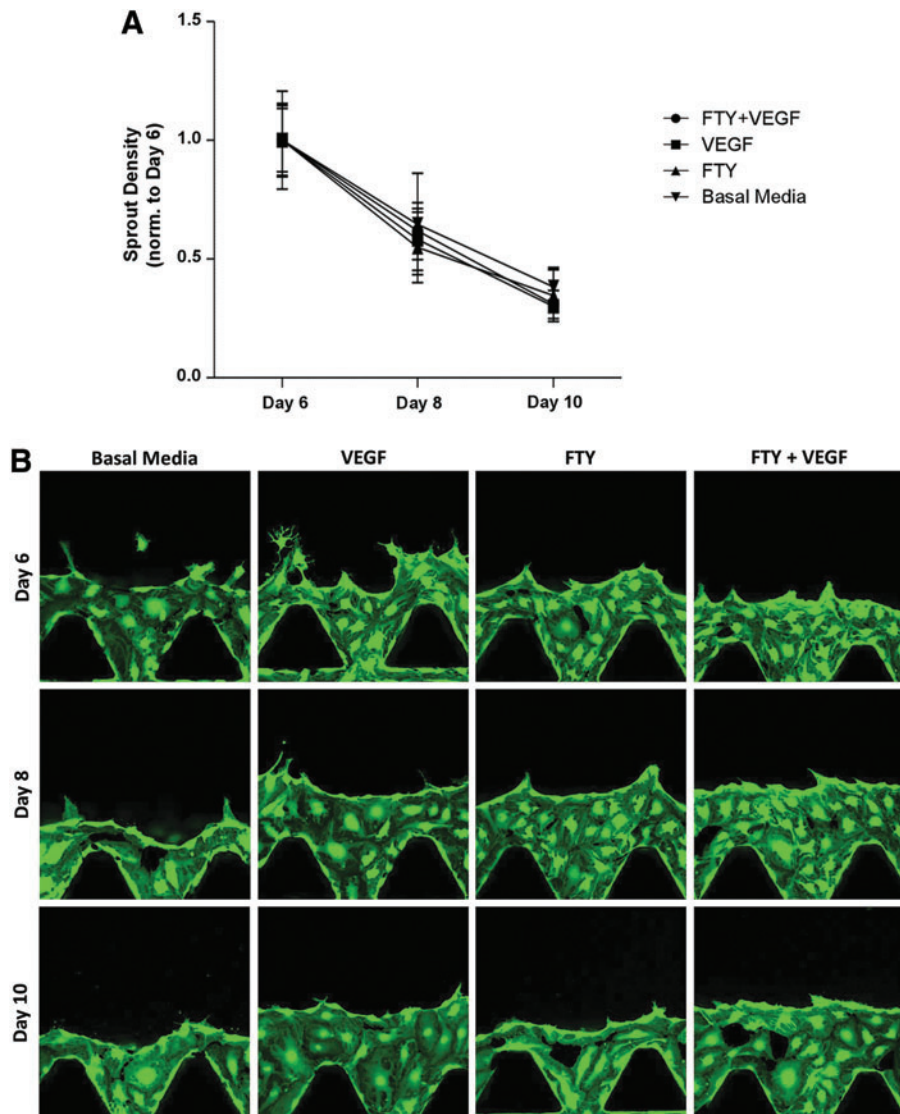


Supplementary Data



SUPPLEMENTARY FIG. S1. (A) Sprout density, with each experimental group normalized to its day 6 value (shown as unity). At time points later than 6 days postseeding, sprout density in all groups noticeably decreases due to the isotropic stiffness of the gel. We believe longer time points are achievable only with the incorporation of solid posts or beads dispersed throughout the gel region. This study was the basis for selecting day 6 as the optimum time point to observe developed sprout morphology in this device. Error bars represent standard error. (B) Representative images of sprout density. Magnification = 20 \times . Green color indicates GFP.