanted



SUPPLEMENTARY FIGURES

Supplementary Figure 1: Irradiation and stem cell transplant of 43 week-old *apoE*^{-/-} mice with advanced lesions does not alter lesion size and morphology.

43 week-old *apoE*^{-/-} mice were either untreated (A, C), or irradiated (B, D) and reconstituted via tail vein injection with HSC transduced with HA-epitope tagged EGFP (CD68S-HA-EGFP) as described in the Methods. Mice were sacrificed 15 weeks post-transplant and lesion characteristics were analyzed by H&E in the aortic arch and thoracic aorta (A, B) and the brachiocephalic artery (C, D). As demonstrated by this set of representative lesions, the size and characteristics of the lesions from untreated and irradiated mice are comparable.