

## Supplementary material

### **Tumor targeted fluorescent proteinoid nanocapsules encapsulating synergistic drugs for personalized cancer therapy**

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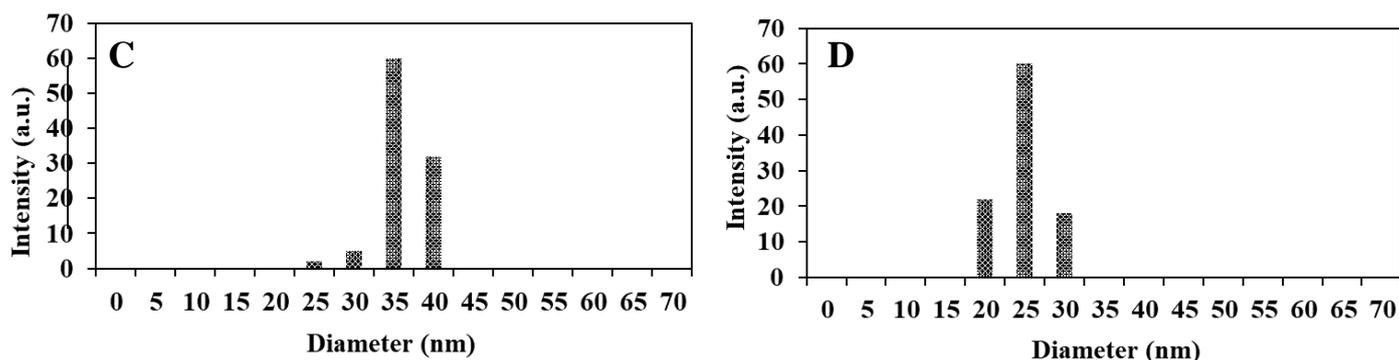
eladha300@gmail.com

**Figure S1:** HR-SEM images and histograms of P(RGD) and P(RGD)/Pal,Alp NCs. Wet diameter and size distribution histogram of hollow P(RGD) NCs and P(RGD)/Pal,Alp NCs.

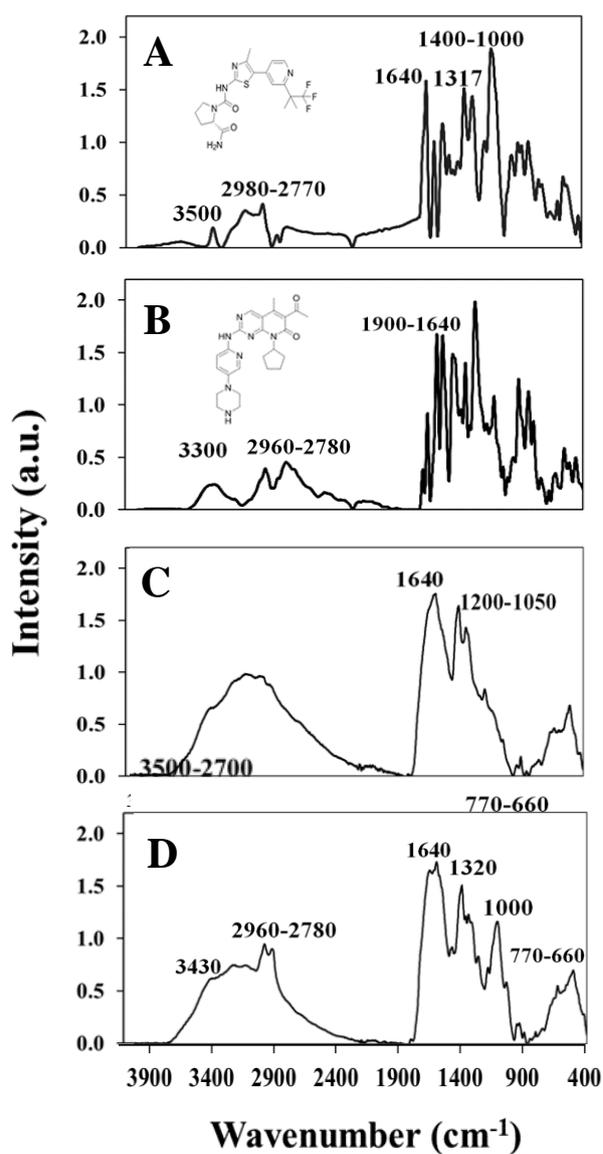
**Figure S2:** FTIR spectra of Alp, Pal, P(RGD) NCs and P(RGD)/Pal,Alp NCs.

**Figure S3:** TGA thermograms of Alp, Pal, P(RGD) NCs and P(RGD)/Pal,Alp NCs.

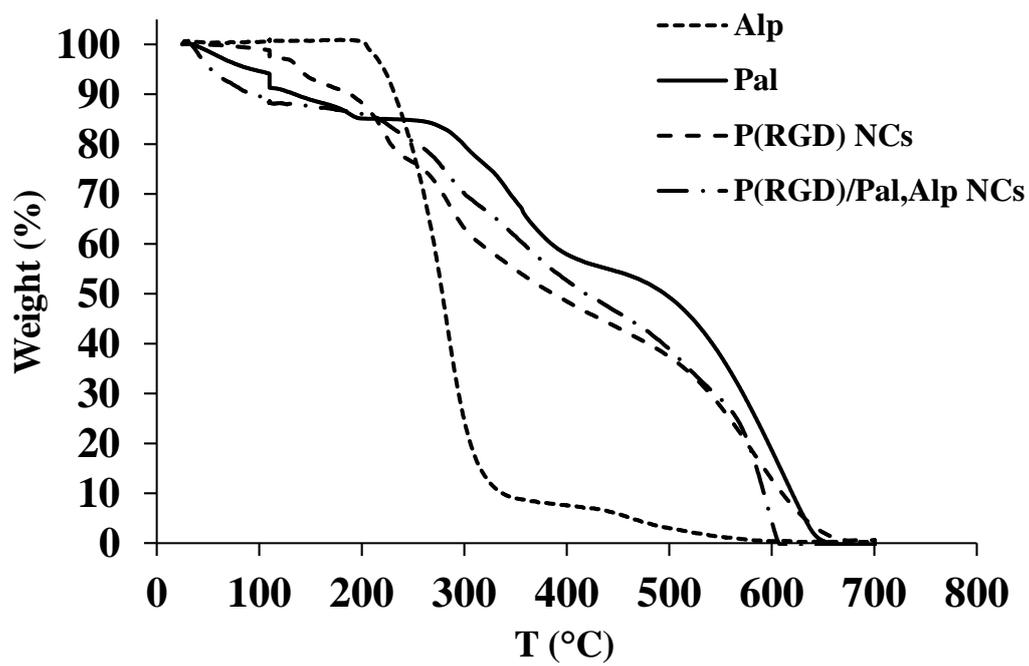
**Figure S4:** Tumor growth as function of time. *In vivo* tumor growth inhibition in PDX mice using Pal, Alp and mixed (Pal + Alp) treatment.



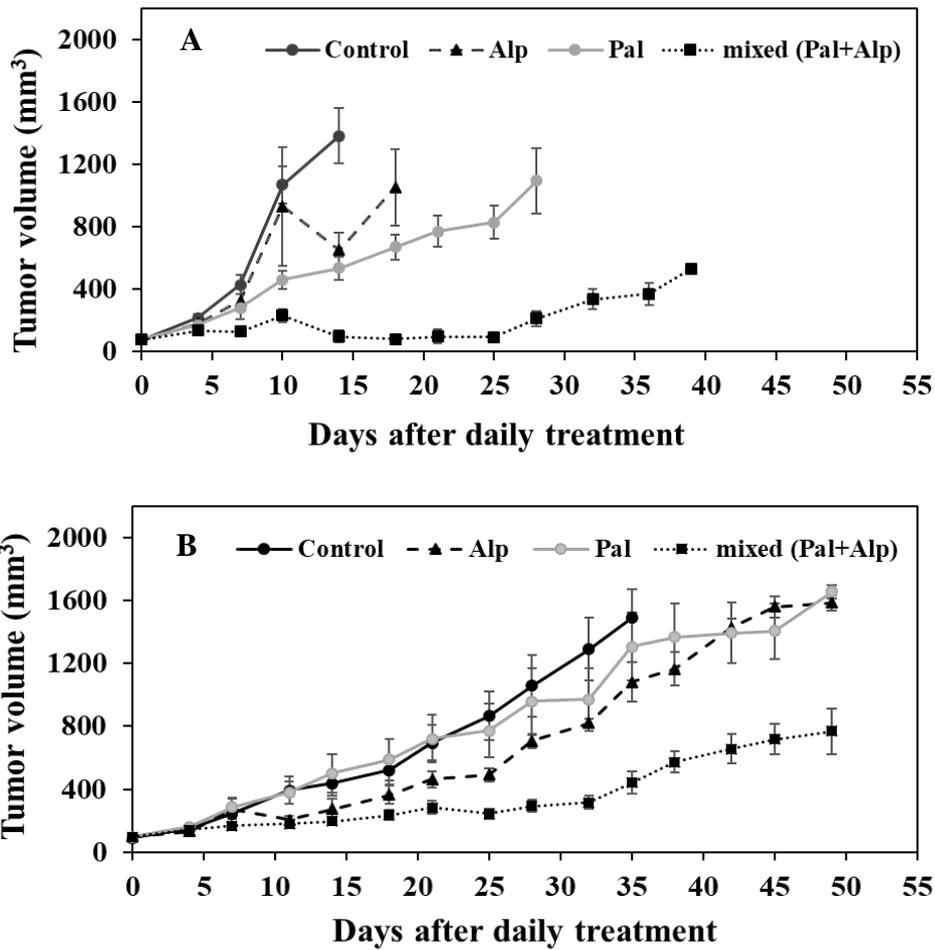
**Figure S1:** Dry diameter and size distributions obtained by HR-SEM of (A) P(RGD) and (B) P(RGD)/Pal,Alp NCs. Wet diameter and size distribution histograms obtained by cryo-TEM of (C) hollow P(RGD) NCs and (D) P(RGD)/Pal,Alp NCs.



**Figure S2:** FTIR spectra of (A) Alp, (B) Pal, (C) P(RGD) NCs and (D) P(RGD)/Pal,Alp NCs.



**Figure S3:** TGA thermograms of Alp, Pal, P(RGD) NCs and P(RGD)/Pal,Alp NCs.



**Figure S4:** Tumor growth as function of time. *In vivo* tumor growth inhibition in PDX mice using Pal, Alp and mixed (Pal+Alp) treatment. (A) RA-300 colon cancer and (B) RA-346B stomach cancer. Tumor volumes were measured two times per week, and tumor weight was measured at end of treatment ( $n = 4$  to 5 per group at end point, note that some mice were euthanized when tumors exceeded maximum allowable size considering animal ethics).