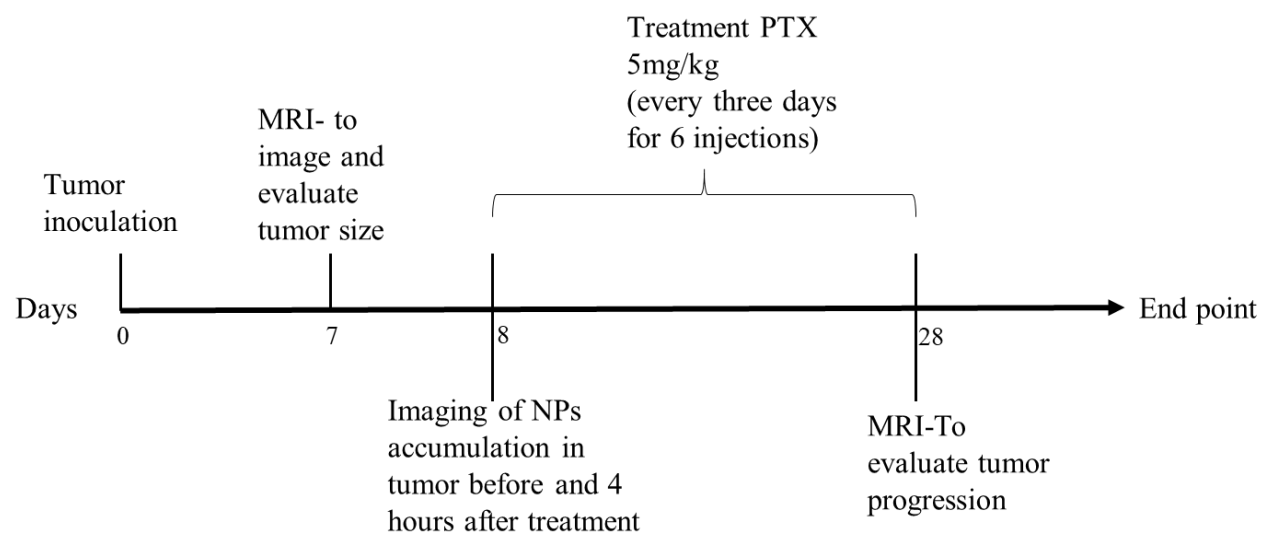


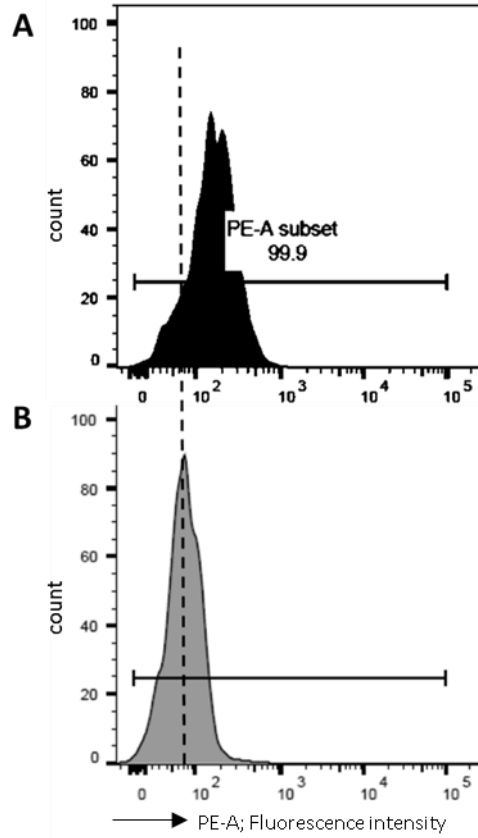
## **SUPPLEMENTAL DATA**



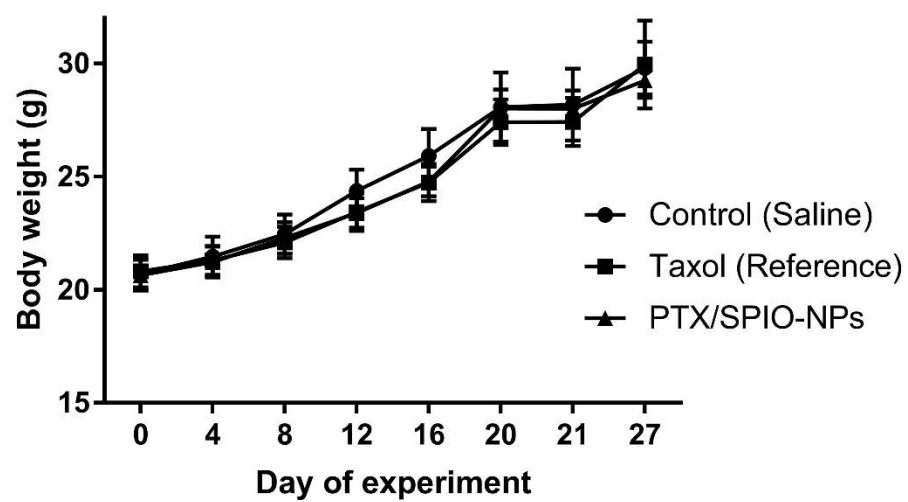
**Supplementary data S1.**  $^{19}\text{F}$  NMR spectra of PCL-*b*-PEG and the molecular clip at each step of the process. A) Molecular clip before irradiation; (B) Polymer + molecular clip before irradiation (C) Polymer + molecular clip before irradiation. With  $^{19}\text{F}$  NMR the process was easily monitored. After 90mins of irradiation, total disappearance of the peak at -65 ppm corresponded to the molecular clip function (C) in comparison to the  $^{19}\text{F}$  NMR spectrum of both reagents before irradiation (B). As reported in the literature [30], activation of molecular clip is crucial step for the successful grafting of peptide onto NHS ester. Zoom shows the peaks of interest in B and C.



**Supplementary data S2.** Timeline of *in vivo* experimentation.



**Supplementary data S3** U87MG cells expression of  $\alpha_v\beta_3$  using monoclonal anti-human  $\alpha_v\beta_3$ -phycoerythrin antibody *via* flow cytometry. A) U87MG cells treated with monoclonal anti-human integrin-  $\alpha_v\beta_3$  (CD51/61)-phycoerythrin antibody B) Untreated U87MG cells. The phycoerythrin peak shift towards higher fluorescence intensity showed that the antibody binding to the  $\alpha_v\beta_3$  receptors expressed on U87MG cells.



**Supplementary data S4.** *In vivo* toxicity- monitoring of body weight in relation to day of the experimentation