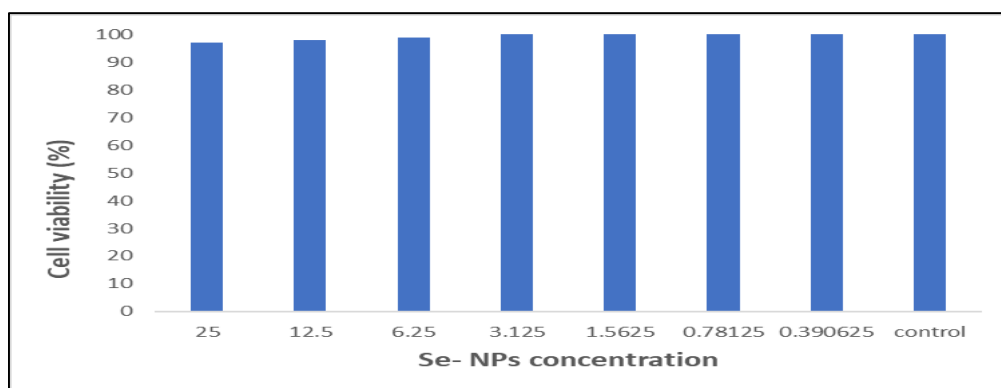
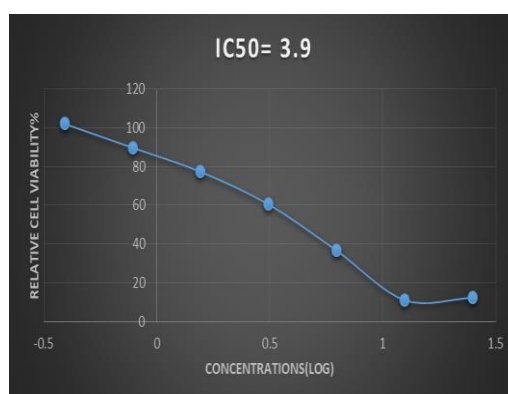


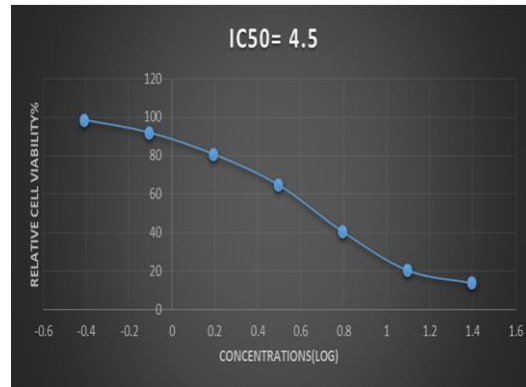
**Supplementary Figure (1): MTT cell proliferation assay of SeNP-treated cells of HEPG2 cell line for 48h. Each value is the mean  $\pm$  SD ( $p < 0.05$ ). One-way ANOVA test. Comparison with control, \*\*\*  $p$ -level  $< 0.001$ .**



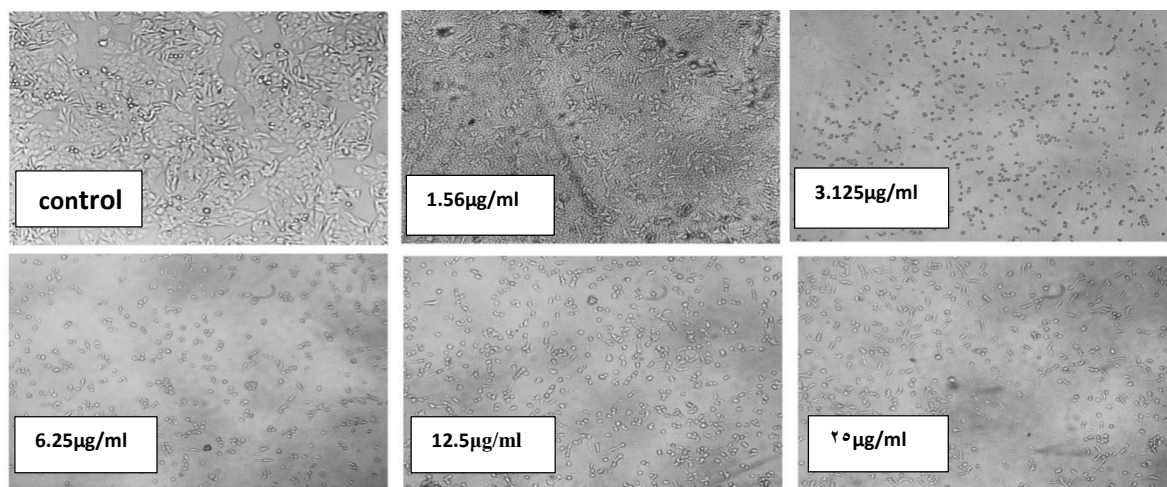
**Supplementary Figure (2): Percentage of cells viability of normal cell line ( HEK293) treated with SeNPs.**



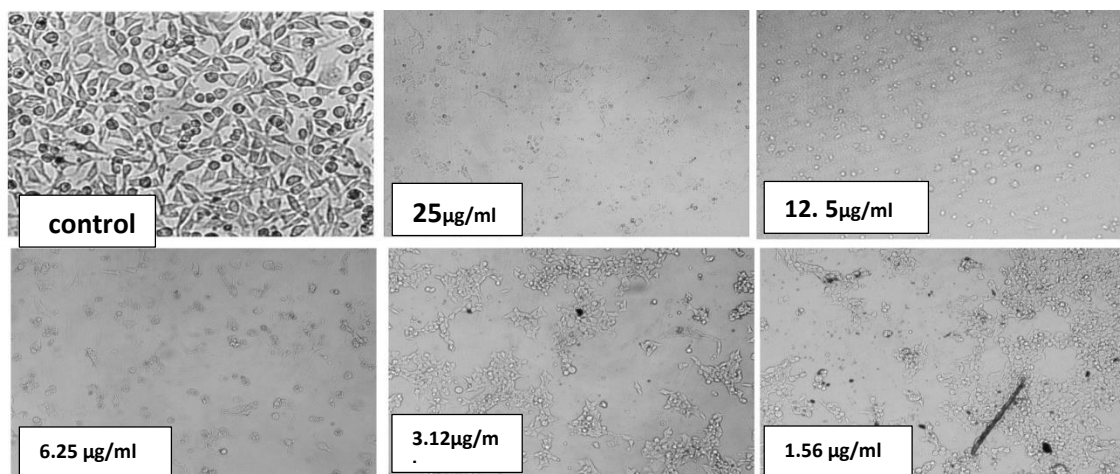
**Supplementary Figure (3): IC50 values for SeNPs treated**



**Supplementary Figure (4). IC50 values for SeNPs treated HepG2 SW480 cancer cell line.**



**Supplementary Figure 5: Morphological changes following 48hrs. treatments with different concentrations of Se NPs in human cancer (WS480) cell lines**



**Supplementary Figure 6: Morphological changes following 48hrs. treatments with different concentrations of Se NPs in human cancer (HepG2)**