

SUPPORTING INFORMATION

TITLE: Coacervate delivery of growth factors combined with a degradable hydrogel preserves heart function after myocardial infarction

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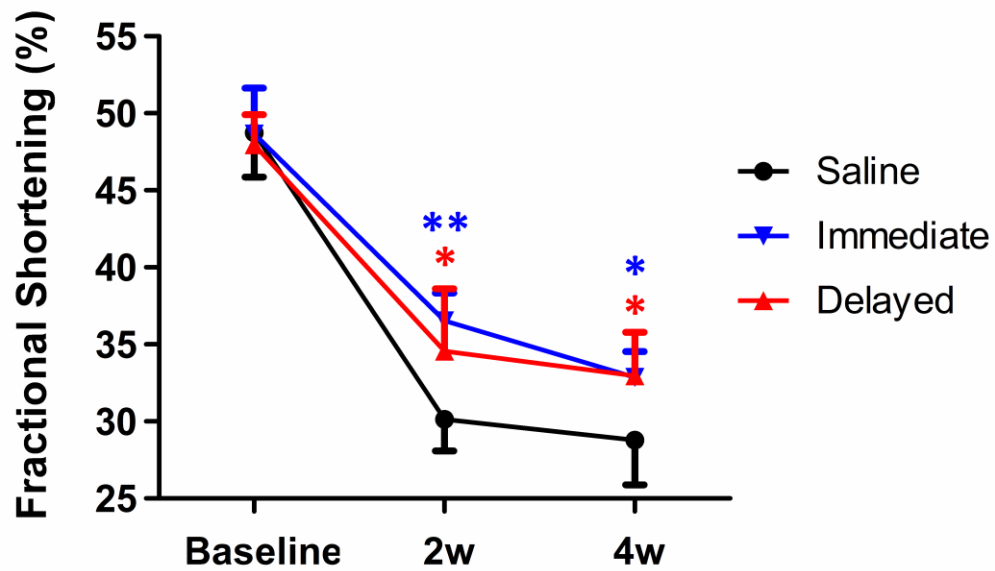


Figure S1. Functional analysis of delayed combined treatment. Rat infarcts were injected with Hydrogel+Coacervate immediately or delayed to 1 week after infarction. Echocardiography was performed prior to MI (baseline) and 2 and 4 weeks after MI, and data presented as fractional shortening. Bars indicate mean $\pm$ SD of n=8 for Saline group, n=10 for Immediate group, and n=3 for Delayed group. *p<0.05, **p<0.01 compared to Saline group.

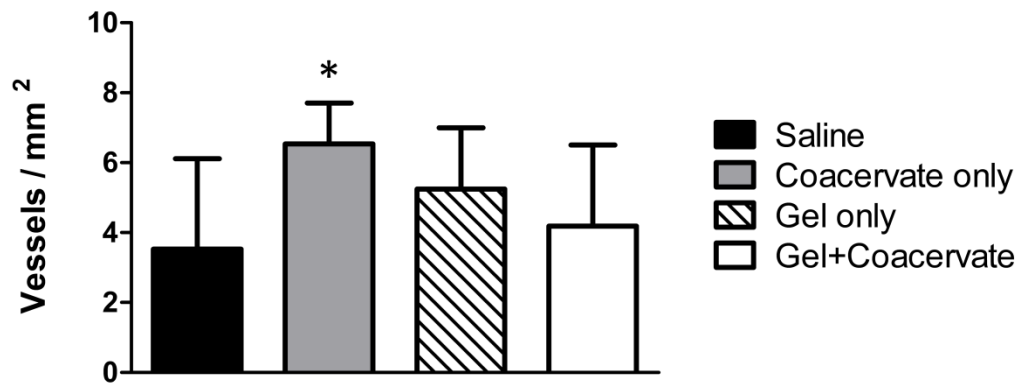


Figure S2. Border zone blood vessel quantification. Mature blood vessels were identified by α -smooth muscle actin immunohistochemical staining for smooth muscle cells. Blood vessels in the border zone surrounding the infarct region were quantified at 4 weeks post-MI. Bars indicate mean $\pm$ SD of 8-10 rats per group. * $p < 0.05$ compared to Saline group.

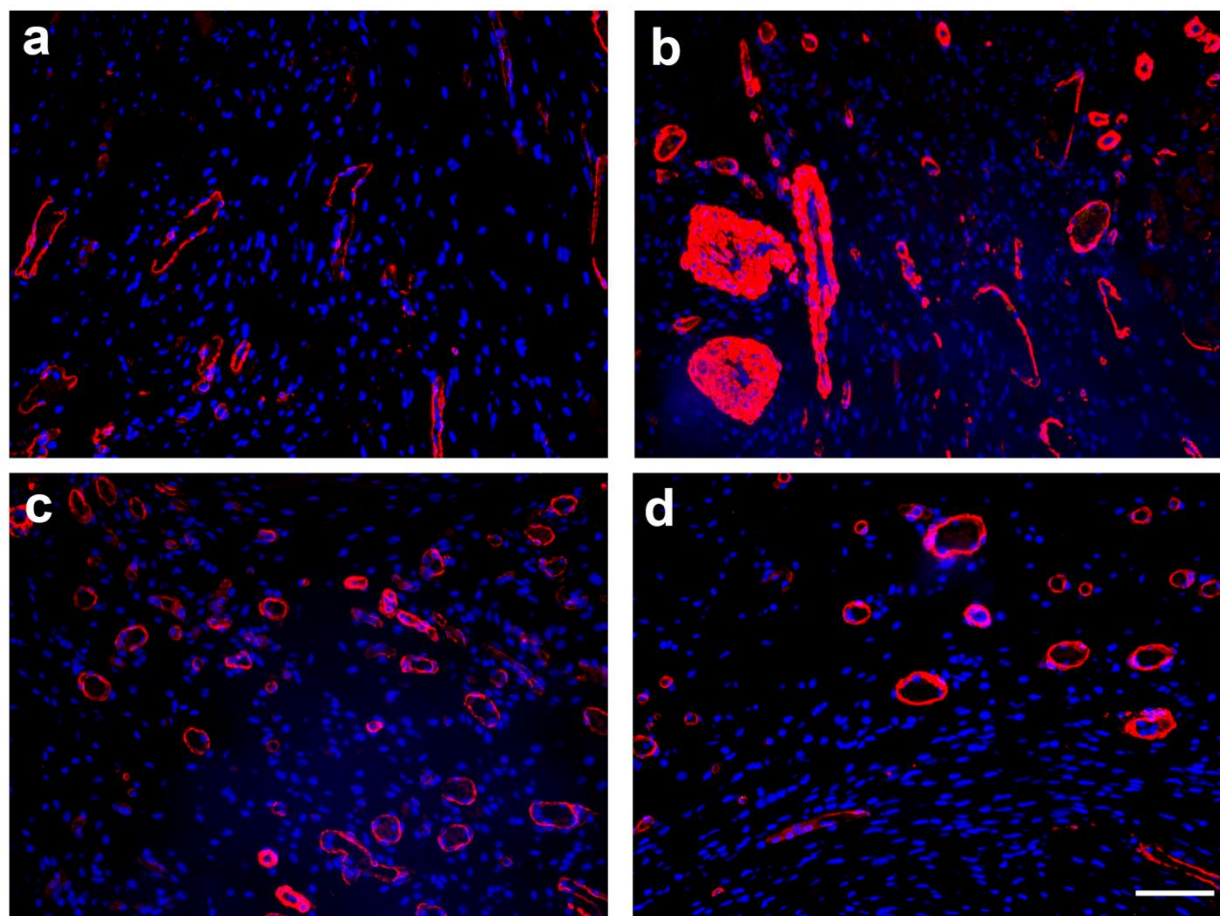


Figure S3. Blood vessel immunostaining micrographs. Mature blood vessels were identified by α -smooth muscle actin immunohistochemical staining for smooth muscle cells (red) and DAPI for cell nuclei (blue) after 4 weeks. Representative images are shown of the infarct region of hearts treated with (a) Saline, (b) Gel only, (c) Coacervate only, and (d) Gel+Coacervate.

Scale bar = 50 μ m.