

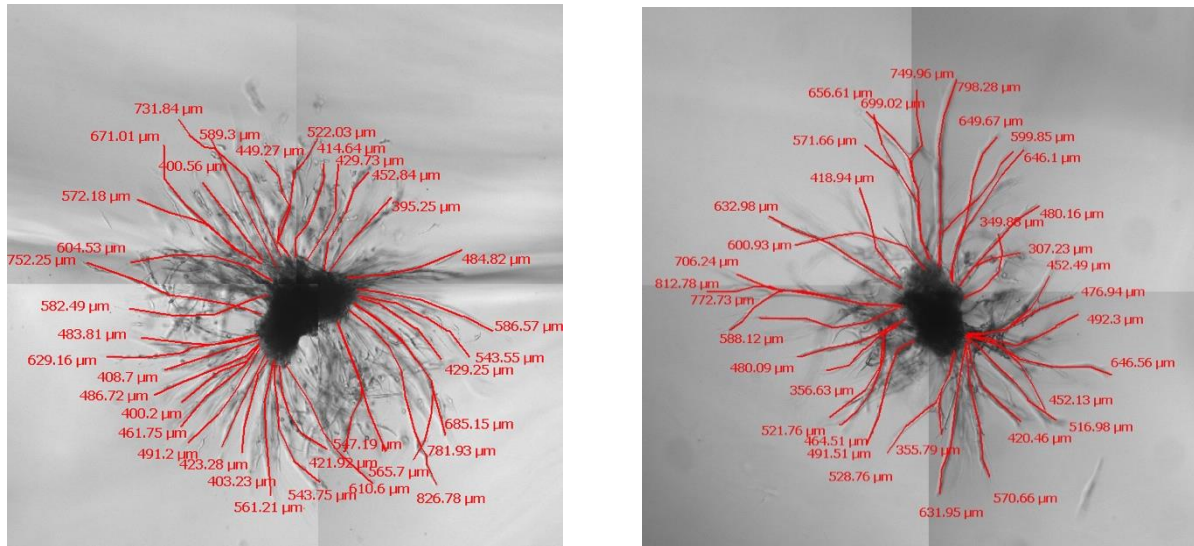


Figure S1. Representative analyzed images of quantification of vascular sprouting parameters from co-culture spheroids embedded within gradient scaffolds. Representative image of vascular sprouting within a high modulus region of a modulus gradient scaffolds (left) and a high RGD concentration region in scaffolds containing gradients of immobilized RGD (right) .

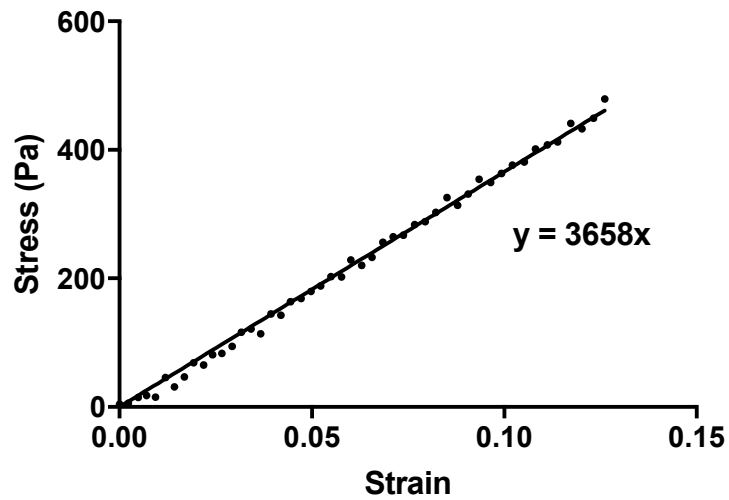


Figure S2. Representative stress-strain curve used to calculate scaffold elastic modulus.

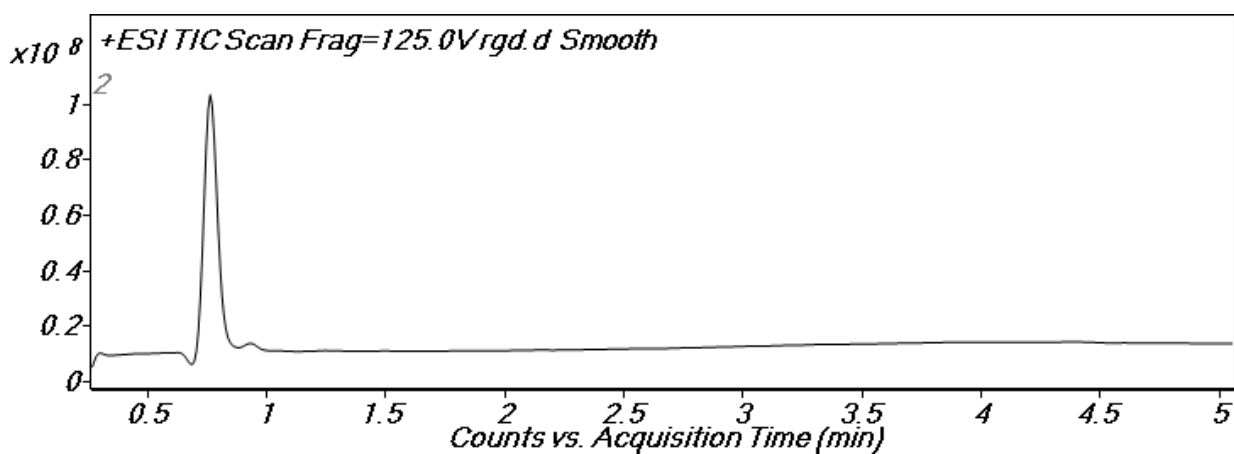


Figure S3A. HPLC chromatogram of purified YRGDS peptide.

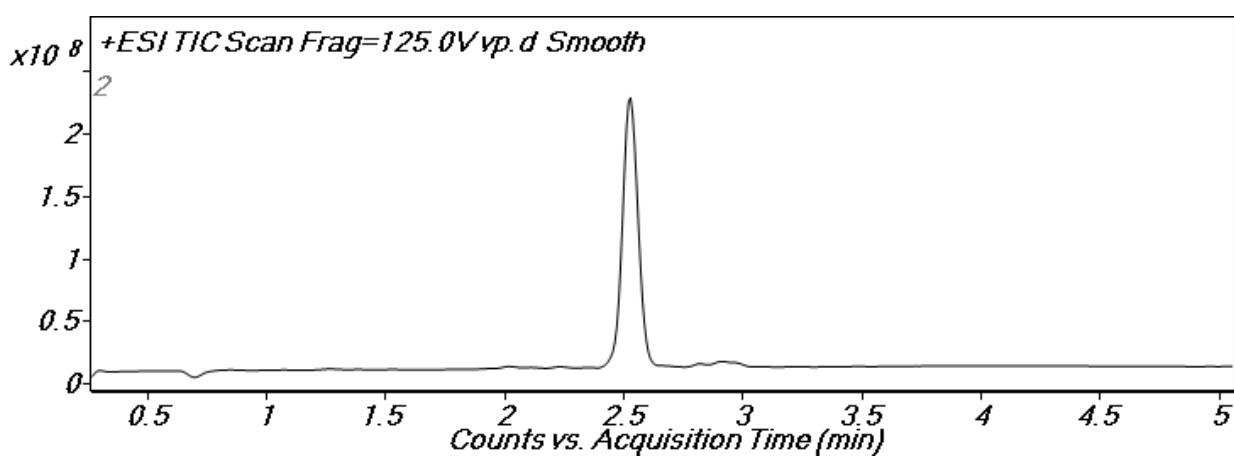


Figure S3B. HPLC chromatograms of purified MMP-sensitive peptide (GGVPMSMRGGK).

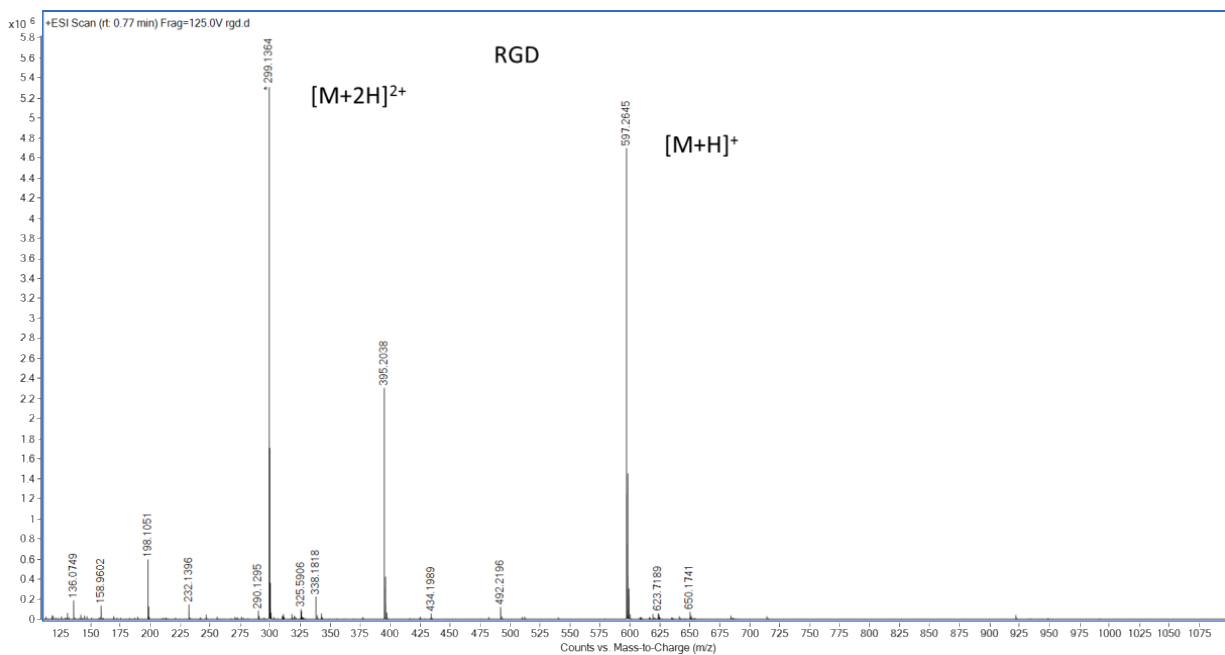


Figure S4A. Mass spectra of cell adhesive peptide YRGDS. MW calculated ($[M+H]^+ = 597.263$ Da); observed ($[M+H]^+ = 597.265$ Da).

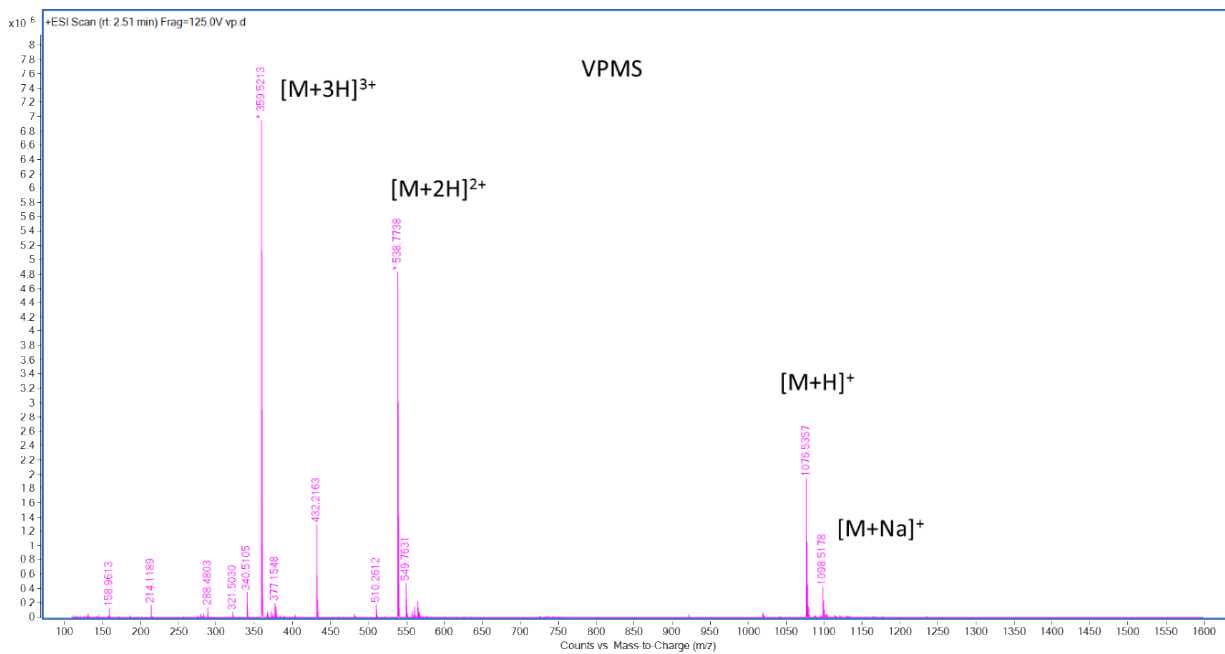


Figure S4A. Mass spectra of MMP-sensitive peptide GGVPMSMRGGK. MW calculated ($[M+H]^+ = 1076.534$ Da); observed ($[M+H]^+ = 1076.536$ Da).