## **Supplementary Figure Captions**

Figure S1. Quantitative analysis of ultrasound imaging of Fig. 3B. Data are mean ±s.d. (n=4). \*\*\*p<0.001, relative to contusion only.

Figure S2. Quantitative analysis of ultrasound imaging of Fig. 3C. Data are mean  $\pm$ s.d. (n=4). \*p<0.05, \*\*\*p<0.001, relative to contusion only.

Figure S3. Quantitative analysis of ultrasound imaging of Fig. 4B. Data are mean ±s.d. (n=4). \*\*\*p<0.001, relative to contusion only.

Figure S4. Cytotoxicity of PVAX nanoparticles against RAW264.7 cells. Data are mean ±s.d. (n=4).

Figure S5. H&E staining of organs of mice treated with PVAX nanoparticles.

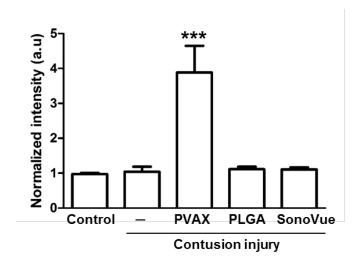


Figure S1.

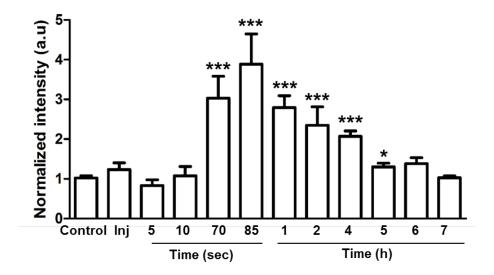


Figure S2.

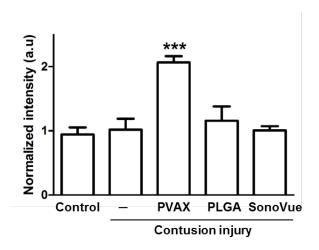


Figure S3.

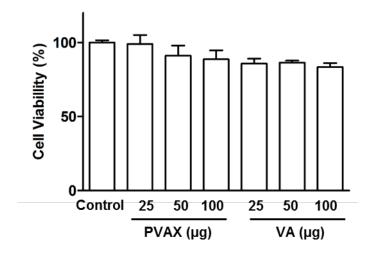


Figure S4.

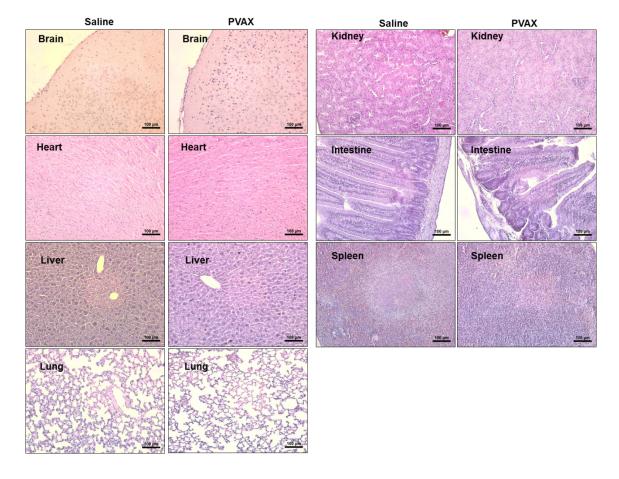


Figure S5.