

## **Supplementary Material**

### **Engineered endothelium provides angiogenic and paracrine stimulus to grafted human ovarian tissue**

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**Supplementary Figure 1.** a) Following thaw of cryopreserved ovarian cortical strips, cytochrome P450 labeled follicles (red) are present in abundance. Insets are enlarged in the associated box. Scale bars = 100  $\mu$ m. b) Xenograft of human ovarian tissue co-transplanted with ExECs (green) and intra-vitally administered GIB4 lectin (red). c) Representative sections of ovarian grafts co-transplanted with ExECs, without cells and with human foreskin fibroblasts. Insets are enlarged in the associated box. d) Median density  $\pm$ MAD of total follicles per squared millimeter in smaller (3-6  $\text{mm}^2$ , n=7) or larger (8-18 $\text{mm}^2$ , n=8) ovarian grafts with and without ExECs.

**Supplementary Video 1. Mouse #1 MRI showing coronal sections at 14 and 15 weeks.**

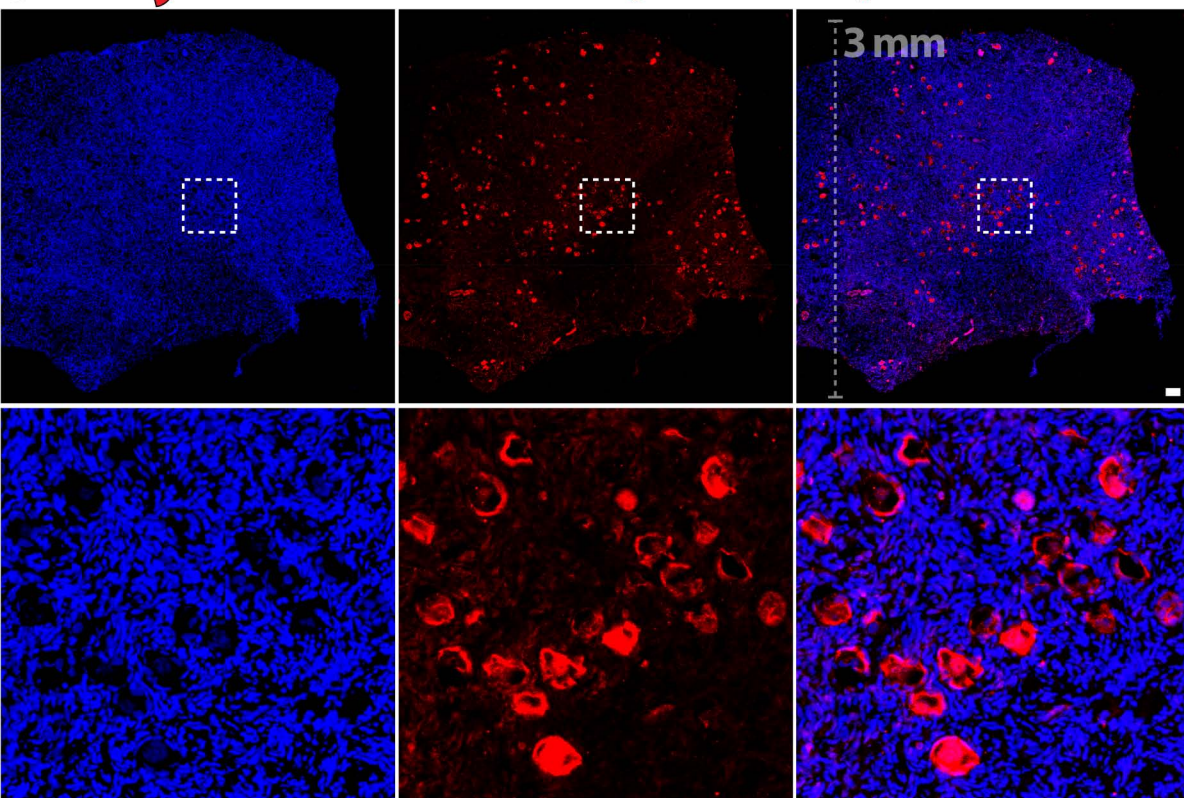
**Supplementary Video 2. Mouse #1 MRI showing sagittal sections at 14 and 15 weeks.**

**Supplementary Video 3. Mouse #3 MRI showing coronal sections at 20, 21 and 22 weeks.**

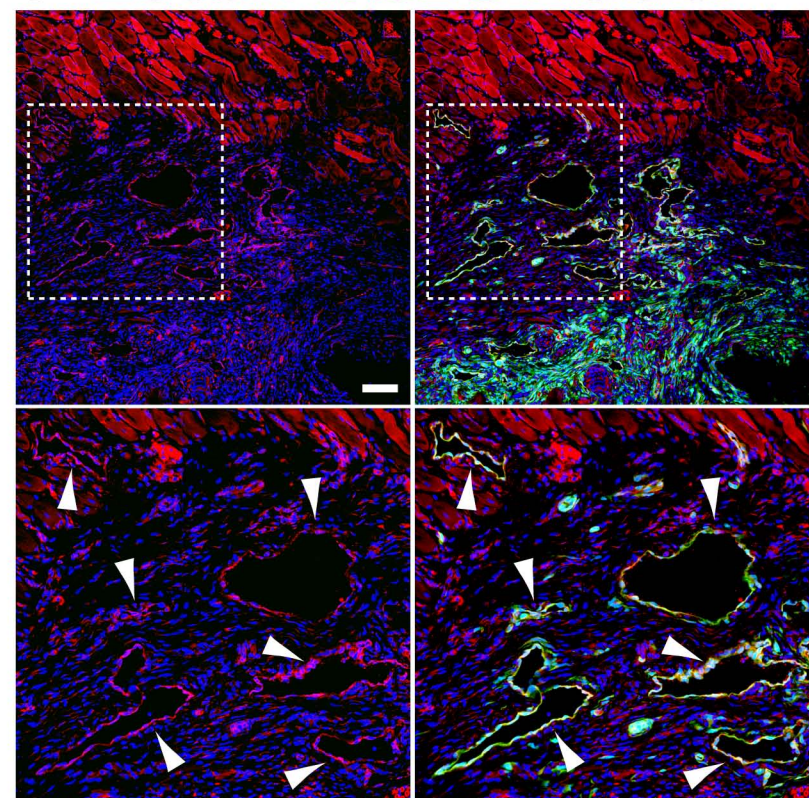


# Supplementary Figure 1

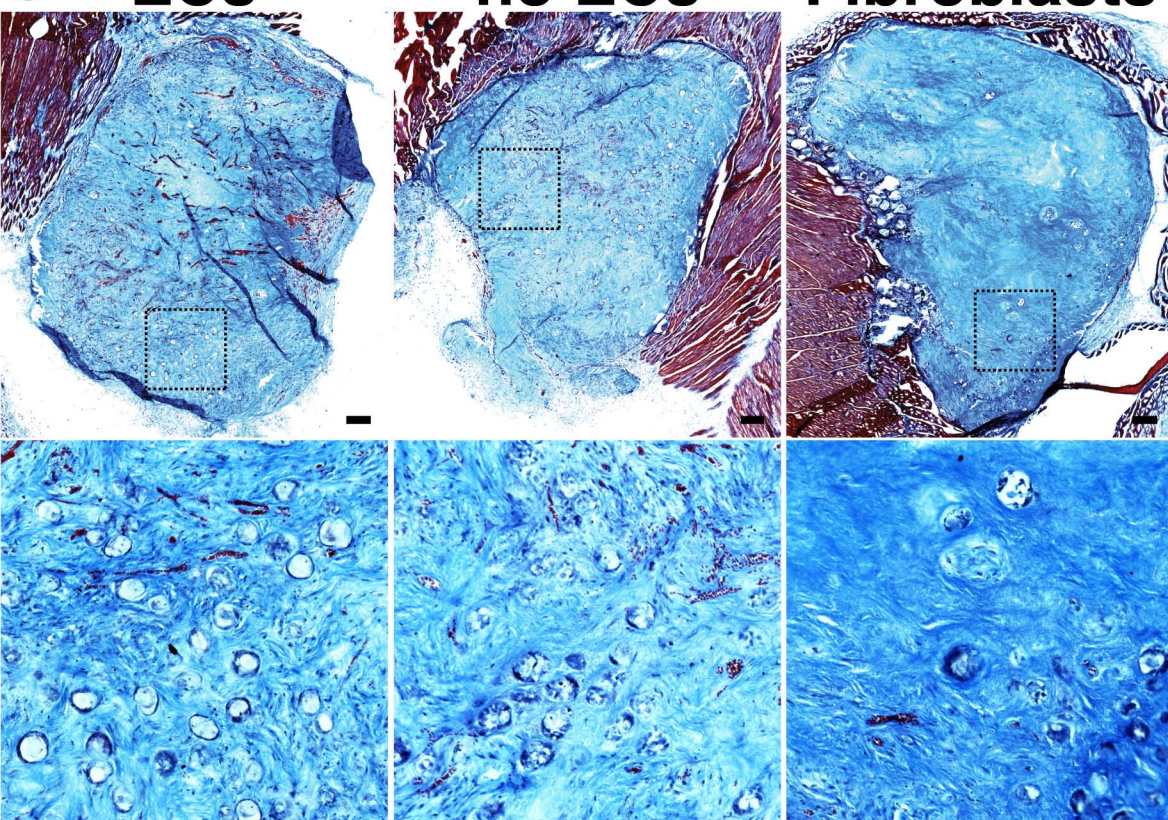
## a Cytochrome P450 (Follicles) Nuclei



## b Lectin MsEC Nuclei



## c ECs no ECs Fibroblasts



## d

□ - no ECs ■ - ECs

