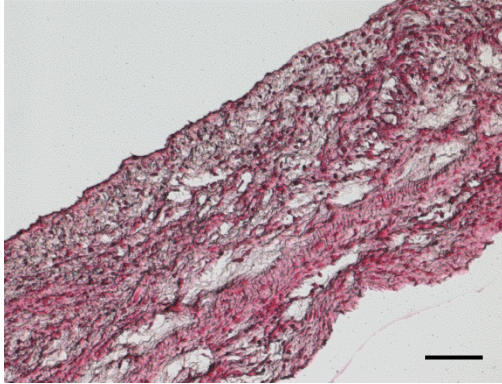
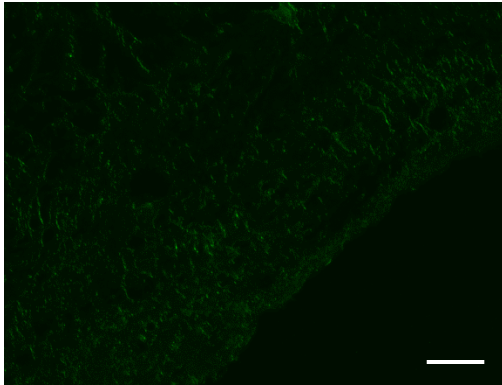


## DATA SUPPLEMENT

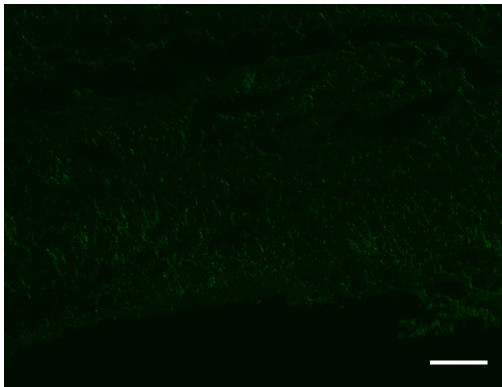
**A**



**B**



**C**



**Supplementary Figure S1.** Leaflets were depleted of elastin using 20 U/mL elastase following procedures similar to those outlined for collagen depletion. After 6 days of culture, elastin-depleted leaflets were histologically analyzed for: (A) mineralization via von Kossa staining, (B)  $\alpha$ -SMA expression, and (C) ALP expression. Detectable mineralization,  $\alpha$ -SMA, and ALP were not found in any of the elastin-depleted leaflets. Scale bar = 100  $\mu$ m.