

Supplementary Video 1. Lymphatic collector vessel pulsatile activity between the right-side inguinal and axillary lymph nodes as recorded using NIRF imaging 4 hours after i.d. injection of 20 μ l sterile saline in the dorsal aspect of the right hind paw. Small movements are due to respiration. Movie is 4 times faster than actual speed.

Supplementary Video 2. Movie showing absence of normal lymphatic contractile activity, or pumping, in left side inguinal-to-axillary collecting lymphatic vessel 4 hours after i.d. injection of 20 μ l LPS (100 μ g/mouse) in the dorsal aspect of the right hind paw. Small movements are due to respiration. Movie is 4 times faster than actual speed.

Supplementary Video 3. Movie of lymphatic contractile activity, or “pumping,” in left side inguinal-to-axillary collecting lymphatic vessel 4 hours after i.d. injection of 20 μ l IL-1 β (1 μ g/mouse) in the dorsal aspect of the right hind foot. Note unfinished pulses toward axillary area and backward pulses toward inguinal lymph node. Movie is 4 times faster than real speed.

Supplementary Figure 1. Levels of other cytokines that were elevated in mouse serum four hours after i.d. LPS injection in the dorsal aspect of the right hind paw, as measured by Milliplex analysis. MCP-1, RANTES, MCP-5/CCL12, IL-10, IL-12p40, IL-17, IFN- γ , and GM-CSF significantly increased ($p < 0.05$) four hours after LPS injection. $n = 5$ mice per group. $* = p < 0.05$.

Supplementary Figure 2. IFN- γ , MCP-1/CCL2, IL-1 α , and VEGF-C were injected in right hind paws, with no slowing of lymphatic pumping, as represented by pulses/minute, at 4 hours after cytokine/chemokine injection. $n = 5$ mice per group. $* = p < 0.05$.

Supplementary Figure 3. Heat-inactivated TNF- α (2 μ g/mouse) and IL-1 β (1 μ g/mouse) did not affect lymphatic pumping, represented by pulses/minute. Cytokines were heated at 85 $^{\circ}$ C for 15 minutes before i.d. injection in dorsal right hind paw and NIRF imaging 4 hours later. $n = 5$ mice per group. $* = p < 0.05$.

Supplementary Figure 4. Kinetics of LPS and IL-1 β effects on lymphatic pumping, as represented by pulses/minute. LPS (100 μ g/mouse) or IL-1 β (1 μ g/mouse) was injected i.d. in dorsal aspect of right hind paw, followed by NIRF imaging at 30, 60, 90, and 120 minutes. Lymphatic pumping decreased at a similar rate after either LPS or IL-1 β injection. Left graph shows individual mouse side results. Right graph shows combined mouse side results.