

Supporting Information

Incorporation of amniotic membrane as an immunomodulatory design element in collagen scaffolds for tendon repair

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Contains:

5 pages

3 figures

Supporting Methods: Lyophilized amniotic membrane sheets were cut and homogenized in 0.5M acetic acid. The diluted particles were placed on a glass slide and the acetic acid was allowed to evaporate overnight. The slide was sputter coated and imaged with a Philips XL30 ESEM-FEG scanning electron microscope under high vacuum. A minimum of 25 fields of view were analyzed to obtain the particle size distribution found in Fig. S1.

Supporting Figures

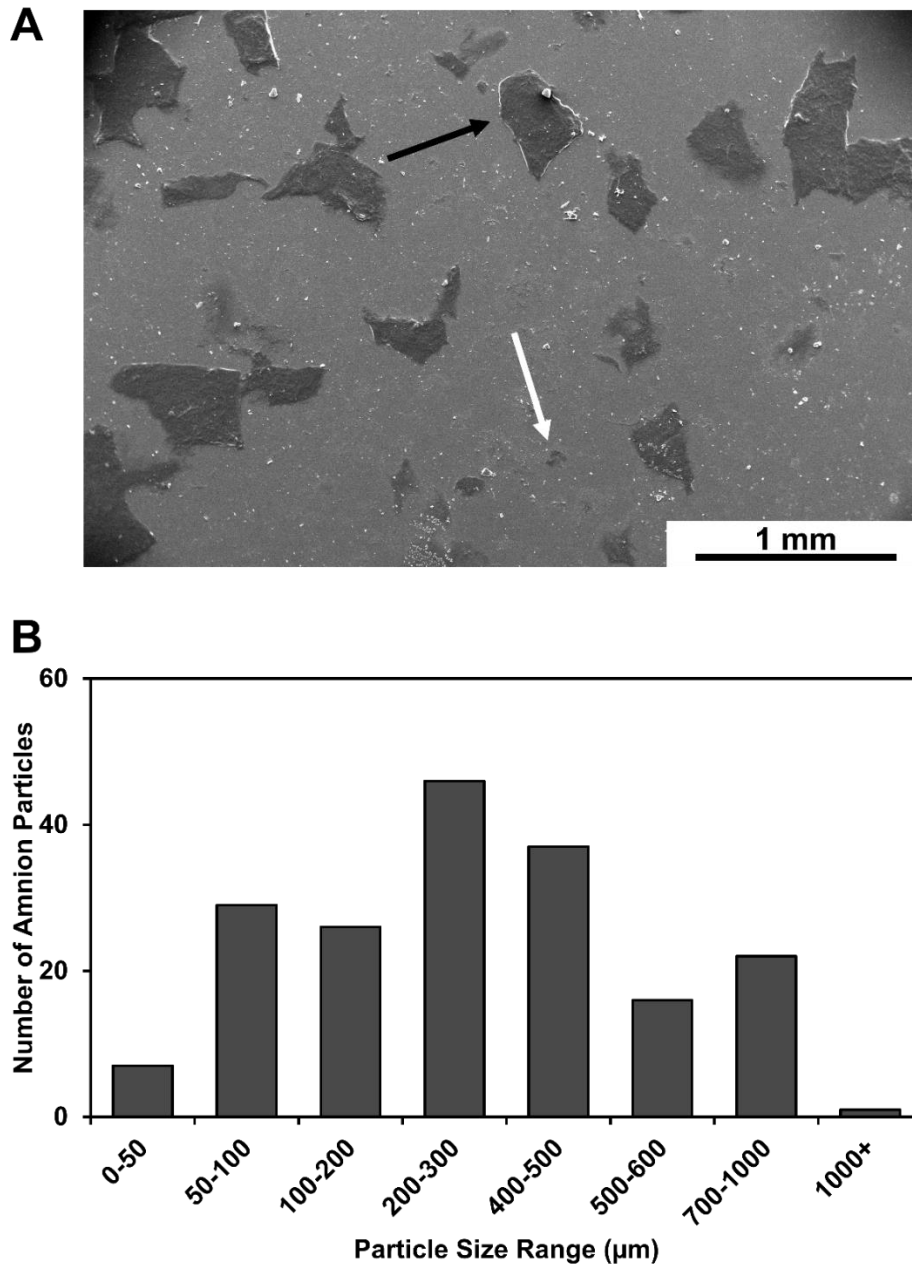


Figure S1. Particle size distribution of amniotic membrane post-homogenization. (A) Representative ESEM image of amniotic membrane particles seen in dark grey. Black arrow indicates larger amniotic membrane particle and white arrow displays smaller amniotic membrane particle. (B) Particle size distribution of amniotic membrane particles based on particle measurement of ESEM images.

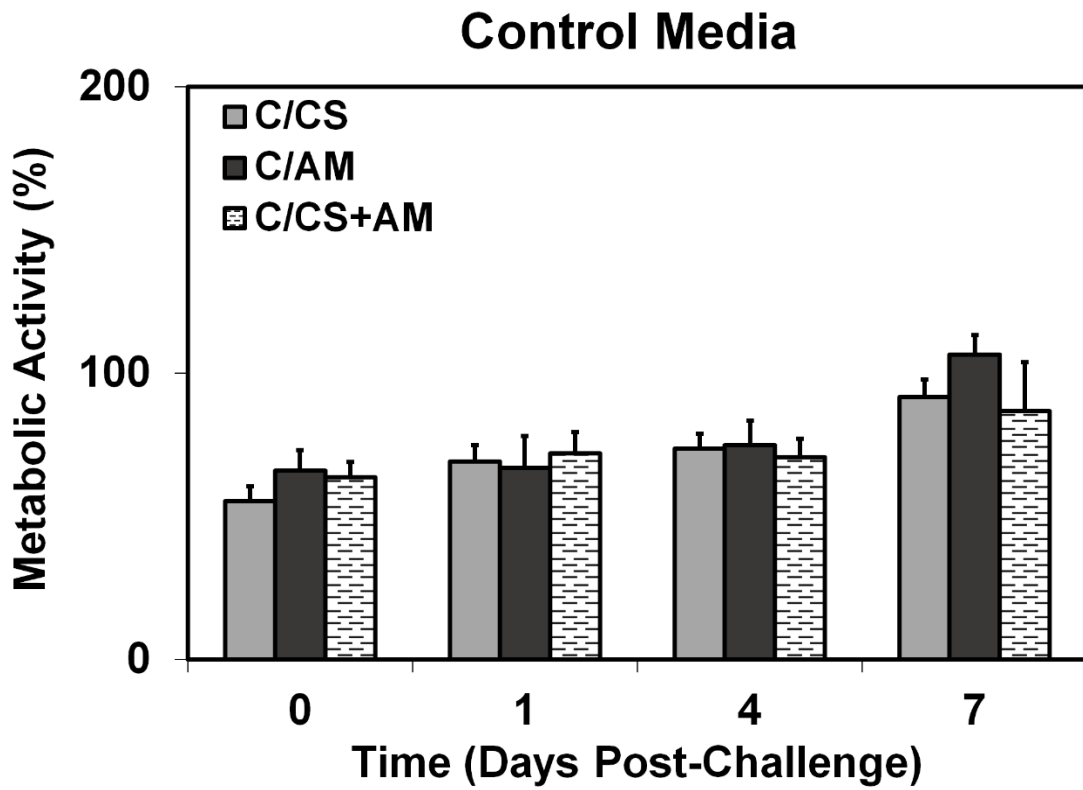


Figure S2. Human mesenchymal stem cell metabolic activity in 3D scaffolds cultured in non-inflammatory control media. C:CS = collagen-chondroitin sulfate scaffolds, C:AM = collagen-amniotic membrane scaffolds, C:CS+AM = collagen-chondroitin sulfate scaffolds (core) wrapped with a layer of amniotic membrane (shell).

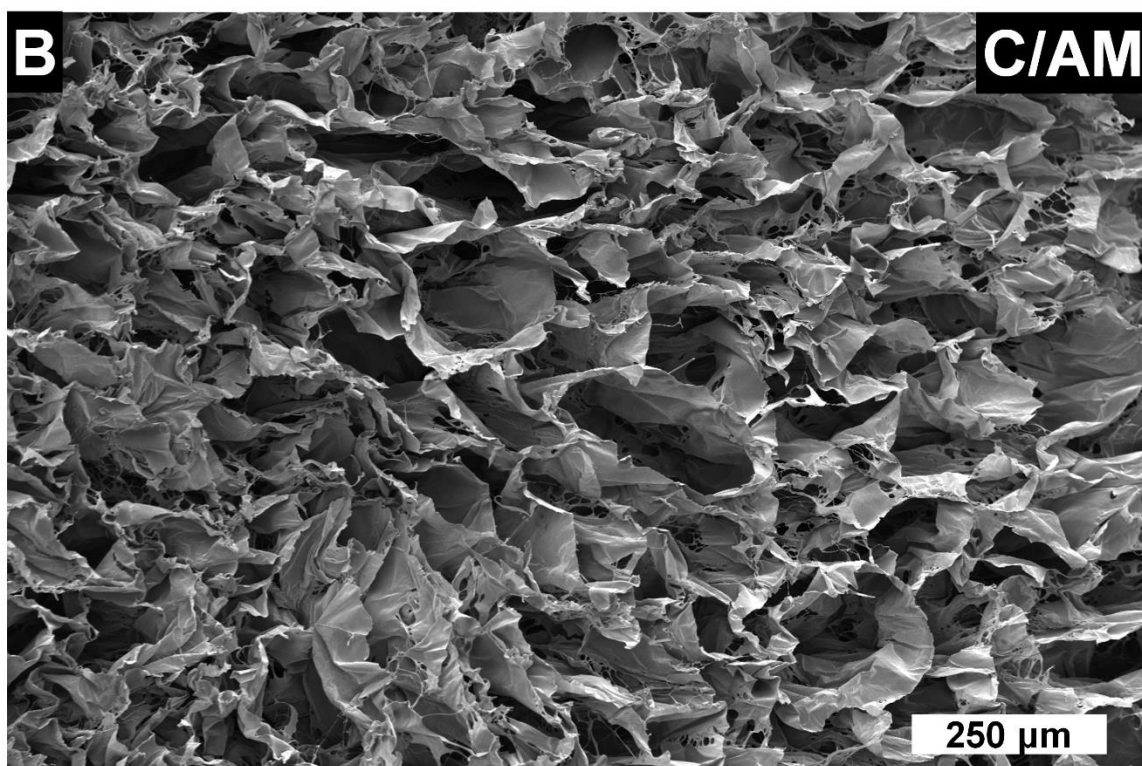
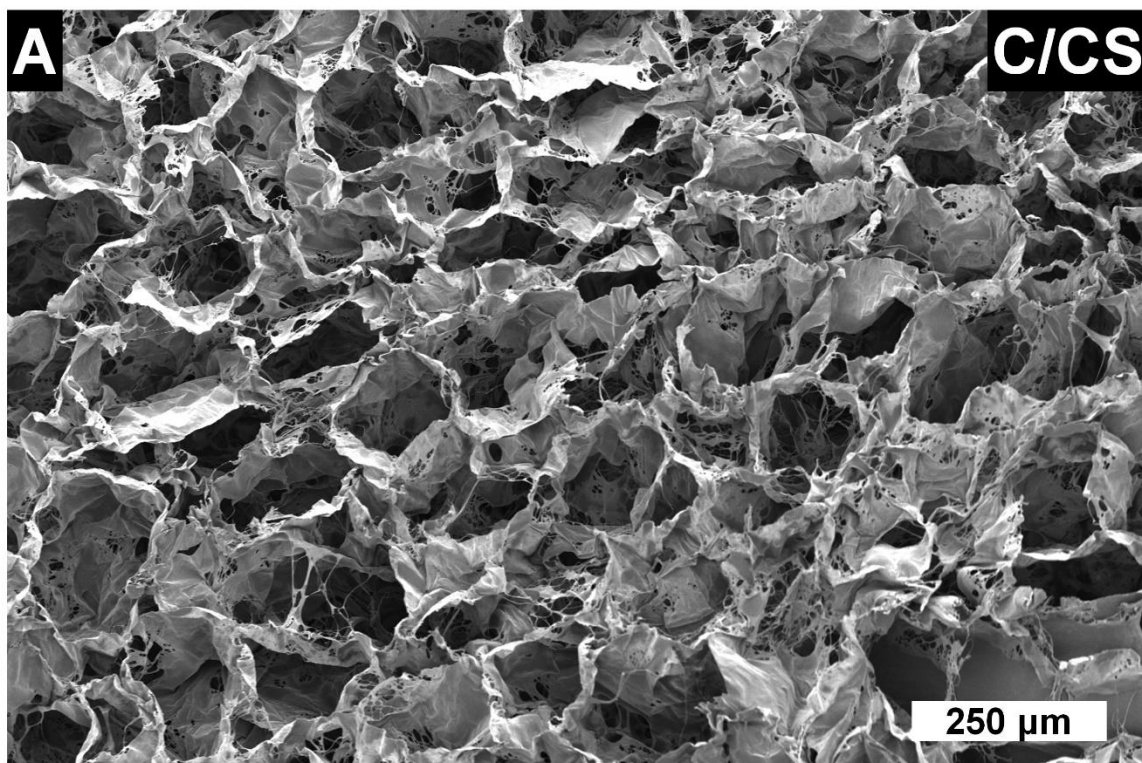


Figure S3. Cross-sectional SEM images of (A) C:CS and (B) C:AM scaffold microstructure. Scale bar = 250 microns.