Supplementary:

A Personalized Glomerulus Chip Engineered from Stem Cell-Derived Epithelium and Vascular Endothelium

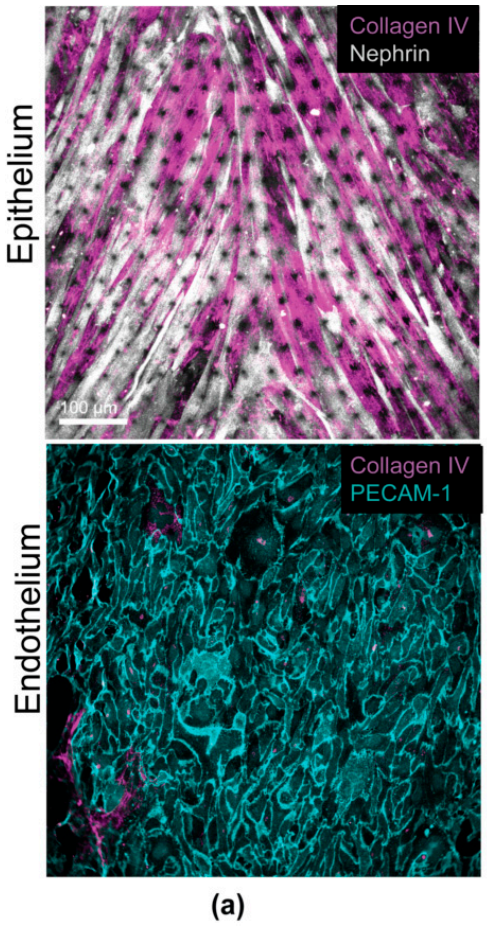

Figure S1. Human iPS cell-derived epithelium and endothelium secrete the most abundant glomerular basement membrane protein, collagen type IV. (a) Representative confocal microscopy images of the collagen type IV-positive (magenta), Nephrin-positive (white) epithelium (top), collagen type IV-positive (magenta), and PECAM-1-positive endothelium (bottom). Scale bar 100 μm.

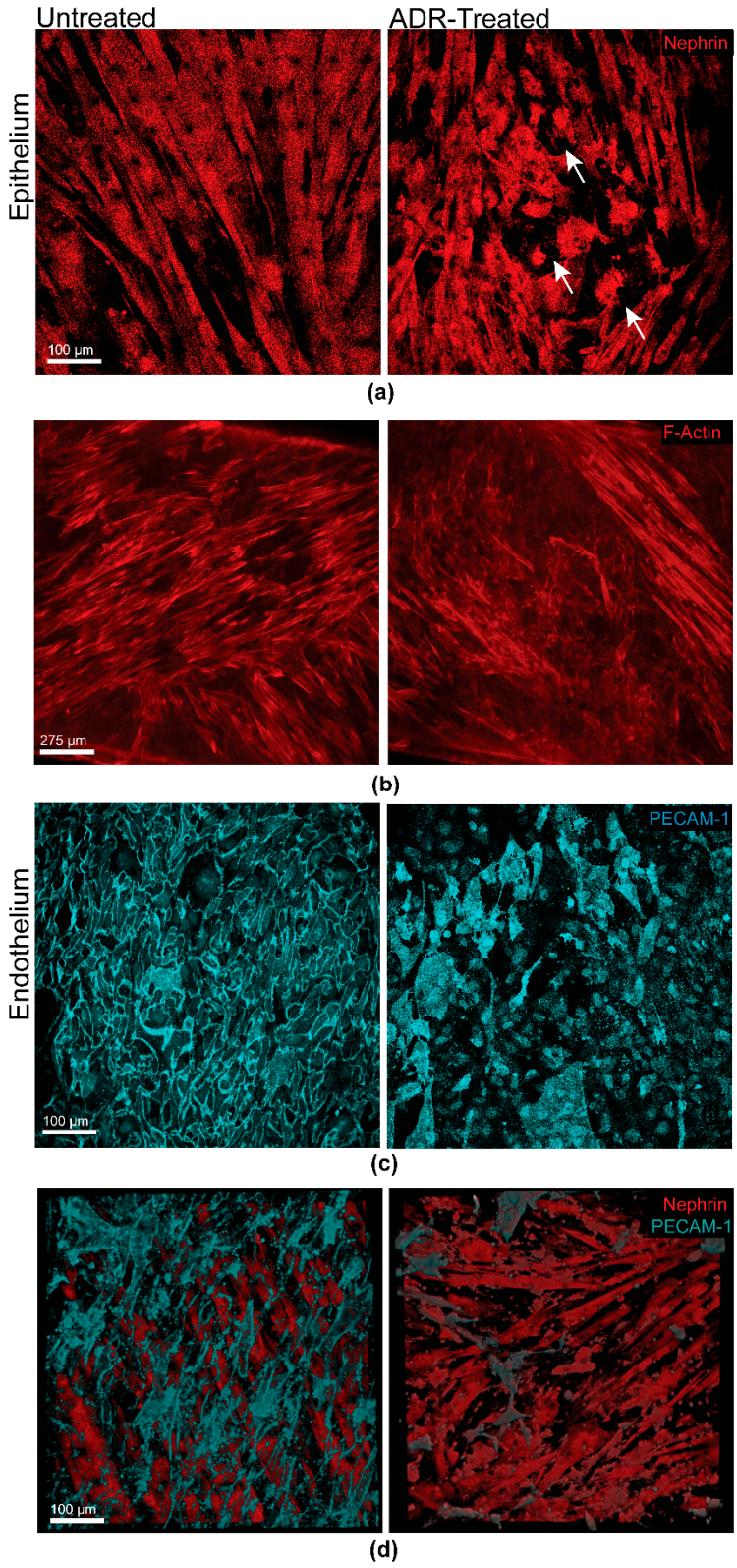

Figure S2. Human iPS cell-derived epithelium (podocyte layer) and endothelium recapitulate Adriamycin-induced tissue damage. (**a**) Representative confocal microscopy images of the untreated and treated Nephrin positive (red) podocytes in the urinary channel. Arrows indicate specific podocytes' cell body retraction. Scale bar 100 µm; (**b**) Representative immunofluorescent images of the untreated and treated F-actin positive (red) podocytes in the urinary channel. Scale bar 275 µm (**c**) Representative confocal microscopy images of the untreated and treated PECAM-1 positive (cyan) endothelium in the capillary channel. Scale bar 100 µm (**d**) Three-dimensional overlay of Nephrin positive epithelium and PECAM-1 positive endothelium. Images represent basal to apical view. Scale bar 100 µm.