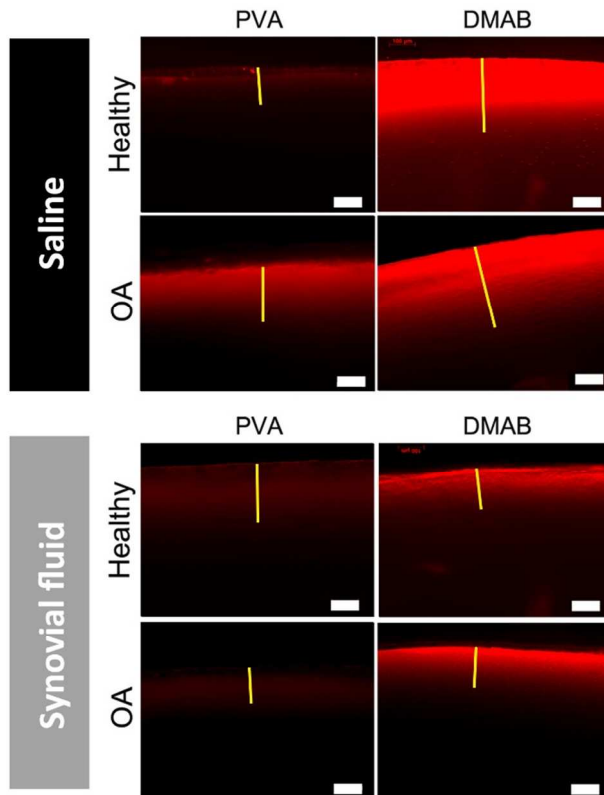


SUPPORTING DATA

Fig S1. Penetration depth measurements of NPs into cartilage explants, calculated in ImageJ shown for one set of replicates. The yellow lines mark the depth of maximum penetration. Scale bar (white) = 100 μm . Triplicates of each condition were measured (n = 3).



		Maximum penetration (μm)	
		PVA	DMAB
Saline	Healthy	128.2 \pm 13.0	334.1 \pm 76.3
	OA	176.0 \pm 34.3	346.3 \pm 72.2
Synovial fluid	Healthy	242.0 \pm 58.5	145.0 \pm 15.5
	OA	110.2 \pm 39.9	213.9 \pm 67.9

Fig S2. Time progression of synoviocyte uptake of anionic PVA and cationic DMAB NPs with varying amounts (0%, 10%, 50%) of synovial fluid in the culture media. Differences in signal intensity between PVA and DMAB NPs are likely related to the differences in dye loading efficiencies of the NP formulations, as the images were taken with the same microscope parameters and therefore do not adjust for differences in dye loading.

