Supplemental Material

Figure I

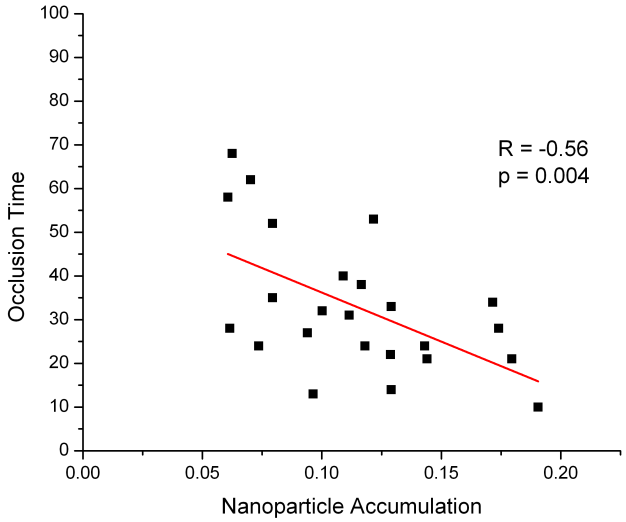

Figure I: Paired samples of aortic nanoparticle accumulation measurements and carotid occlusion times demonstrates a significant inverse correlation between the two metrics, confirming prior work[1] indicating a relationship between increased endothelial permeability and increased vessel hypercoagulability.

Figure II

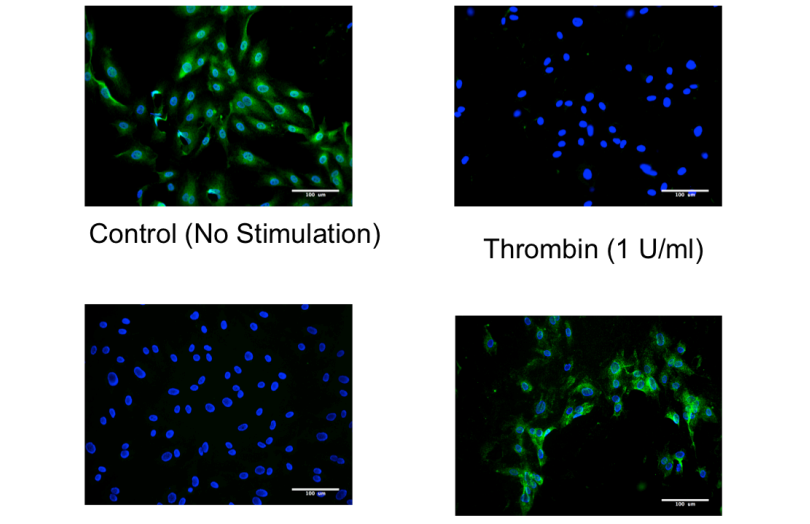

Figure II: Immunocytochemistry for IkB on HAECs demonstrates diminished degradation of IkB in response to thrombin stimulation with PPACK-NP treatment, consistent with inhibited activation of NF-kB.

Figure III

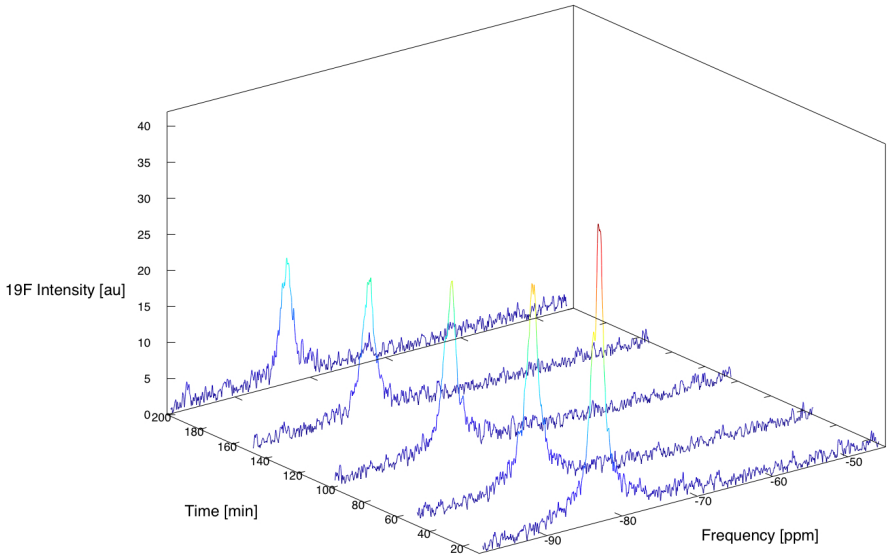

Figure III: Temporal series of ^{19}F spectra for one mouse at increasing times after a bolus dose of PFC-NP. Signal decay can be monitored through decrease in the ^{19}F signal intensity and fit to a bi-exponential model to estimate clearance half-life. Depicted spectra reflect an arbitrary scale for signal strength. Frequencies are given as PPM (parts per million) assuming a 190 MHz spectrometer frequency.

Figure IV

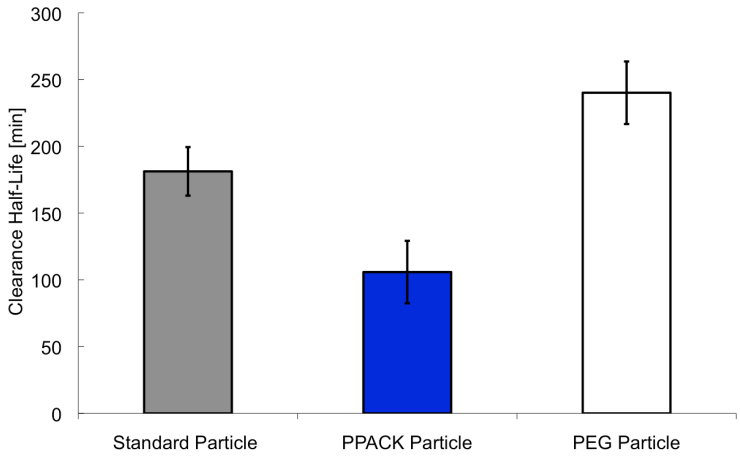

Figure IV: Clearance half-life for selected nanoparticles. ^{19}F MRS determined clearance half-lives for PPACK-functionalized PFC nanoparticles (105.87±23.38 minutes), PFC nanoparticles with a surface-

conjugated carboxy-PEG spacer (240.16±23.42 minutes), and non-functionalized PFC nanoparticles (181.3±40.7 minutes).

Figure V

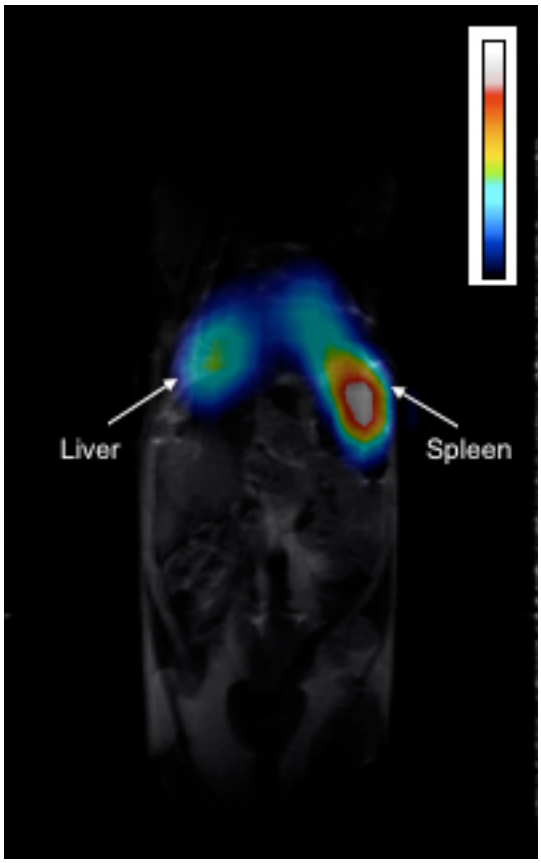

Figure V: ^{19}F spin echo coronal projection image (false color) overlaid on a proton spin echo coronal slice image (grayscale). The image, demonstrating accumulation of nontargeted PFC-NP in the spleen and liver, was acquired post-mortem in a mouse sacrificed two hours after injection.

Figure VI

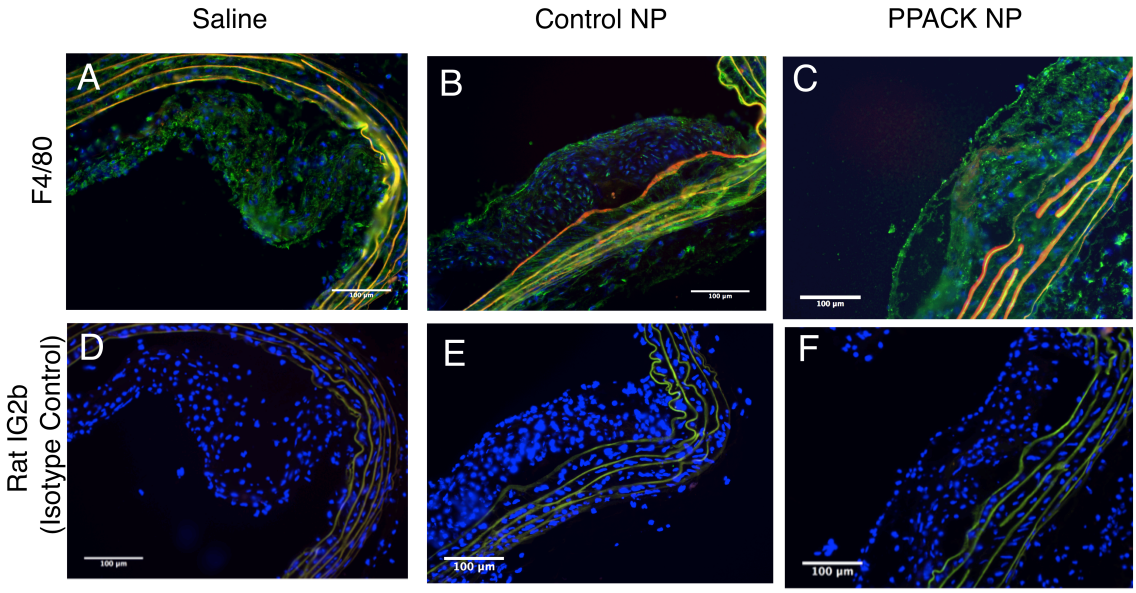

Figure VI: (A-C) Staining of mouse aortic arch sections for the macrophage F4/80 antigen provides secondary confirmation of the presence of macrophage populations in plaques. (D-F) Isotype control staining confirms lack of nonspecific binding of the MOMA-2 antibody (see Fig. 6A-D).

Work Cited

1. Palekar RU, Jallouk AP, Goette MJ, Chen J, Myerson JW, Allen JS, Akk A, Yang L, Tu Y, Miller MJ, Pham CTN, Wickline SA, Pan H. Quantifying progression and regression of thrombotic risk in experimental atherosclerosis. *FASEB J* 2015;29(7):3100–3109. doi:10.1096/fj.14-269084.