Electronic Supplementary Material (ESI) for Biomaterials Science. This journal is © The Royal Society of Chemistry 2023

Supporting Information



Figure S1. ¹H NMR spectrum of RSF and GMA-SF.



Figure S2. FTIR spectrum of FT-0, FT-1, FT-2 and FT-3.



Figure S3. Photographs of FT-0, FT-1 and FT-2 incubated in saline for different time.



Figure S4. (A) FTIR spectum of FT-0,FT-1 and FT-2 after incubation in saline for 1 month. (B) FT-IR spectum of of FT-0,FT-1 and FT-2 after incubation in saline for 2 months.



Figure S5. (A) Photograph and (B) microscopic image of a screen with an pore size of 200 micrometers. Scale bar = $200 \ \mu m$.



Figure S6. (A) Microscope images of FT-0, FT-1, and FT-2 microparticles printed by the screen with 150 μm pore size. (B) Size distribution profiles of FT-0, FT-1, and FT-2 microparticles printed by the screen with 150 μm pore size. Scale bar = 200 μm.



Figure S7. (A) Photograph and (B) microscopic image of a screen with an pore size

of 150 micrometers. Scale bar = 200 μ m.



Figure S8. Photographs of rats after subcutaneous injection for 12 weeks.



Figure S9. Masson's trichrome-stained tissue within the bump after subcutaneous injection for 2, 4, 6 and 8 weeks. Scale bar = $200 \mu m$.



Figure S10. Hematological parameters of rats after injection for 2 (A), 4 (B), 6 (C),

and 8 weeks (D). (n = 3).



Figure S11. H&E staining of the major organs (heart, liver, spleen, lung, and kidney) of rats after injection for 8 weeks. Scale bar = $200 \ \mu m$.