Supplementary information

Polyethylene oxide-poloxamer 407 i*n situ* forming gels: A dual-drug delivery system for periodontal application

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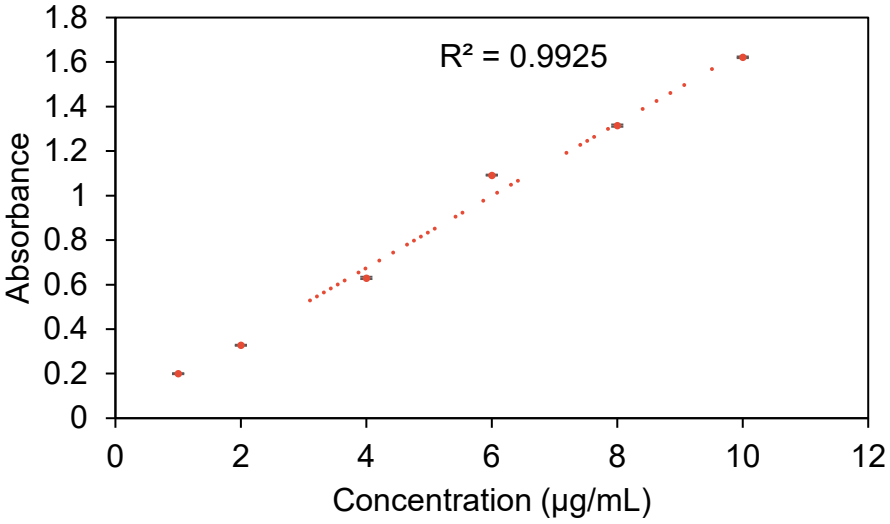

Fig. S1. Calibration curve of curcumin in 70 % v/v ethanol in water

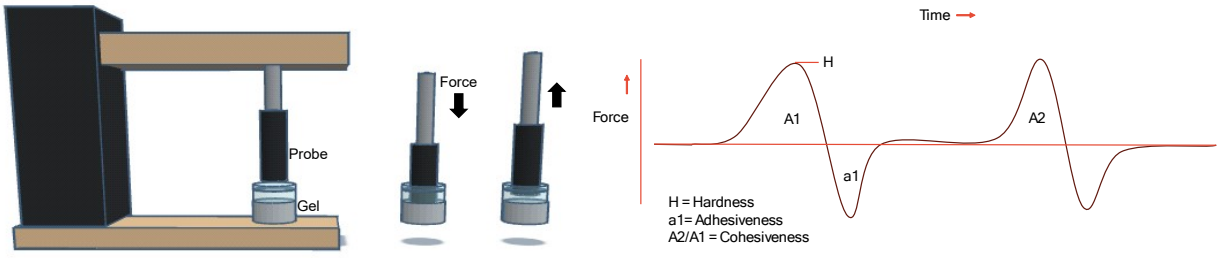

Fig. S2. Illustration of setup to evaluate hardness, cohesiveness, and adhesiveness of ISFG systems

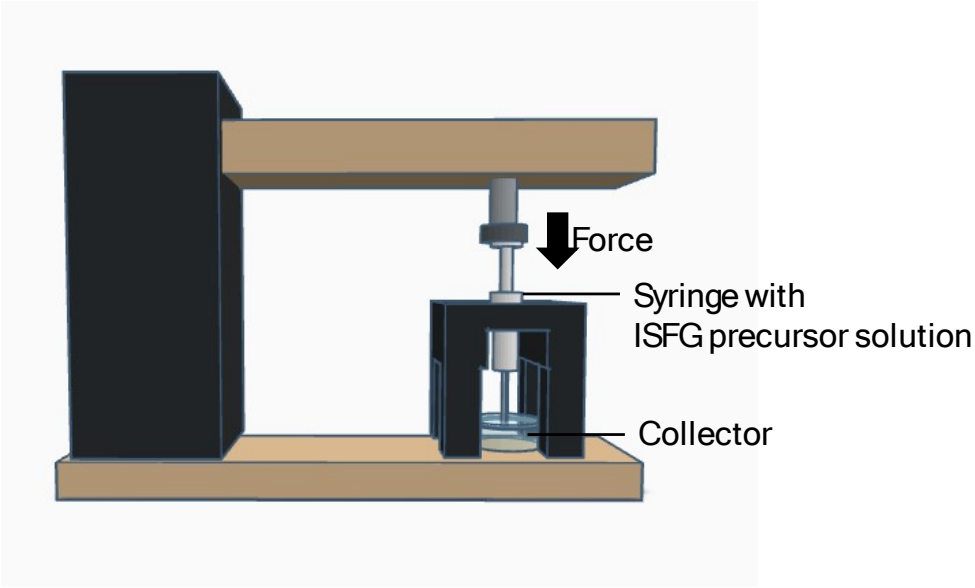

Fig. S3. Illustration to show setup for syringeability force determination

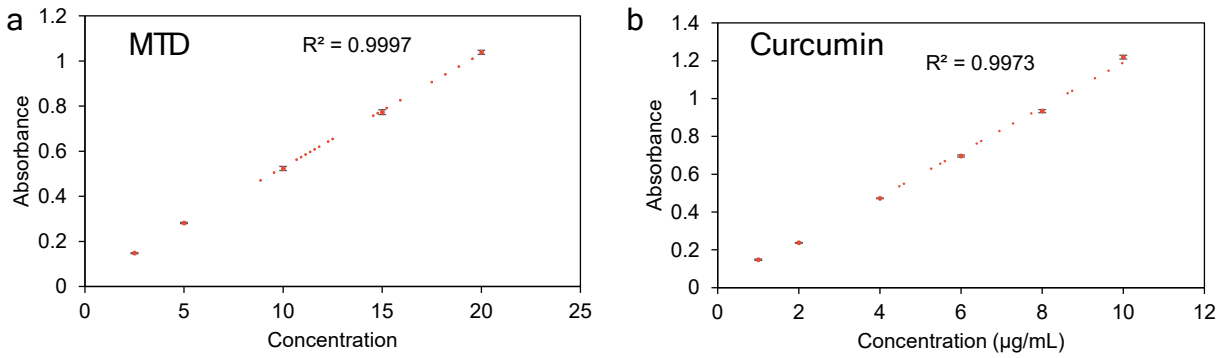

Fig. S4. Calibration curves for (a) metronidazole and (b) curcumin in dissolution medium

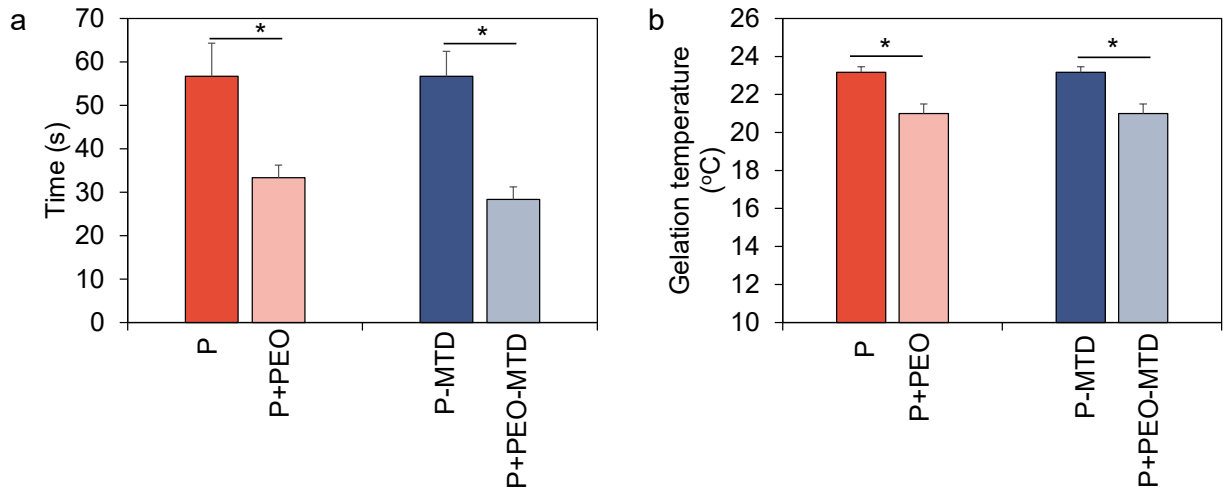

Fig. S5. Effect of PEO and MTD loading on gelation time and temperature. (a) Gelation time for ISFGs. (b) Gelation temperature for ISFGs. n = 3, *$p < 0.05$

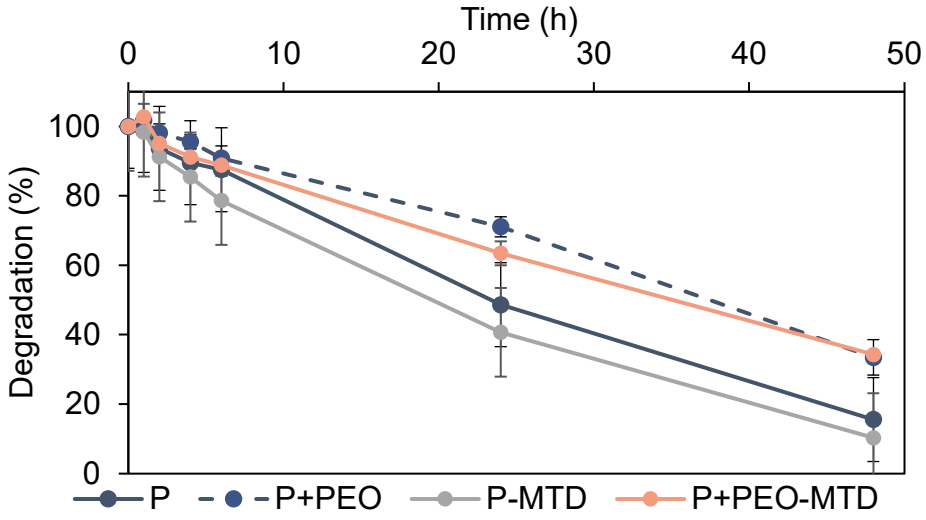

Fig. S6. Effect of PEO and MTD loading on the degradation of ISFGs

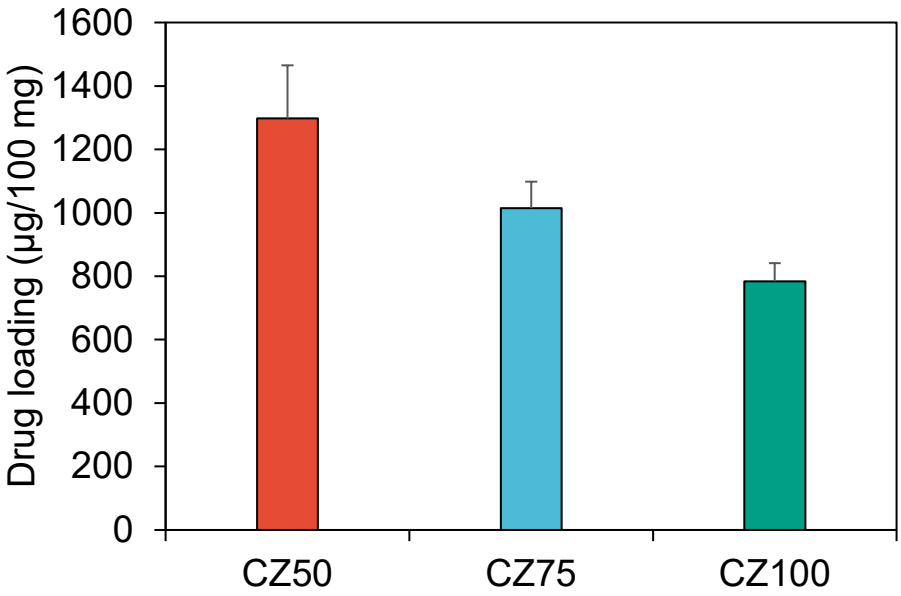

Fig. S7. Drug (curcumin) loading for three nanoparticle formulations

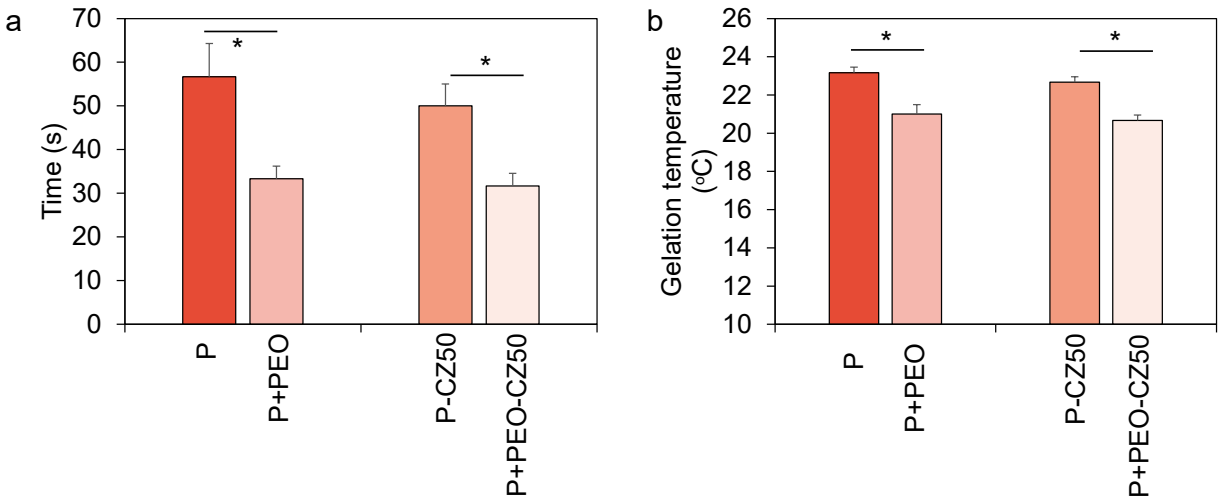

Fig. 7. Effect of PEO and nanoparticles loading on gelation time and temperature. (a) Gelation time for ISFGs. (b) Gelation temperature for ISFGs. n = 3, *$p < 0.05$

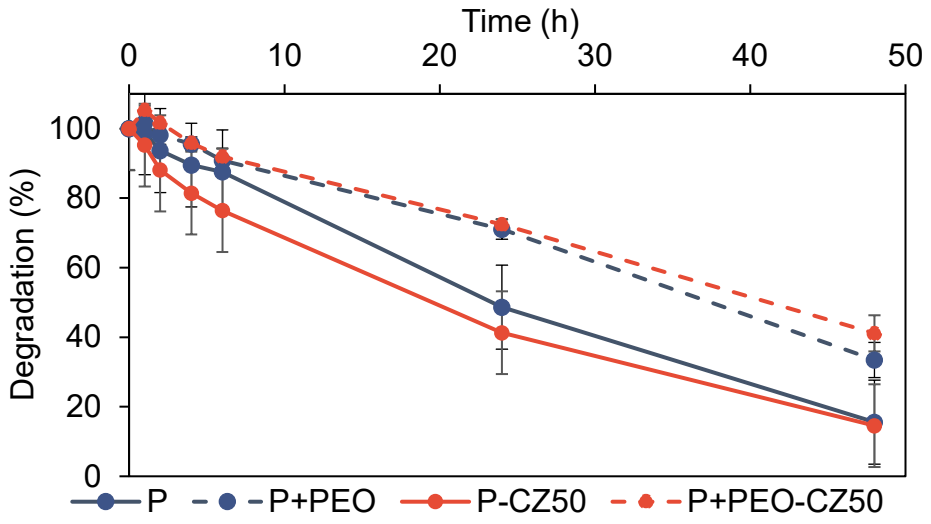

Fig. 8. Effect of PEO and nanoparticles loading on the degradation of ISFGs

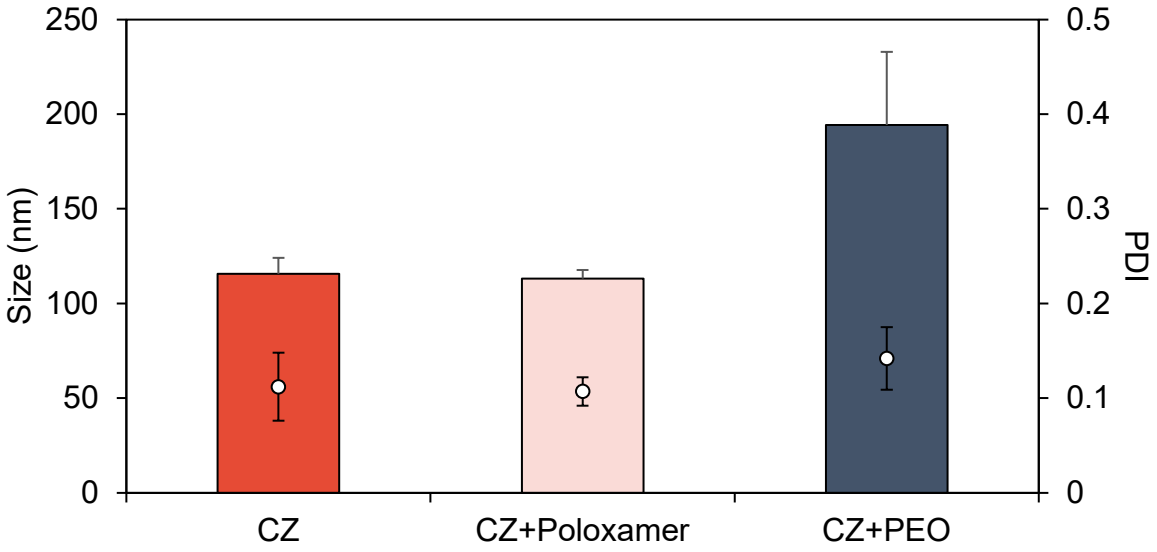

Fig. S9. Effect of the addition of PEO on nanoparticles' size

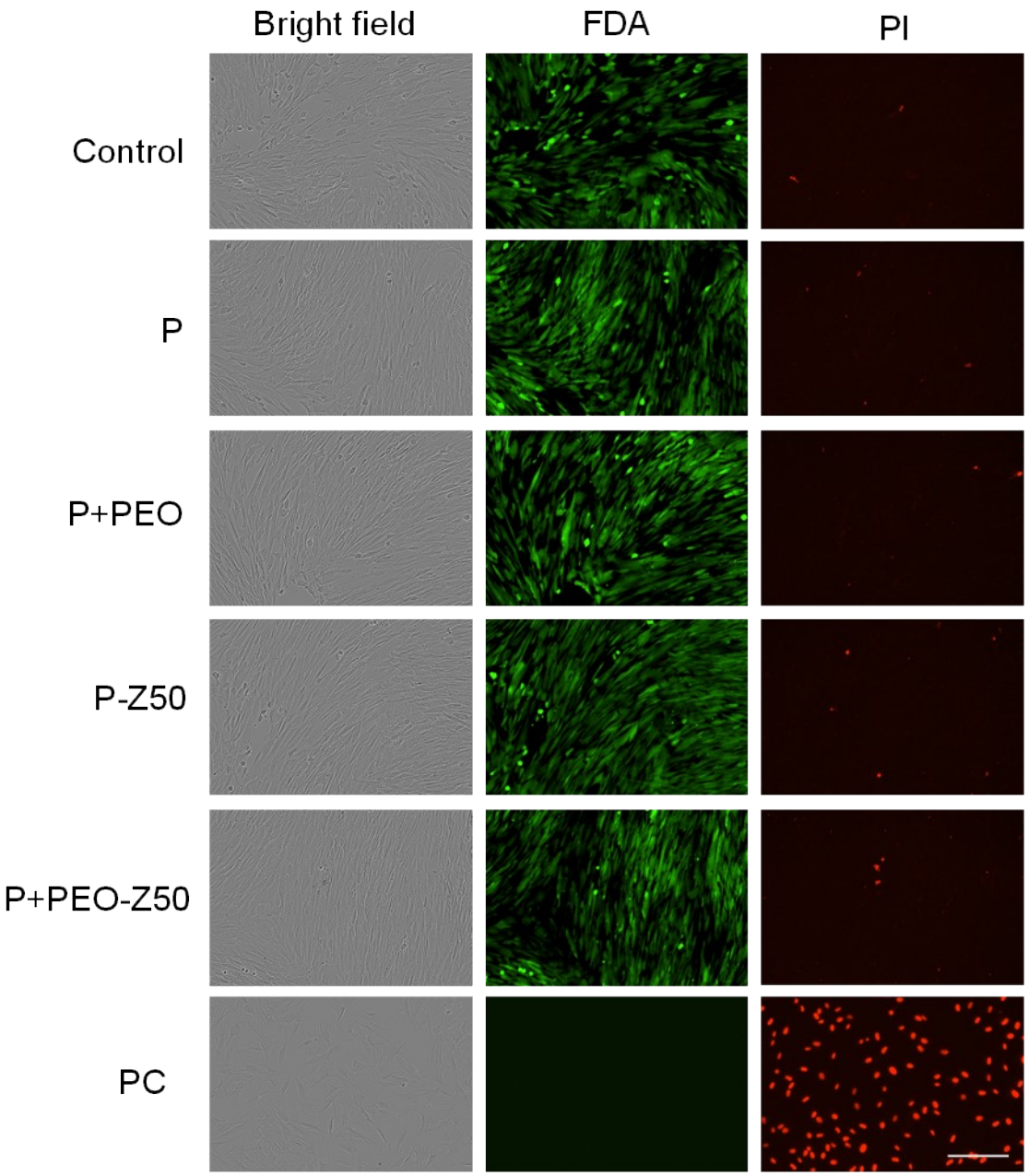

Fig. S10. Images of HDF cells after staining with FDA/PI stain for live/dead assay (treatment with 10 mg/mL ISFG extracts) (scale bar - 200µm)

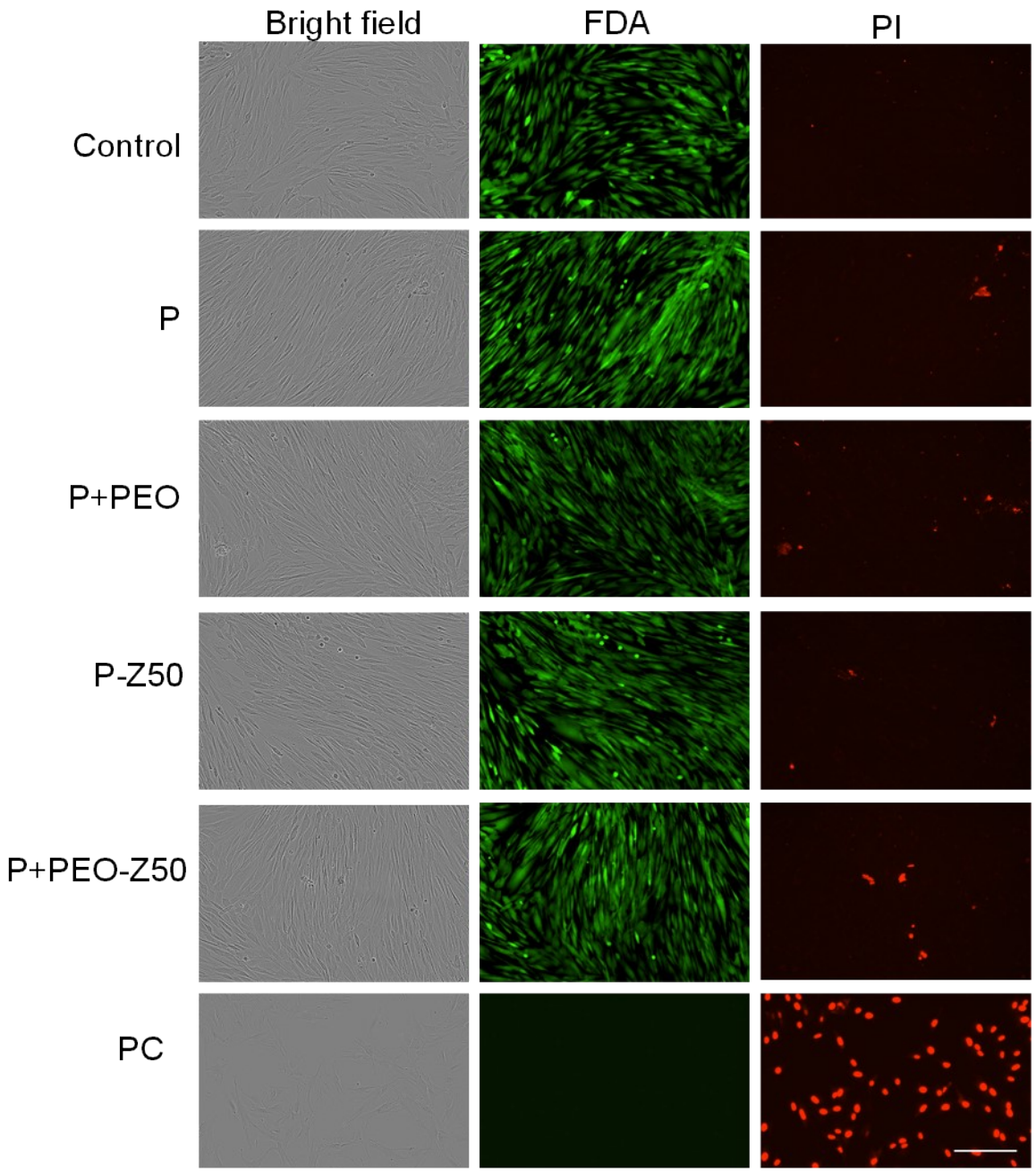

Fig. S11. Images of HDF cells after staining with FDA/PI stain for live/dead assay (treatment with 25 mg/mL ISFG extracts) (scale bar - 200µm)

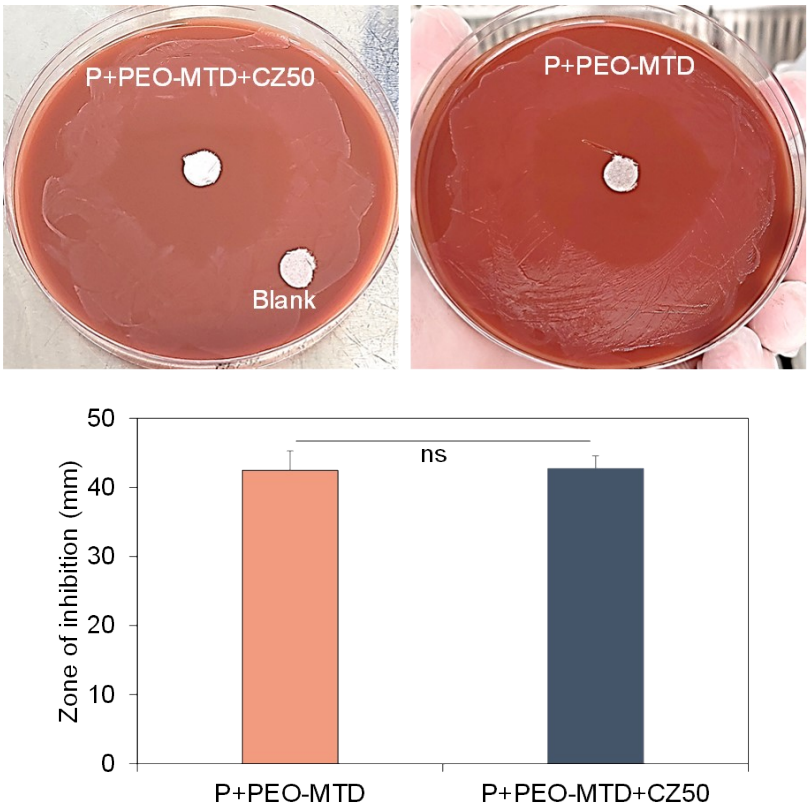

Fig. S12. Antibacterial activity of extracts of P+PEO-MTD and P+PEO-MTD+CZ50 using disc diffusion test (ns, $p < 0.05$)

Table S1. Kinetic model fitting for P-CZ50 and P+PEO-CZ50

Formulation	Higuchi Model		Korsmeyer-Peppas Model		
	k_H	R^2	k_{kp}	R^2	n
P-CZ50	13.702±1.87	0.444±0.31	23.663±9.32	0.976±0.02	0.584±0.16
P+PEO-CZ50	15.184±4.96	0.959±0.04	17.242±9.39	0.982±0.02	0.549±0.08