## SUPPLEMENTARY MATERIAL



**Supplementary Figure 1**. *Physicochemical characterization of* <sup>3</sup>*H-MWCNT-GlcN*. Dispersions of <sup>3</sup>H-MWCNT-GlcN in water were prepared as described in Materials and Methods. The hydrodynamic diameter vs. light scattering intensity (A) or  $\zeta$ -potential (B) were determined in triplicate by DLS. The hydrodynamic diameter vs. particle concentration (C) was determined by NTA. Particle morphology was characterized by TEM. For (A) and (B), three independent measurements were taken as indicated by the red, green and blue curves. For (C), five independent measurements were taken with standard deviations of each data point indicated by the vertical lines. Inset displays mean particle size or  $\zeta$ -potential  $\pm$  standard deviation.



**Supplementary Figure 2.** *Physicochemical characterization of* <sup>3</sup>*H-MWCNT-GlcN.* Dispersions of <sup>3</sup>H-MWCNT-DSPE-PEG-GlcN in water were prepared as described in Materials and Methods. The hydrodynamic diameter vs. light scattering intensity (A) or  $\zeta$ -potential (B) were determined in triplicate by DLS. The hydrodynamic diameter vs. particle concentration (C) was determined by NTA. Particle morphology was characterized by TEM. For (A) and (B), three independent measurements were taken as indicated by the red, green and blue curves. For (C), five independent measurements were taken with standard deviations of each data point indicated by the verticle lines. Inset displays mean particle size or  $\zeta$ -potential  $\pm$  standard deviation.



**Supplementary Figure 3.** *Evaluation of colloidal stability of glyco-MWCNTs in physiologic solutions.* Dispersions of <sup>3</sup>H-MWCNT-GlcN in water were prepared as described in Materials and Methods then diluted in water, 5% L-glucose or PBS. The hydrodynamic diameter vs. light scattering intensity was assessed by DLS following a 60 incubation at 25 °C. (A) Hydrodynamic diameter of (A) <sup>3</sup>H-MWCNT-GlcN of (B) <sup>3</sup>H-MWCNT-DSPE-PEG-GlcN in various buffers. <sup>3</sup>H-MWCNT-GlcN remains stably suspended in water and 5% L-glucose, but aggregates in PBS. In contrast, <sup>3</sup>H-MWCNT-DSPE-PEG-GlcN is stably suspended in both water and PBS.