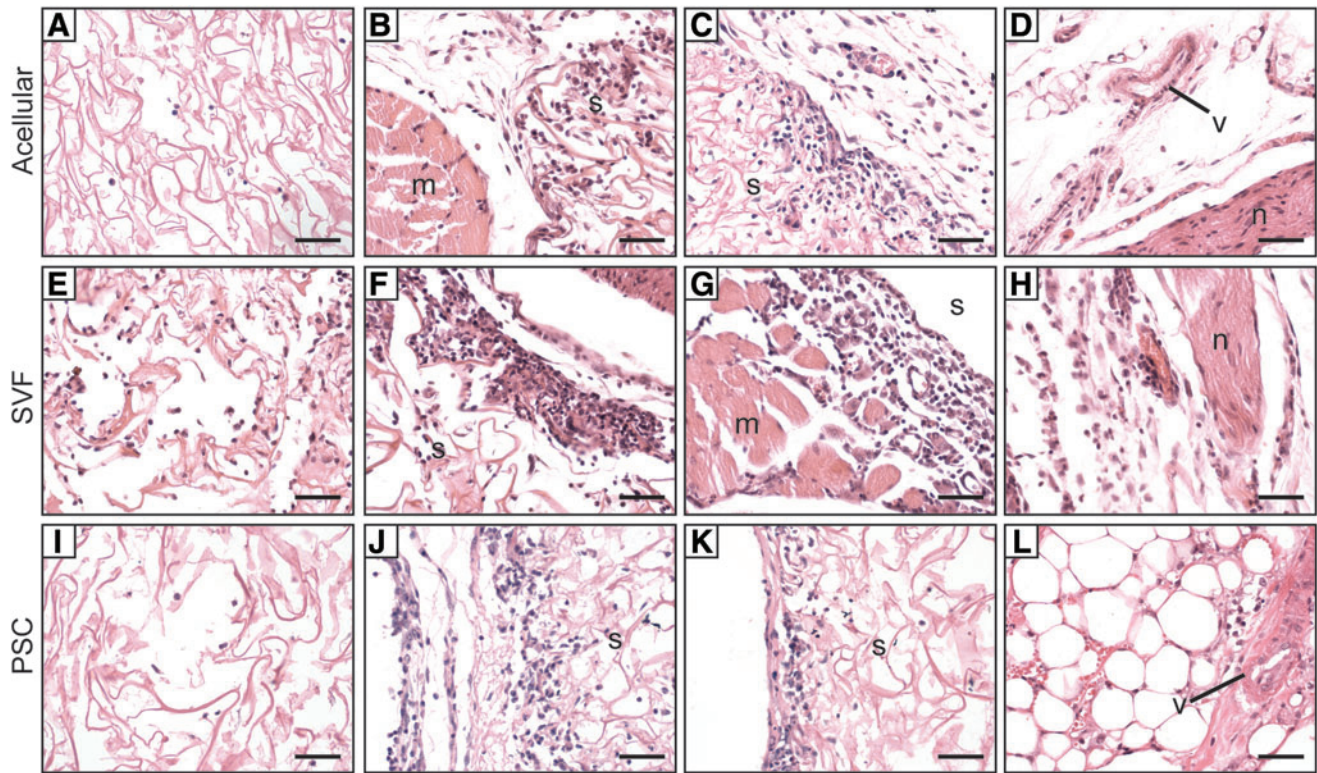


## Supplementary Data



**SUPPLEMENTARY FIG. S1.** Early histological hematoxylin and eosin appearance after SVF or PSC intramuscular implantation in immunocompetent C57BL/6 mice. (A–D) Histological appearance of acellular scaffolds. (A) Image to illustrate representative histological appearance of the center of the vehicle alone, 5 days postoperative. Few inflammatory cells are present. (B, C) Images of the immediate peri-implant areas in the vehicle alone, 1 week postoperatively show a slight infiltration of inflammatory cells around the perimeter of the scaffold (s) adjacent to skeletal muscle (m). (D) Few inflammatory cells are present around the vessels (v) and nerves (n) in the tissue adjacent to the implant area. (E–H) Histological appearance of SVF-treated scaffolds. (E) Mixed inflammatory cells are more numerous in the center of the scaffold in SVF-laden implants. (F, G) At the edges of the scaffold (s) there are more dense aggregates of inflammatory cells surrounding the muscle (m). (H) Inflammation around neurovascular structures adjacent to the implant area, including around nerves (n). (I–L) Histological appearance of PSC-treated scaffolds. (I) Less abundant inflammatory cells are present in the center of the PSC-laden implants. (J, K) At the implant edge, mixed inflammatory infiltrates were observed, but to a lesser extent than among SVF-treated samples. (L) Inflammation of nerves and vasculature (v) is less brisk in the tissue surrounding PSC-laden implants.  $N=4$  implants per cell treatment. Scale bar = 50  $\mu$ M. PSC, perivascular stem/stromal cells; SVF, stromal vascular fraction.