Supporting information for:

GSK3787-loaded Poly(ester amide) Particles for Intra-articular Drug Delivery

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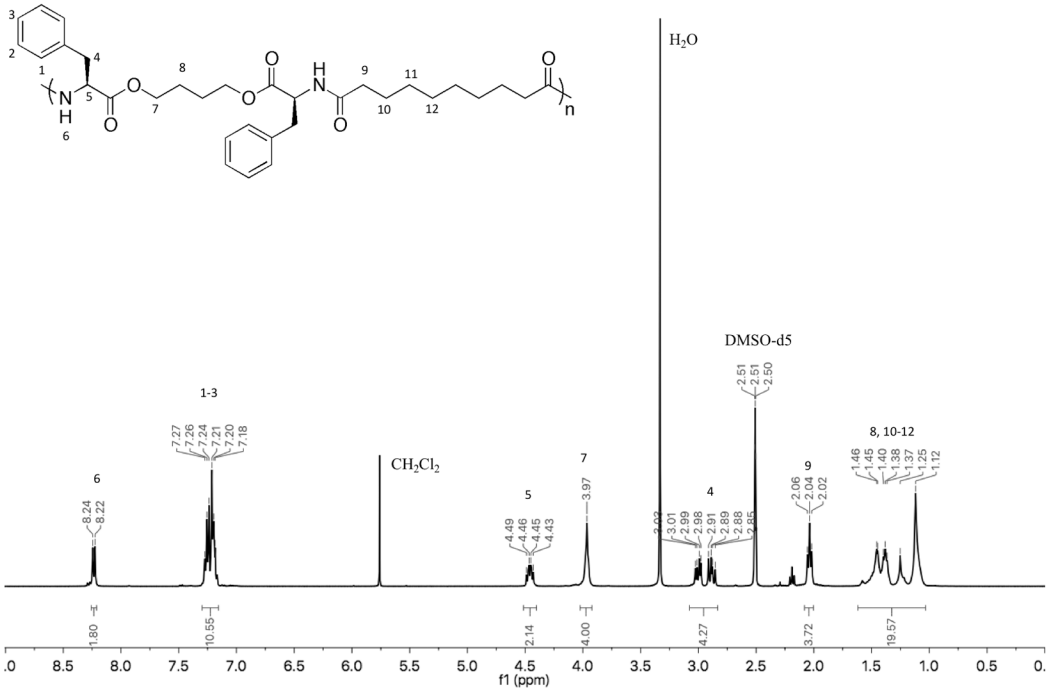

Figure S1. ^{1}H NMR spectrum of PBSe (DMSO-d_6, 400 MHz).

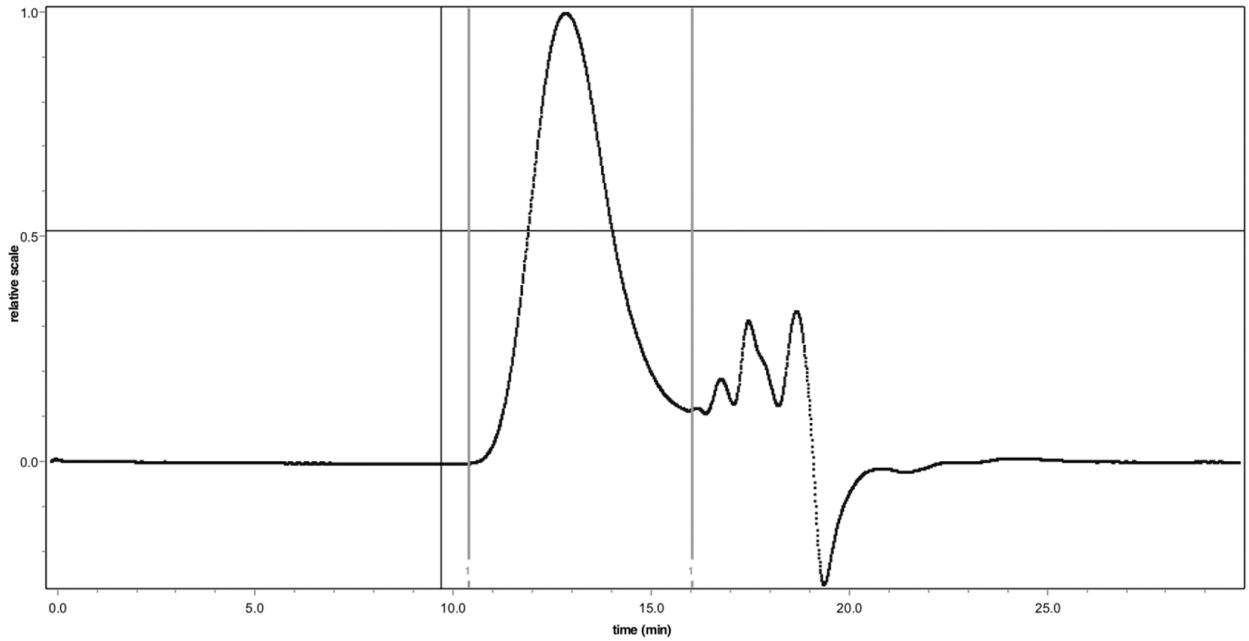

Figure S2. SEC trace (DMF eluent containing 10 mM LiBr, refractive index detection) for PBSe (M_n = 30 kg/mol and $Đ$ = 1.9).

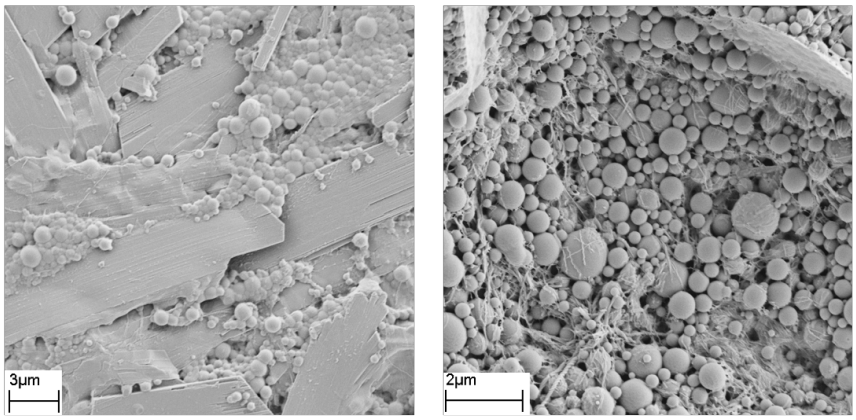

Figure S3. Scanning electron micrographs of particles prepared with different amounts of GSK3787 added. Particles with 15 wt% of GSK3787 added to the dispersed phase of the emulsion did form, but in small numbers and with large amounts of excess, non-particle, material (left). Particles with 10 wt% of GSK3787 did form, and were of spherical morphology and had a good size distribution, but had visible polymer remaining in the samples (right).

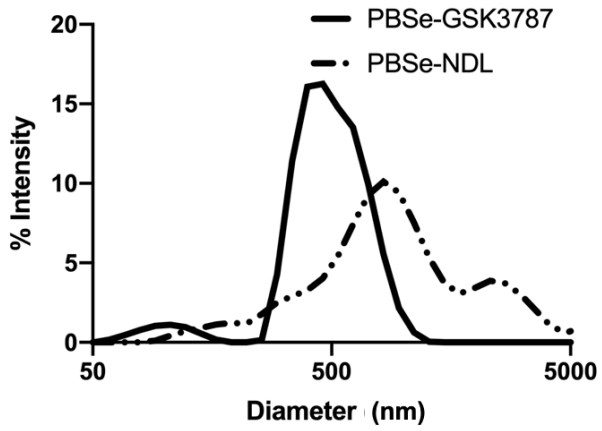

Figure S4. DLS diameter distributions by intensity % of PBSe-GSK3787 and PBSe-NDL particles showing the smaller diameters of the drug-loaded particles.

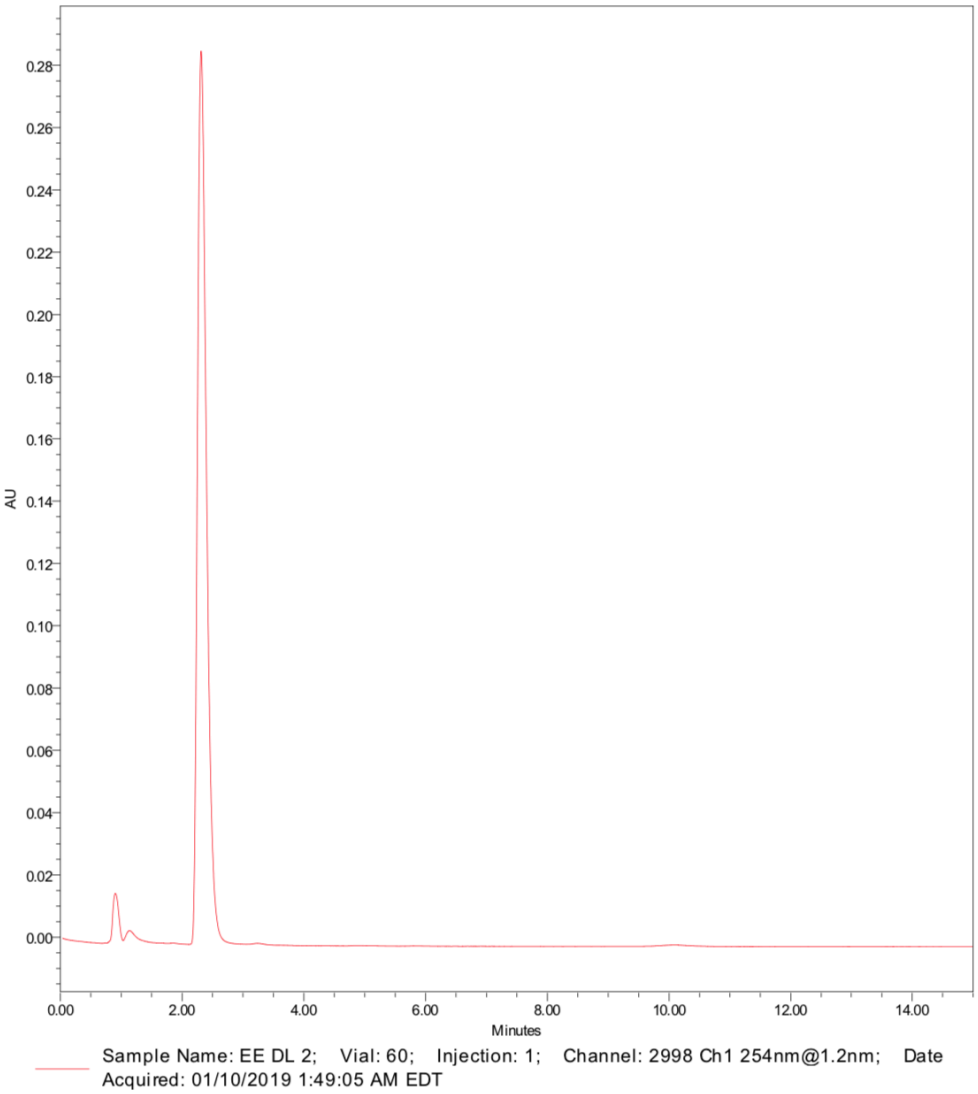

Figure S5. Representative HPLC trace of GSK3787 as measured for drug loading and encapsulation efficiency of particles.

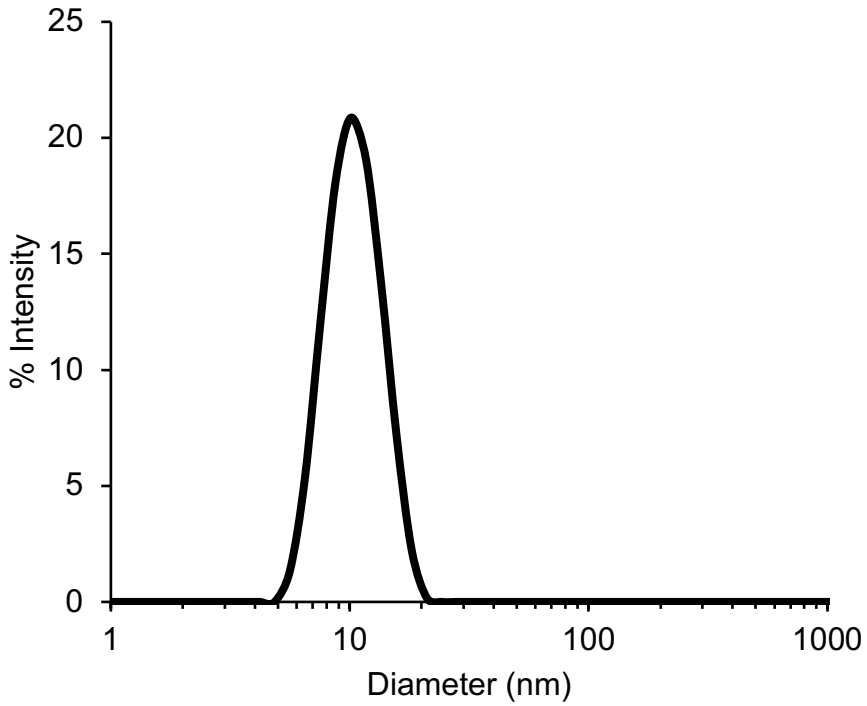

Figure S6. DLS diameter distributions by intensity % of GSK3787 (0.1 mg/mL) in a 2 wt% solution of polysorbate 80 in PBS at 37 °C. The absence of turbidity and presence of assemblies with diameters of ~10 nm suggest that the drug was incorporated into polysorbate micelles at this concentration.

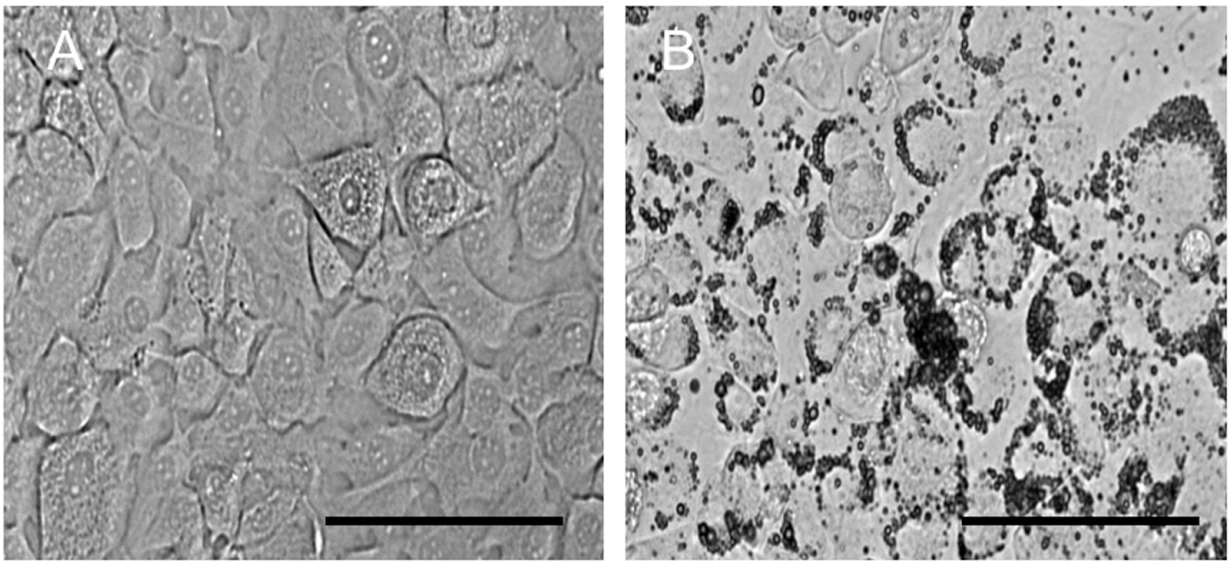

Figure S7. Zoomed brightfield images of live IMAC cells treated with A) no particles; B) 150 μg/mL of PBSe-GSK3787 particles. No noticeable changes in cell morphology were observed. Scale bar = 100 μm.

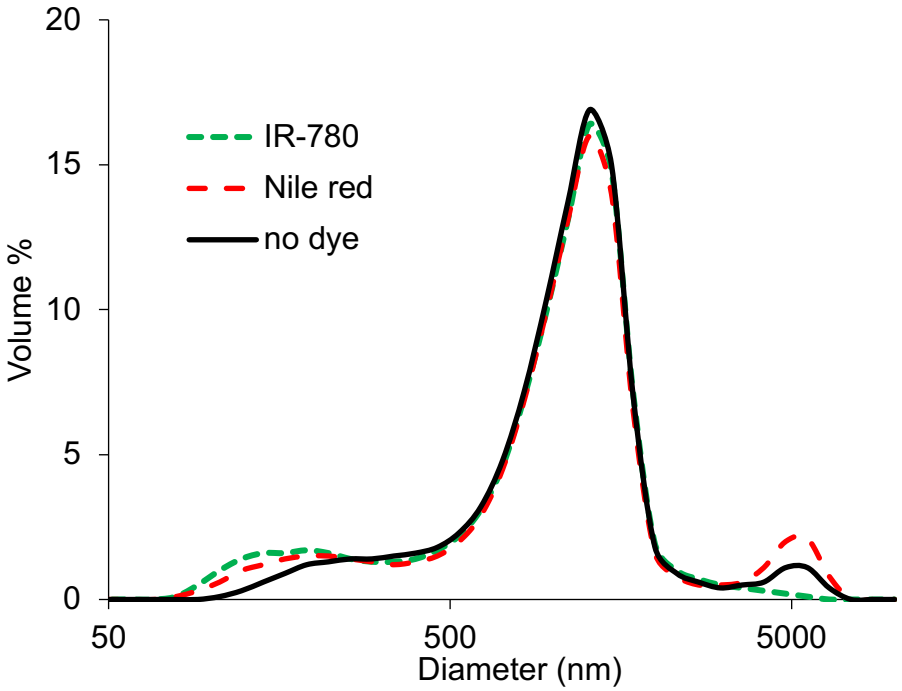

Figure S8. Representative DLS diameter distributions by volume % of PBSe-NDL particles prepared without dye, with 1.25 wt% Nile red, or with 1.25 wt% IR-780. All led to very similar size distributions.