Supplementary Table I

Patient Characteristics

Characteristics	Aortic Stenosis (N=3)	Controls (N=4)	Significance (p-value)
Age (years)	78.7 ± 14.8	48 ± 16	0.046
Male	2 (66.7%)	1 (25.0%)	0.35
Smokers	1 (33.3%)	0 (0.0%)	0.38
Hypertension	2 (66.7%)	1 (25.0%)	0.52
Diabetes Mellitus	0 (0.0%)	0 (0.0%)	N/A
CVA	0 (0.0%)	1 (25.0%)	0.38
PVD	0 (0.0%)	1 (25.0%)	0.38
Coronary Artery Disease	3 (100.0%)	0 (0.0%)	0.45
Hyperlipidemia	0 (0.0%)	1 (33.3 %)	0.38
CAVD	3 (100.0%)	0 (0.0%)	<0.0001
Adjusted Calcium (mg/dL)	9.17 ± 0.58	8.7 ± 1.3	0.64

Supplement Table II

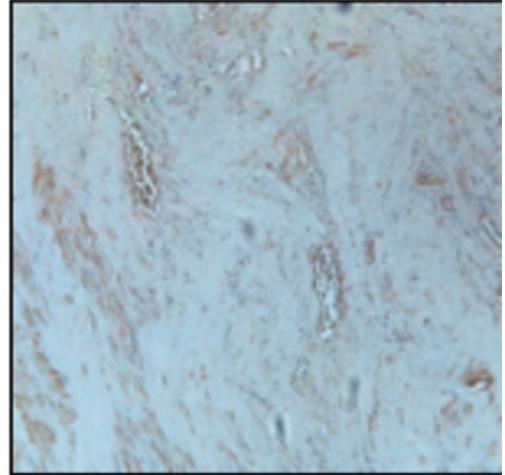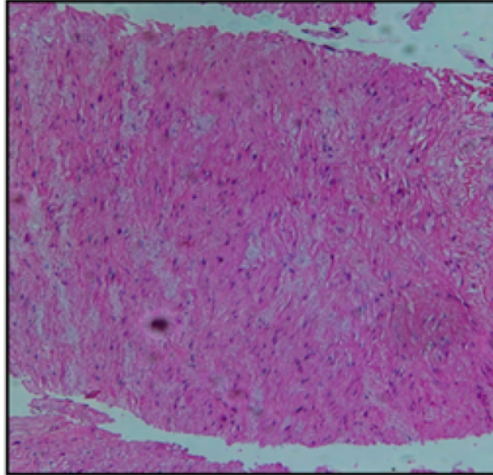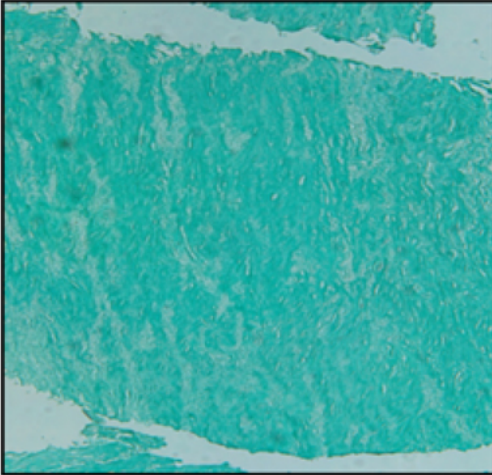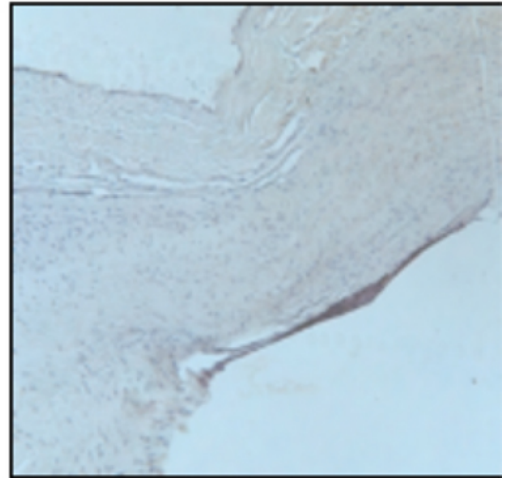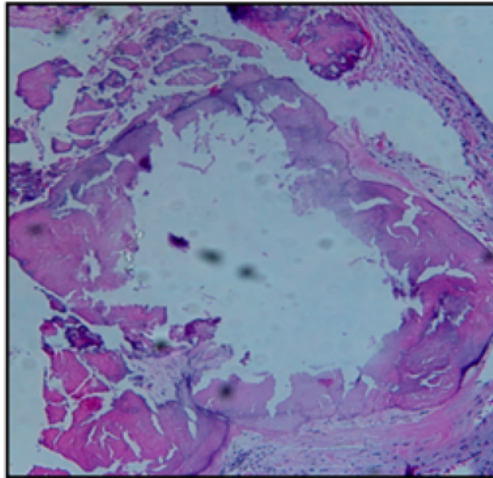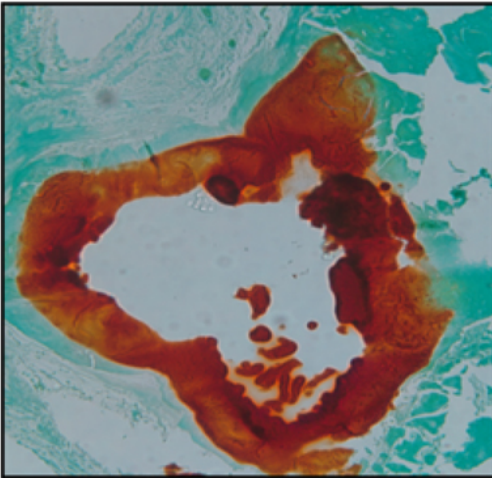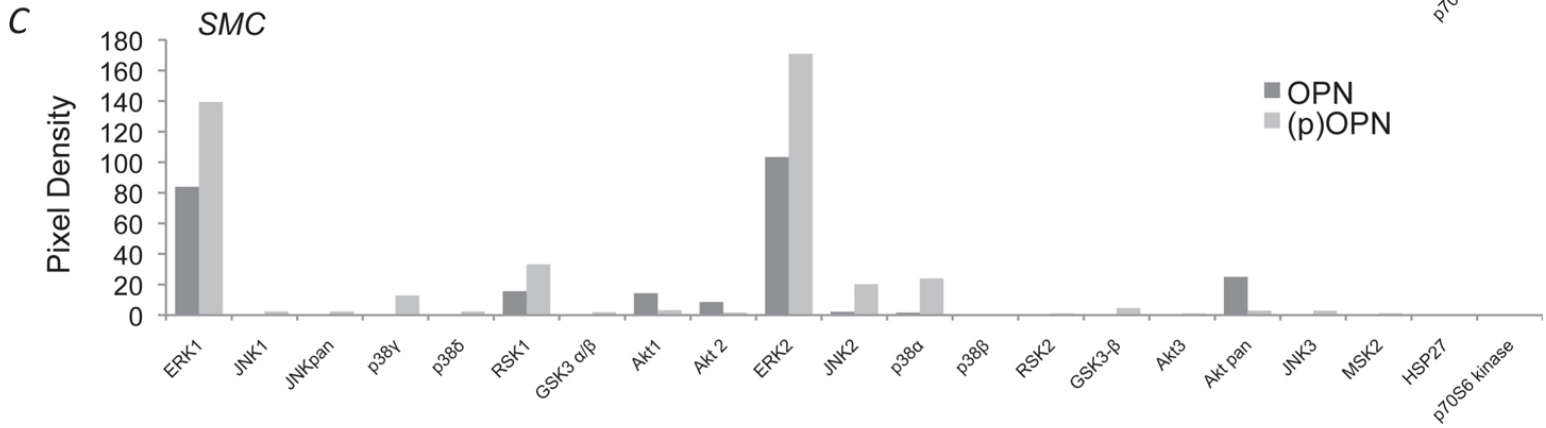|	VIC / SMC	VEC / HUVEC
Morphology	Resemble fibroblasts in morphology, being elongated and forming an orthogonal pattern of overgrowth postconfluence. Long cytoplasmic extensions, prominent adhesion and gap junctions, an in-complete basal lamina, and close association with the extra- cellular matrix (Filip, Radu et al. 1986; Diane L Mulholland and Gotlieb 1997)	Cobblestone-like shape with an oval centrally located nucleus (Manduteanu, Popov et al. 1988)
Markers expressed	FSA (Latif, Sarathchandra et al. 2007)	CD31 (Newman, Berndt et al. 1990; Paranya, Vineberg et al. 2001)
	α-SMA (Taylor, Batten et al. 2003; Liu, Joag et al. 2007)	CD34 (Chalajour, Treede et al. 2007)
	SM myosin (Latif, Sarathchandra et al. 2007)	vWF (Manduteanu, Popov et al. 1988)
	Vimentin (Liu, Joag et al. 2007)	CD105 (Chalajour, Treede et al. 2007)

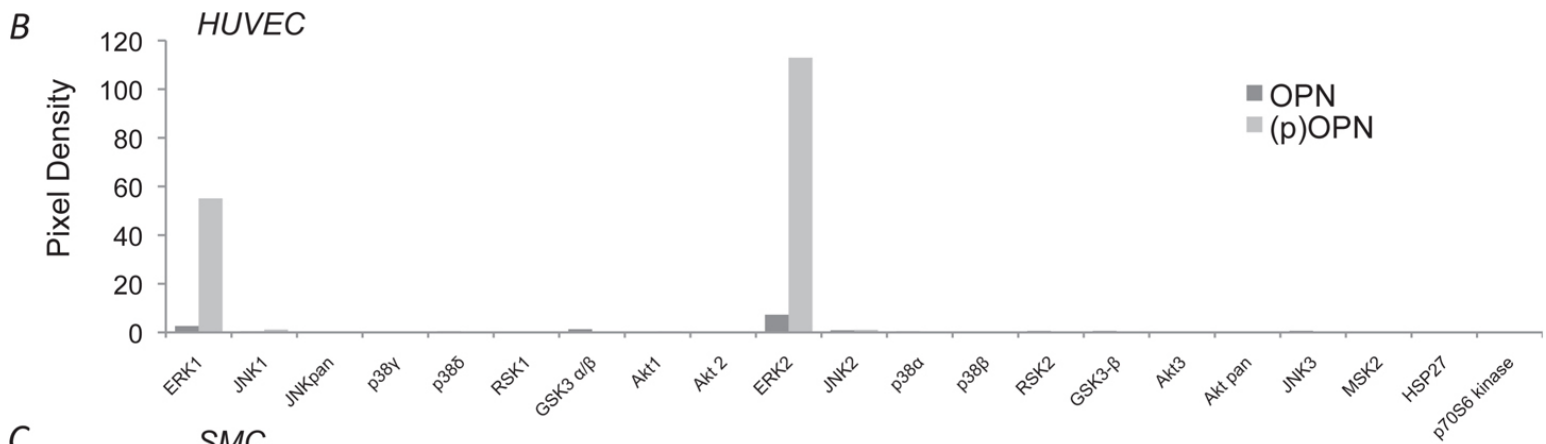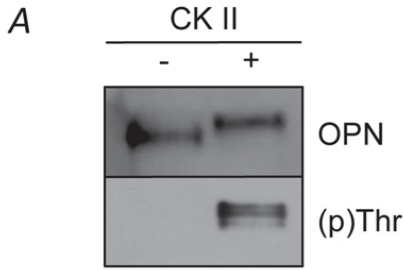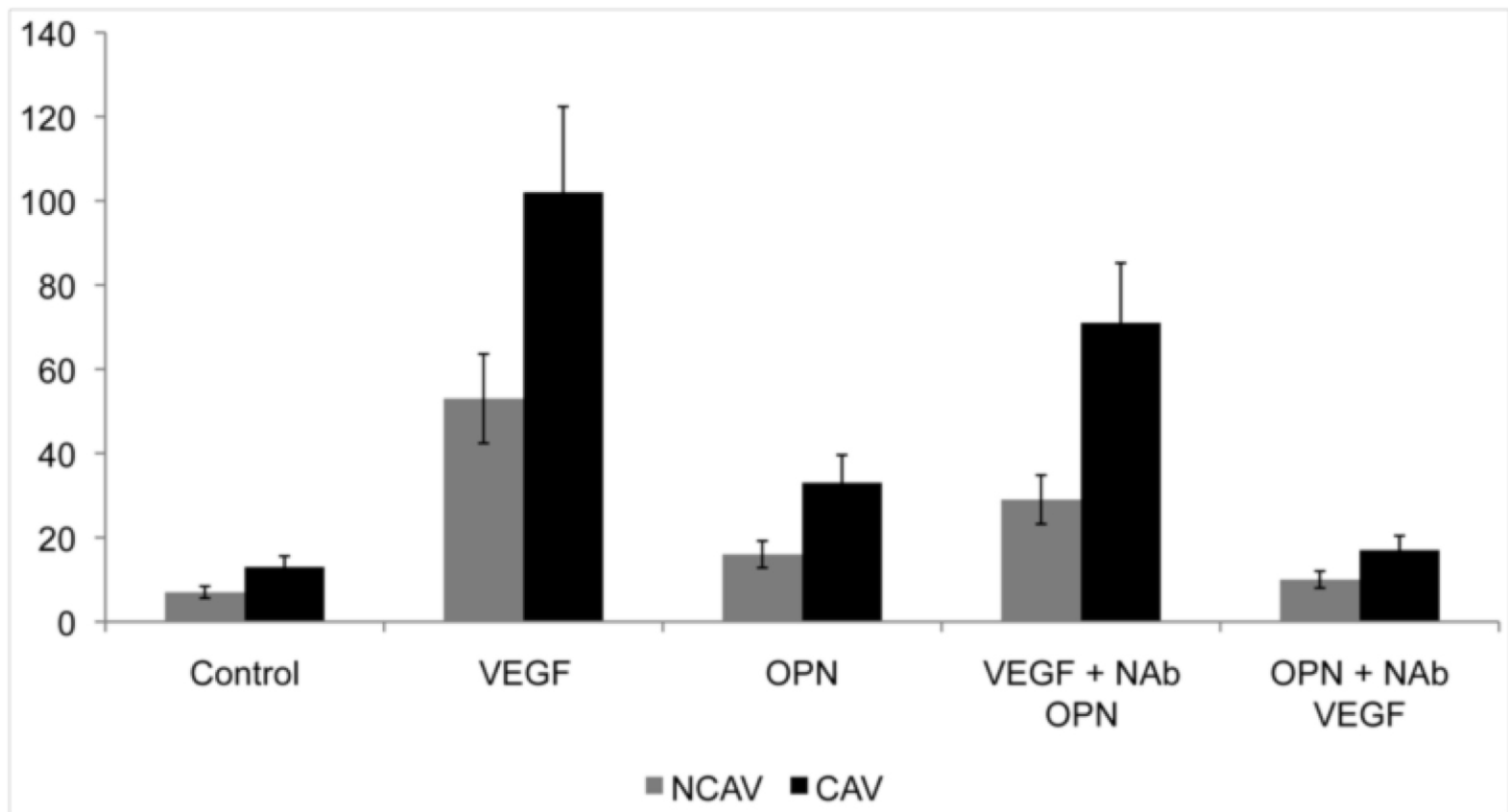|	Alizarin Red 10X	HE 10X	CD31
NCAV			
CAV			

Supplementary Figure I

Supplementary Figure II

Supplementary Figure III