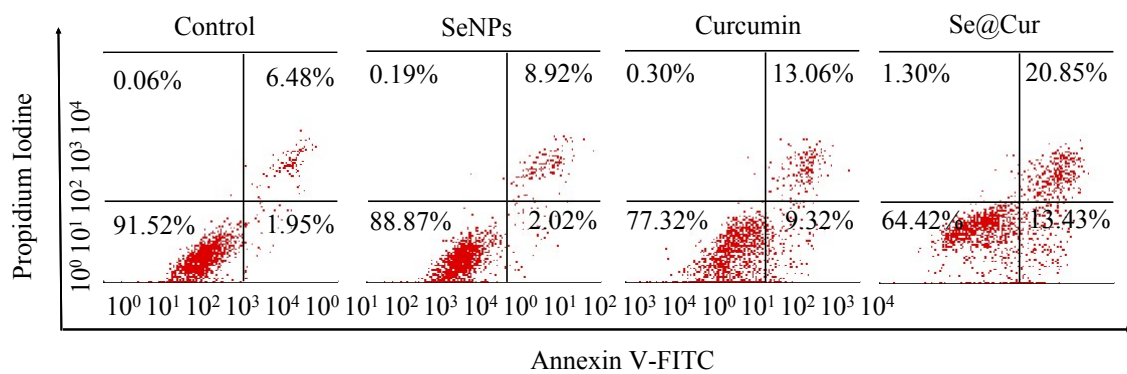
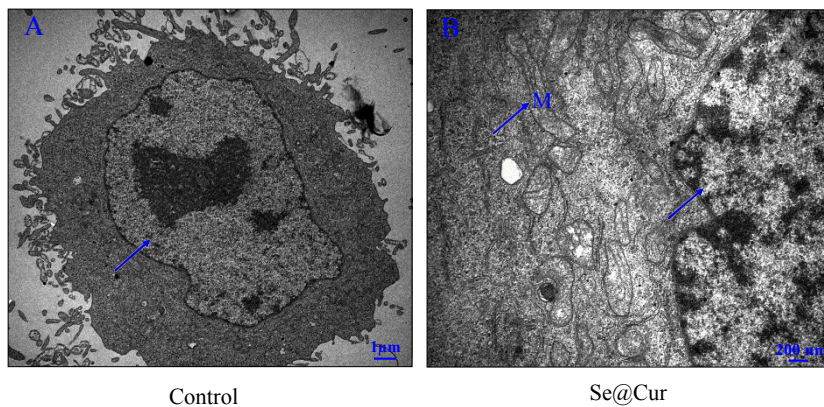


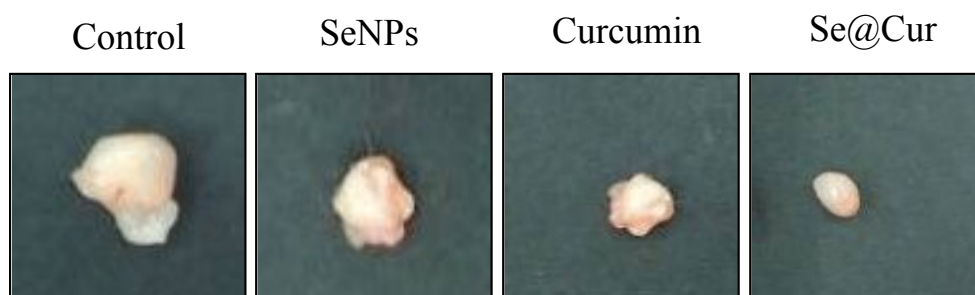
**Fig. S1.** The Migratory ratio of control, SeNPs, Curmin and Se@Cur. The quantitative data were analyzed by manual counting.



**Fig. S2.** Translocation of phosphatidylserine induced by SeNPs, Curcumin and Se@Cur in HepG2 cells. Dot plot results of HepG2 cell treated groups showed the presence of both early and late apoptotic cells. HepG2 cells treated with Se@Cur revealed the increased cell number of apoptosis.



**Fig. S3.** TEM images of HepG2 cells treated with Se@Cur. (A) Control (B) cells treated with Se@Cur. (M: mitochondria N: nucleolus) Microvilli and mitochondria were observed with no morphological changes in untreated cell. When incubated with the Se@Cur, the TEM image indicates few cells with the disappearance of microvilli, a shrinking cytoplasm, distorted organelles and condensed chromatin, indicating apoptosis of the HepG2 cells.



**Fig. S4. Images of the mice with different size of tumors. The tumor image indicated that Se@Cur showed remarkable antitumor activity.**