# Complete Human Penile Scaffold for Composite Tissue Engineering: Organ Decellularization and Characterization

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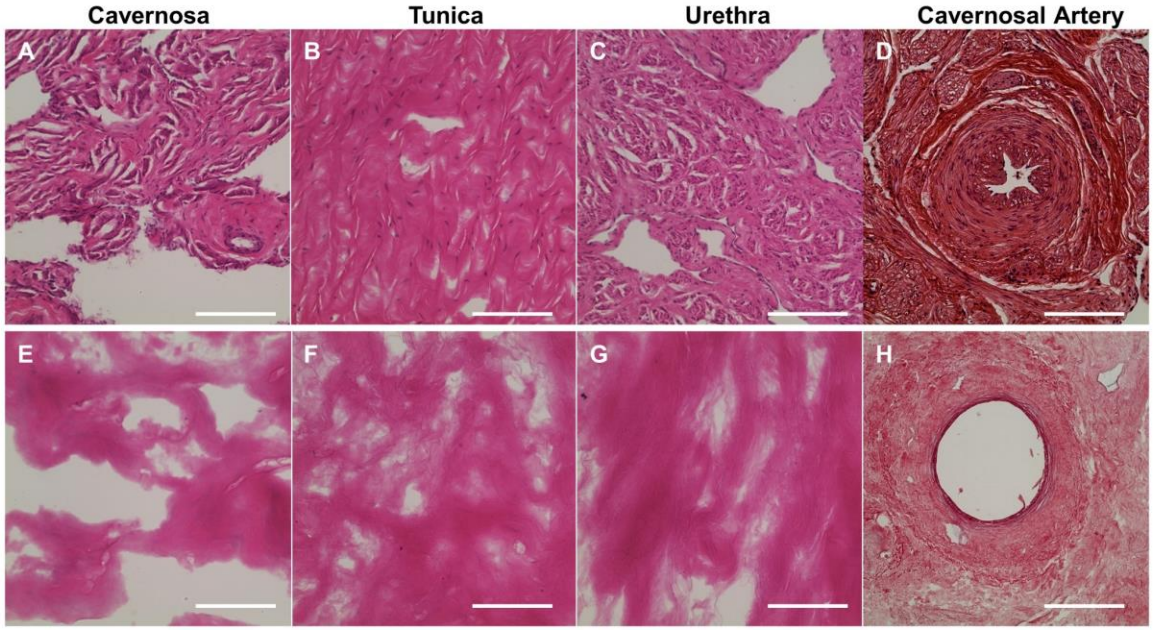
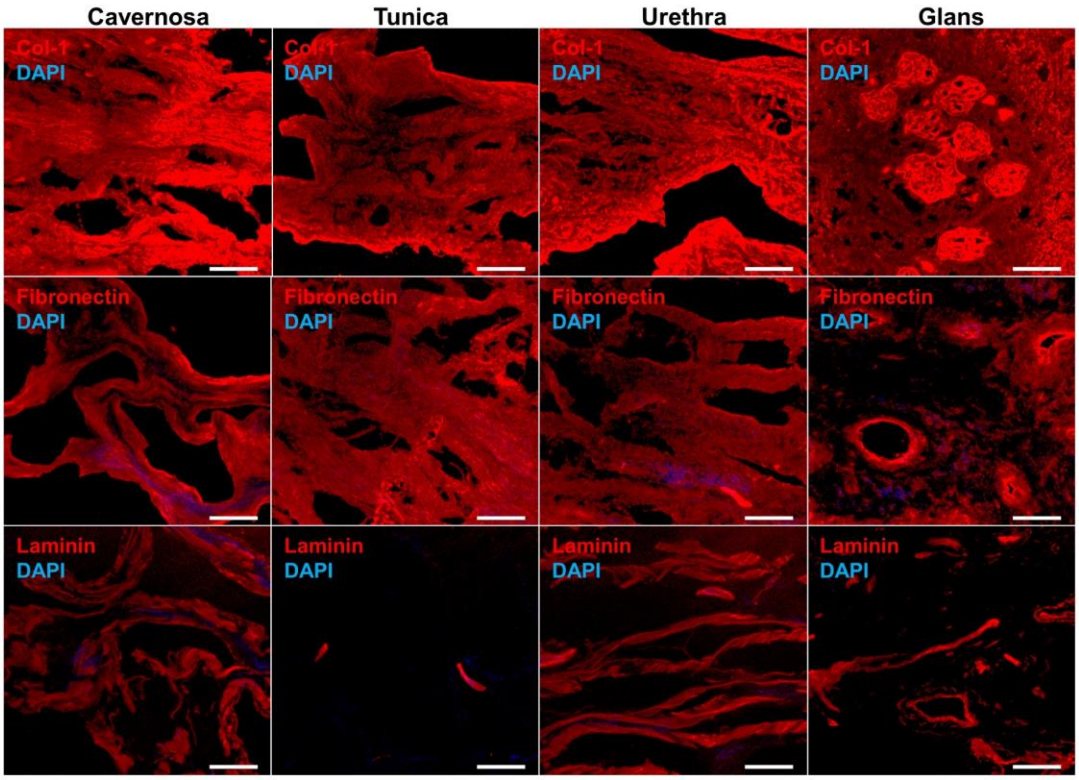
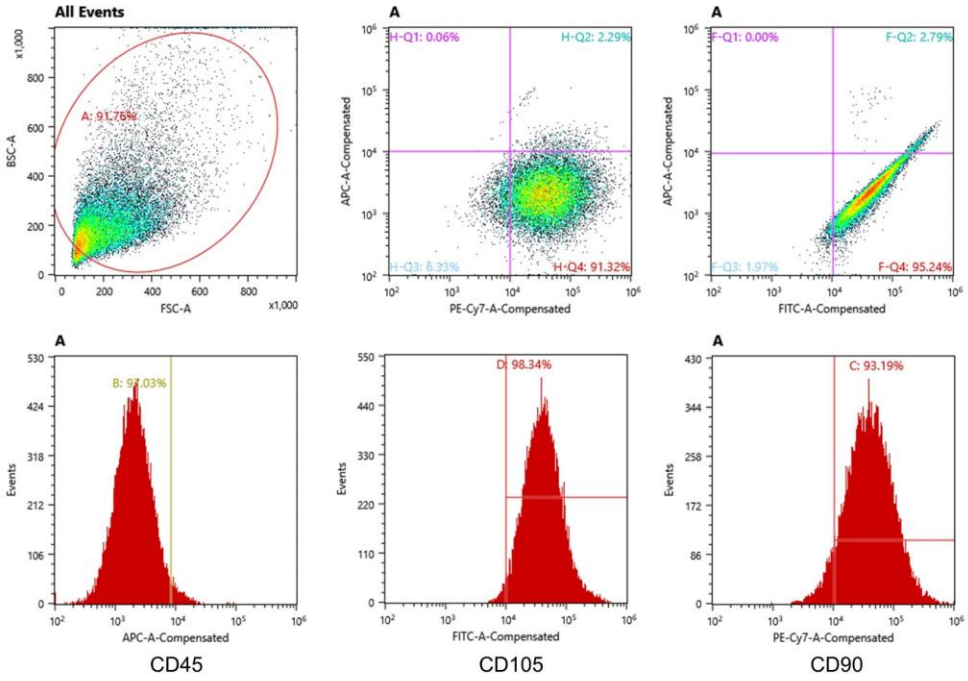


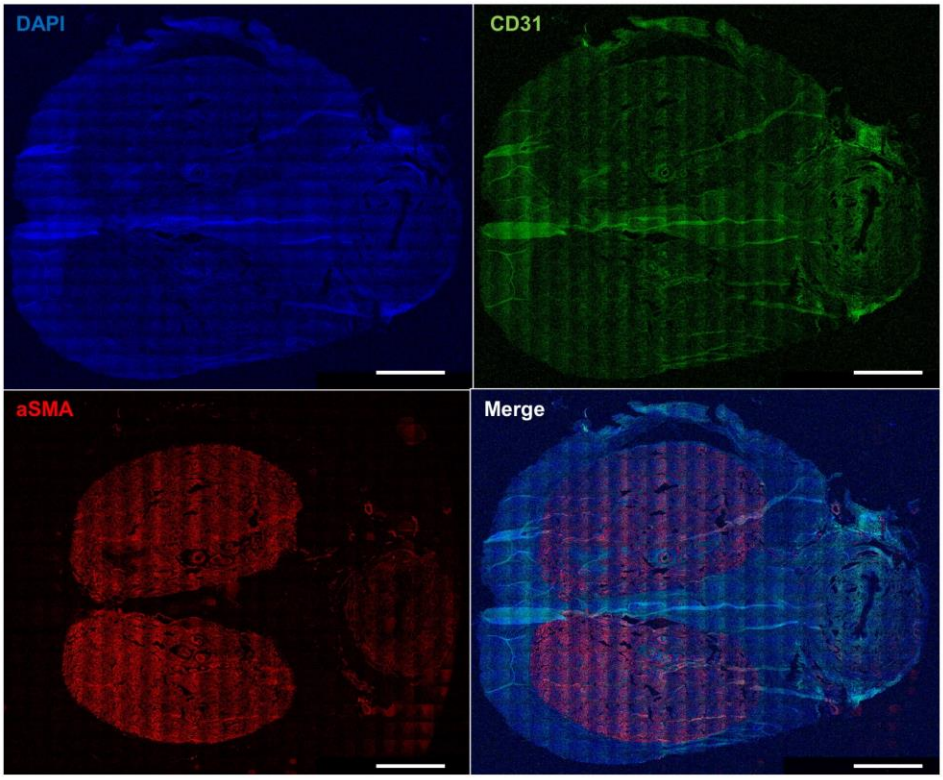

**Supplementary Figure 1. H&E staining for characterization of decellularization across each anatomical unit.** (A-D)
before and (E-H) after decellularization in cavernosa, tunica, urethra and cavernosal artery respectively. Scale bar:200μm.




**Supplementary Figure 2. Immunofluorescence staining of decellularized penile scaffold across each anatomical unit.** Immunofluorescent staining of ECM proteins (Collagen-1, Fibronectin and Laminin) after decellularization in the cavernosa, tunica albuginea, urethra, and glans. Scale bar:100μm.




**Supplementary Figure 3. Flow cytometry of ADSC cells used for scaffold reseeding.**
Flow cytometry data showed that
SVFs obtained from human adipose tissue were negative for CD45 (97.03%) and positive for CD105 (98.34%) and CD90
(93.19%).




**Supplementary Figure 4. Immunofluorescent staining of cross section of whole penis.** Immunofluorescent staining of
cross section of native penis tissue with endothelial cell marker (CD31) and smooth muscle cell marker (aSMA). Scale bar:
5mm.