

Supplementary Information for

The effects of VEGF-centered biomimetic delivery of growth factors on bone regeneration

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Fig. S1 SEM photographs showing the gross appearance of LSS particle, pluronic mixture-infiltrated LSS particle, and MP particle.

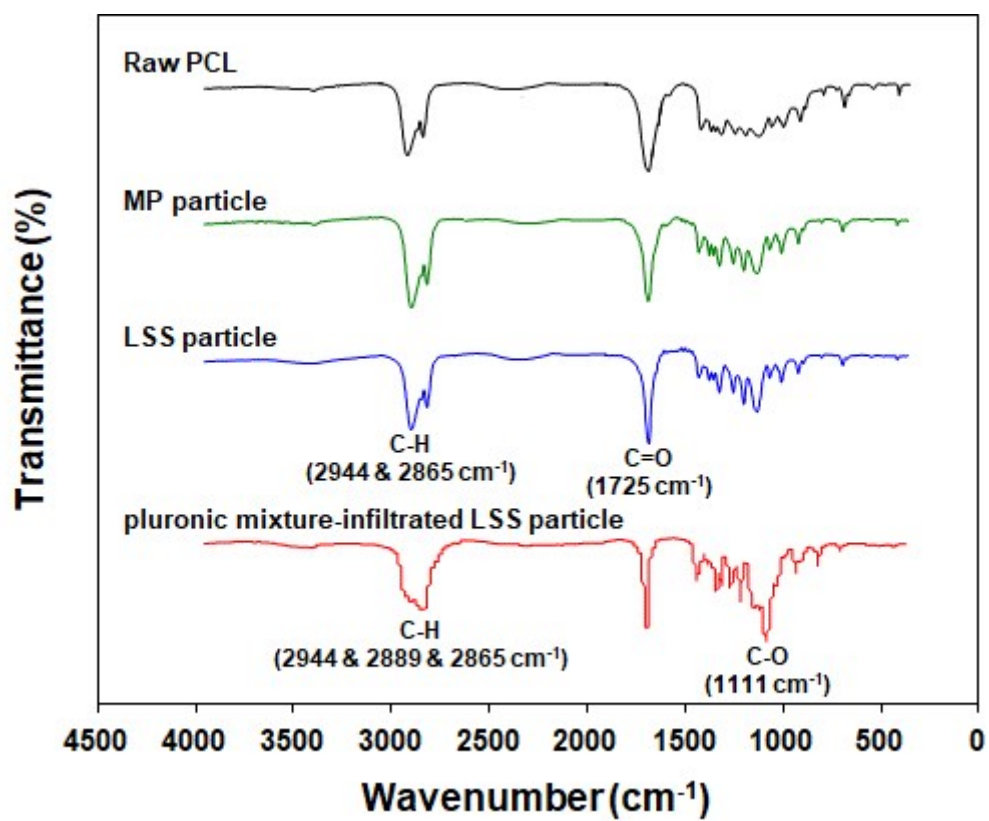


Figure S2. FTIR spectra of LSS particles, pluronic mixture-infiltrated LSS particles, MP particles, and raw PCL.

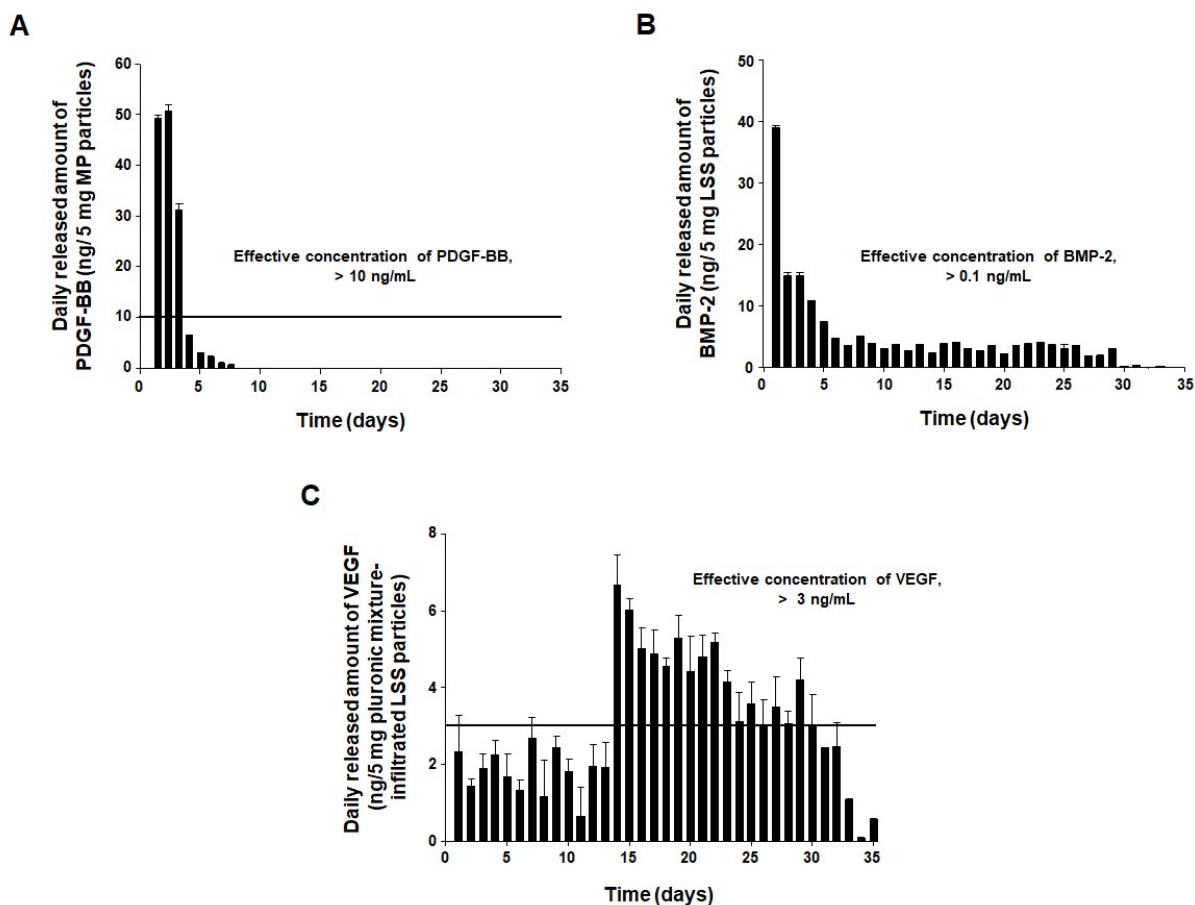


Fig. S3 Daily release behavior of PDGF-BB, BMP-2, and VEGF from MP, LSS, and pluronic mixture-infiltrated LSS particles, respectively. (A) PDGF-BB was released from MP particles for 3 days (fast release) at an effective concentration to induce cell migration (>10 ng/mL). (B) BMP-2 was continuously released from LSS particles for 34 days (continuous release) at an effective concentration to induce osteogenic differentiation (> 0.1 ng/mL). (C) The pluronic mixture-infiltrated LSS particles showed the delayed/continuous release of VEGF (continuous release at an effective concentration for angiogenic differentiation after 14 days (> 3 ng/mL)).

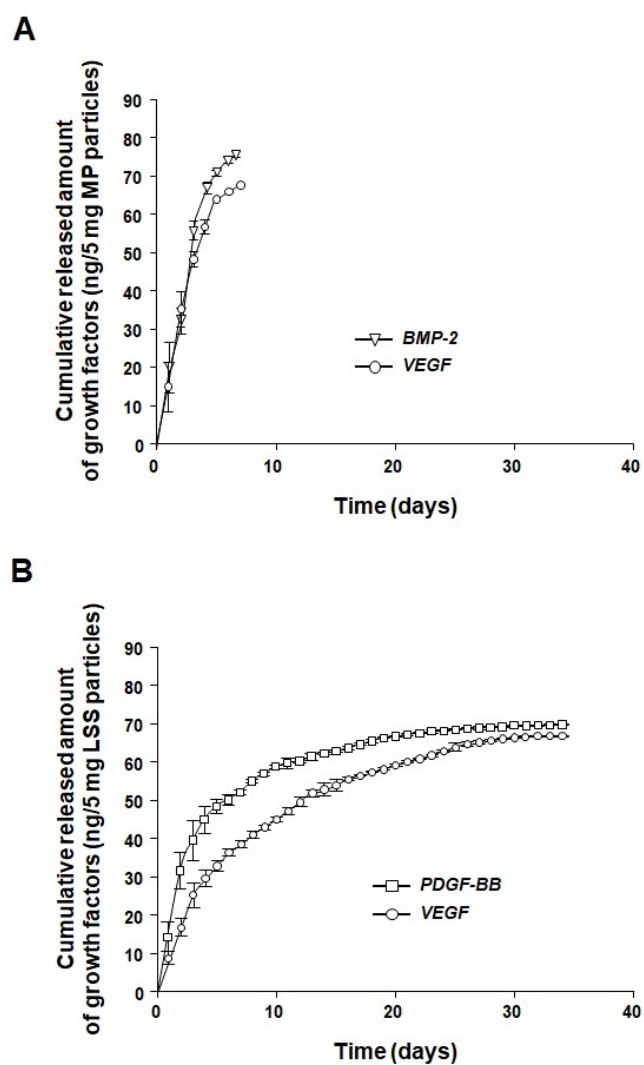


Fig. S4 Cumulative release behavior of growth factors from MP and LSS. (A) MP particles showed fast release of BMP-2 and VEGF within ~ 7 days, and (B) LSS particles allowed continuous release PDGF-BB and VEGF over 30 days.

