Supporting Information

Lentinan-Functionalized Selenium Nanosystems with High Permeability Infiltrate Solid Tumor by Enhancing Transcellular Transport

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Figure S1. Quantitative analysis of cellular uptake efficiency of coumarin-6 labelled LET-Tw-SeNPs in HepG2 cells by flow cytometry analysis.



Figure S2. Quantitative analysis of the infiltrating abilities of 30 μ M SeNPs and LET-Tw-SeNPs.



Figure S3. Flow cytometric analysis of LET-Tw-SeNPs and SeNPs on cell cycle.



Figure S4. DHE probe to detect the amount of ROS produced by different NPs in HepG2 cells.

| | LET-Tw-SeNPs | Tw-SeNPs |
|----------------------|--------------|----------|
| $C_{max}(\mu g/L)$ | 797.0 | 717.3 |
| AUC (g/L*h) | 12.8 | 7.0 |
| $t_{1/2\beta}$ (h) | 50.0 | 34.7 |
| MRT (h) | 60.6 | 38.5 |
| C _L (L/h) | 0.02 | 0.05 |

Table S1. Pharmacokinetic parameters of LET-Tw-SeNPs and Tw-SeNPs after i.v. injection at a dose of 10 mg Se per kg of mouse body weight (n=3).

 $t^{1/2}\beta$, elimination phase, half-life period of medicine AUC0-72 h, area under the concentration versus time curve. Cmax, maximum concentration observed. MRT, mean retention time. Cl, clearance of medicine.