

## Supplementary Materials for

### **In situ recruitment of regulatory T cells promotes donor-specific tolerance in vascularized composite allotransplantation**

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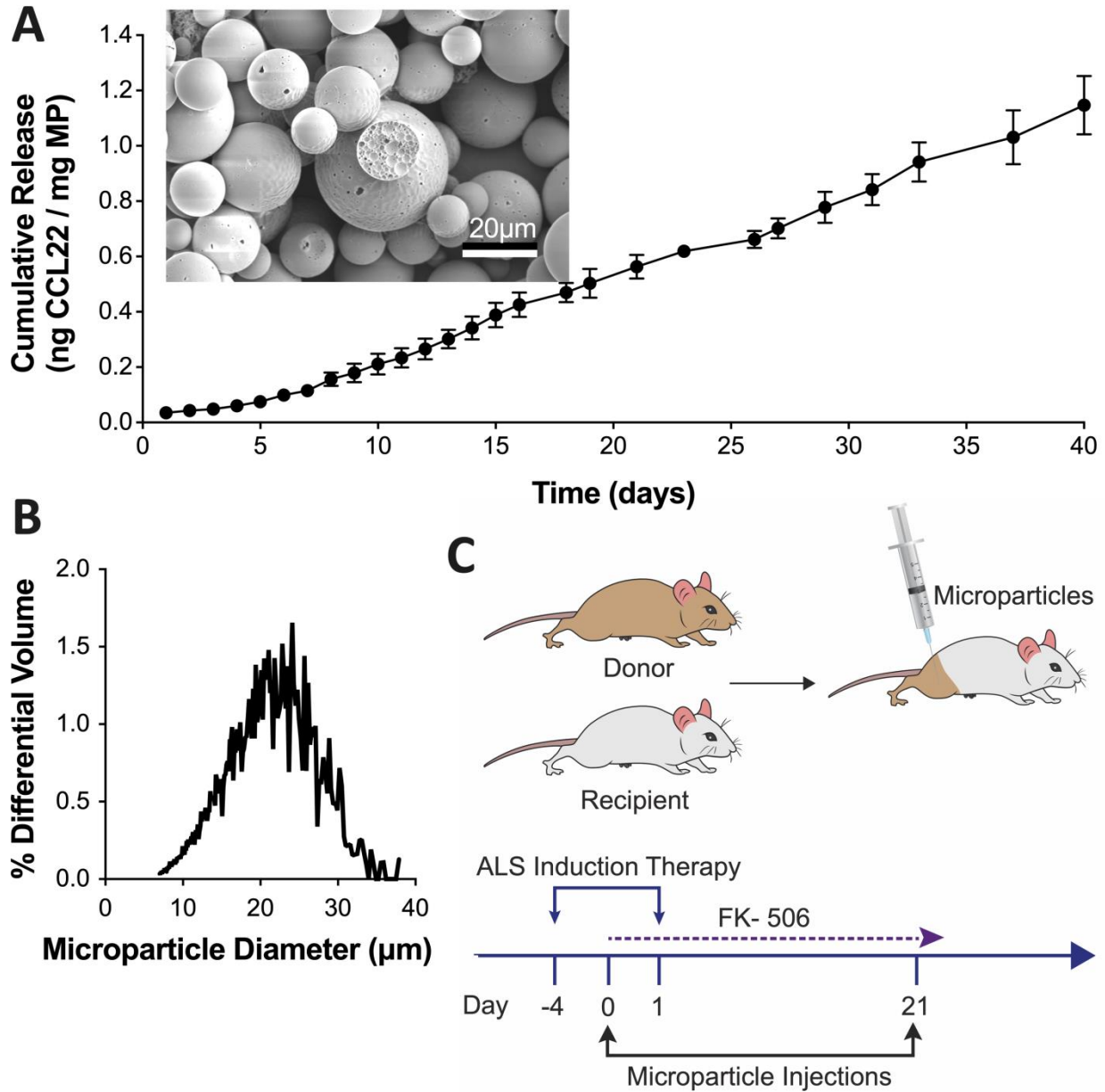
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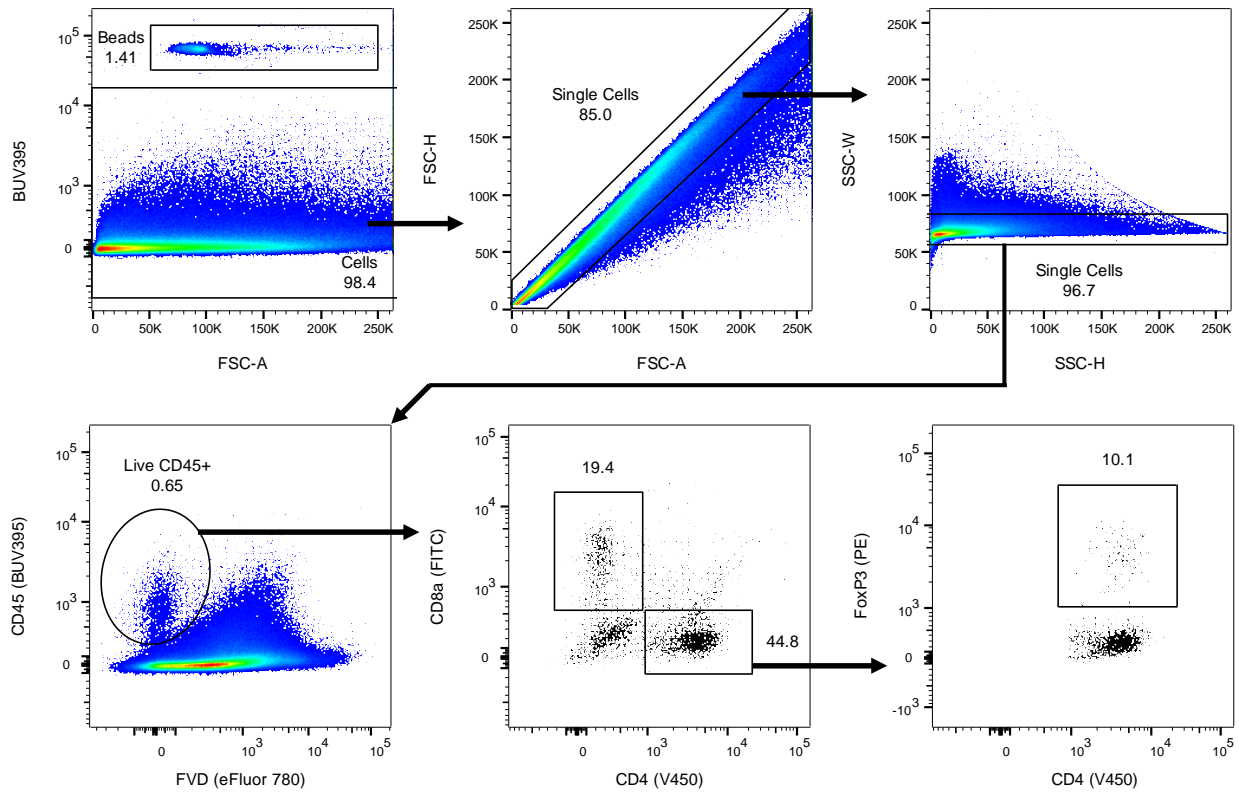
Fig. S1. Characterization of Recruitment-MP and experimental timeline for hindlimb transplantation.

Fig. S2. Skin flow cytometry gating strategy used for Fig. 2C.

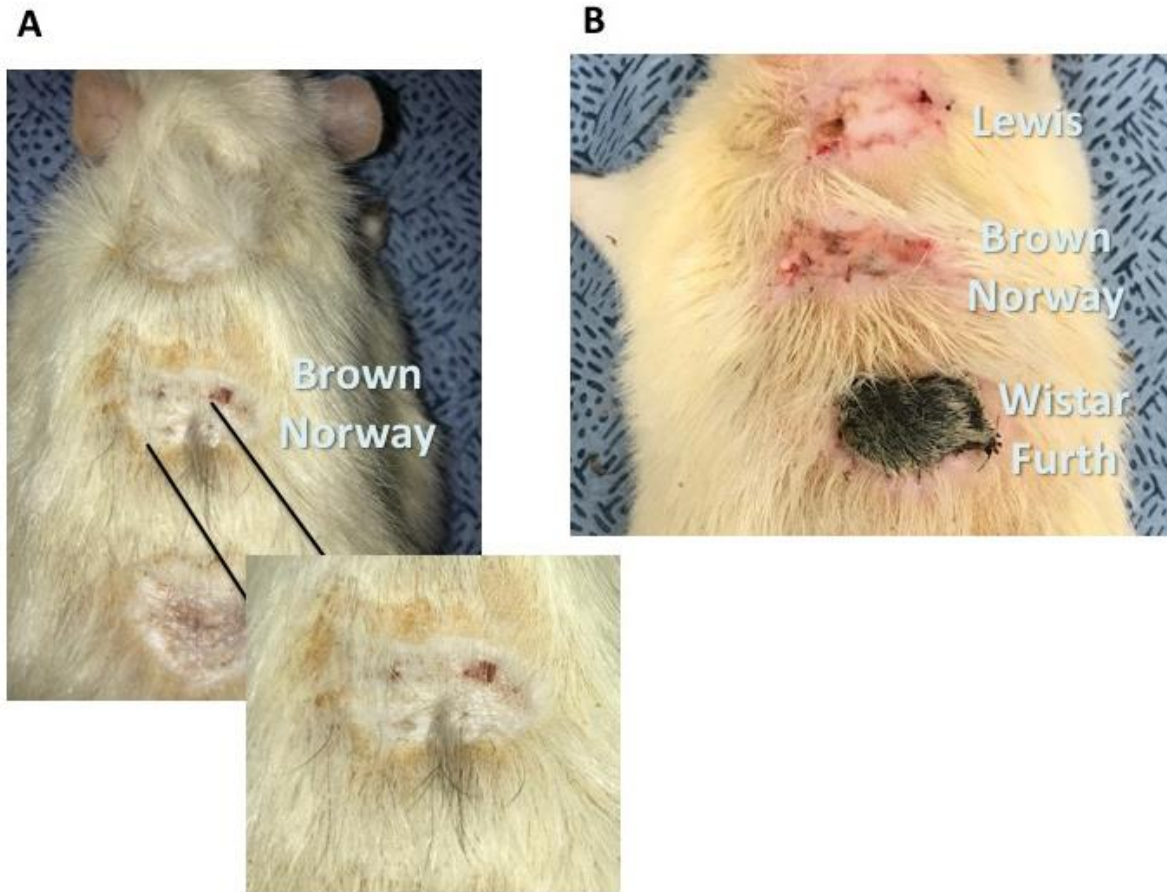
Fig. S3. Representative images of a hindlimb VCA recipient challenged with LEW, BN, and WF nonvascularized skin grafts.



**Fig. S1. Characterization of Recruitment-MP and experimental timeline for hindlimb transplantation.** (A) Release profile shows that Recruitment-MP release CCL22 in a linear fashion for 40 days. Recruitment-MP are spherical in shape and slightly porous (inset), and (B) particle sizing reveals an average particle diameter of 18.3 μm. (C) All animals receive the same baseline immunosuppression protocol consisting of 21 days of FK506 (0.5 mg/kg IP daily), plus two doses of rabbit anti-rat lymphocyte serum (0.5 mL IP). Microparticles were administered subcutaneously in the transplanted graft (unless otherwise noted) on postoperative days (POD) 0 and 21.



**Fig. S2. Skin flow cytometry gating strategy used for Fig. 2C.** Flow analysis of a single cell suspension from a 1cm<sup>2</sup> allograft skin biopsy. Gates identify total leukocytes (Live CD45<sup>+</sup>), CD8<sup>+</sup> cytotoxic T cells, CD4<sup>+</sup> FoxP3<sup>+</sup> Treg, and CD4<sup>+</sup> FoxP3<sup>-</sup> helper T cells.



**Fig. S3. Representative images of a hindlimb VCA recipient challenged with LEW, BN, and WF nonvascularized skin grafts. (A)** Animals with long-term surviving grafts from the 50mg Recruitment-MP group were subject to a secondary skin graft challenge from same strain donors (BN) and third-party donors (WF), with autologous LEW grafts serving as controls. (A) Animals accept BN skin grafts, as evidenced BN hair growth (animal pictured 29 days after skin graft). (B) Conversely, animals fail to accept third-party (WF) grafts, as evidenced by complete graft necrosis (animal pictured 14 days after skin graft). WF grafts eventually slough off as an eschar, and only a contracted wound bed remains. Photo Credit: James D. Fisher, University of Pittsburgh.