

## SUPPORTING INFORMATION

### Scavenger Receptor B1 is a Potential Biomarker of Human Nasopharyngeal Carcinoma and Its Growth is Inhibited by HDL-mimetic Nanoparticles

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#### Methods

**Figure S1:** SR-B1 expression level in NPC tissue sections.

**Figure S2:** Uptake of HPPS-(DiR-BOA) and complex (lipid emulsion) by 5-8F cells.

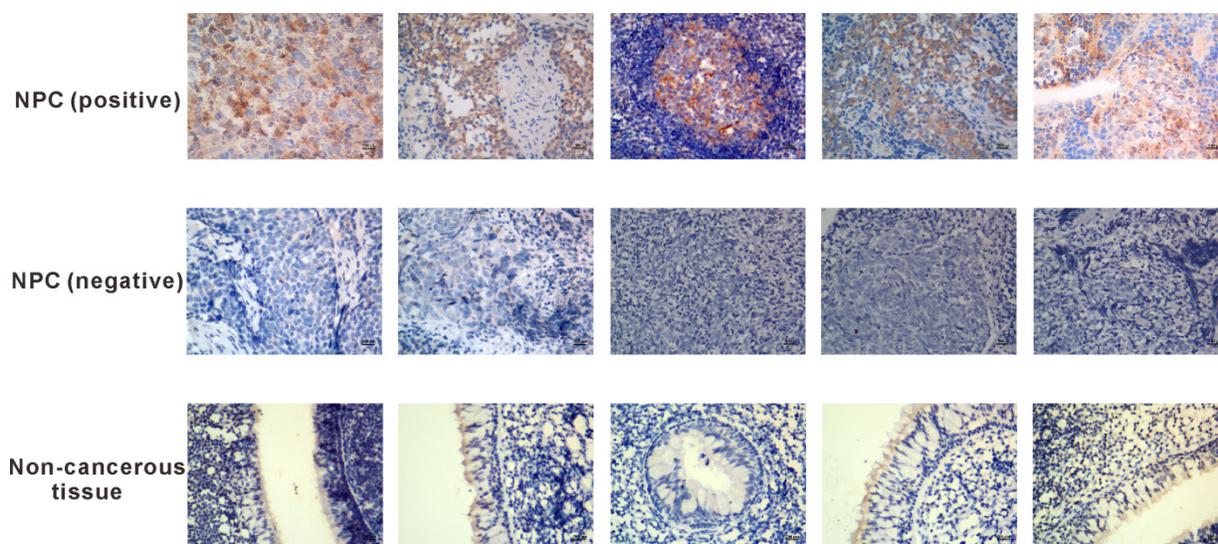
**Figure S3:** Effect of HPPS on viability of 5-8F cells.

#### *Cell Cytotoxicity Analysis*

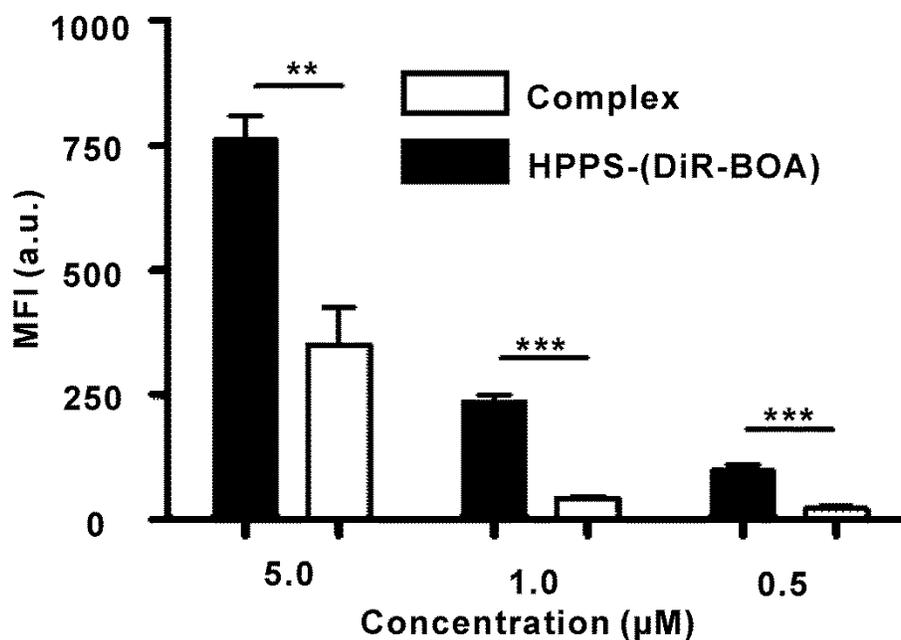
5-8F cells were seeded onto 96-well plates ( $3 \times 10^3$  per well) and cultured at 37°C in a 5% CO<sub>2</sub> incubator overnight. Cells were exposed to the medium containing PBS, 100 nM HPPS-(Fluo-BOA), HPPS-CO (the same DMPC concentration as HPPS-(Fluo-BOA)) or complex (the same DMPC concentration as HPPS-CO), and maintained at 37°C in a 5% CO<sub>2</sub> incubator for 48 h. After further culture in complete medium for 24 h, a cck-8 kit (Ivitrogen) was used to determine the cell viability. Briefly, cells were treated with cck-8 for 45 min followed by the measurement of absorbance (460 nm) by a microplate reader instrument (Genos-basic, Tecan).

#### *Nanoparticle Synthesis*

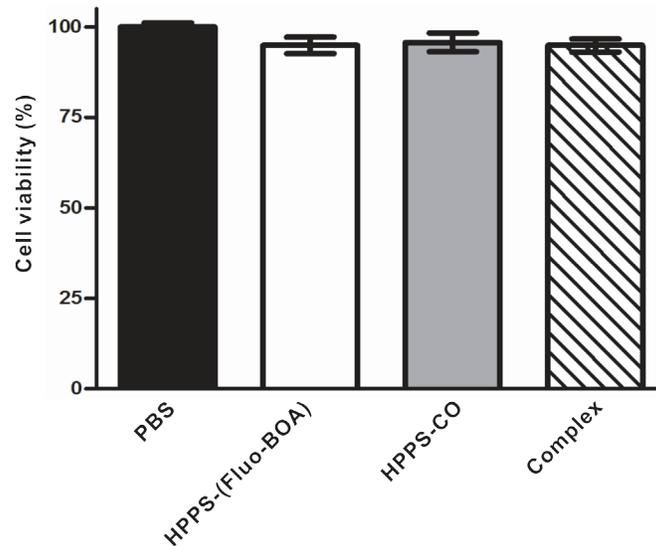
HPPS-(DiR-BOA) and complex (lipid emulsion) formulated with DiR-BOA were synthesized using the similar method as described in the main text by replacing Fluo-BOA with DiR-BOA. The concentration of DiR-BOA in HPPS-(DiR-BOA) and lipid emulsion were determined and represented the corresponding concentration of HPPS-(DiR-BOA) and lipid emulsion.



**Figure S1.** Representative images of SR-B1 positive NPC tissues, SR-B1 negative NPC tissues and non-cancerous tissues (5 sections/per group).



**Figure S2.** Flow cytometry analysis of cellular uptake of HPPS-(DiR-BOA) and complex (lipid emulsion) by 5-8F cells. 5-8F cells were incubated with various concentrations of HPPS-(DiR-BOA) and complex for 1 h. Results are represented as means  $\pm$  sd from triplicate determinations. (\* $P < 0.05$ , \*\* $P < 0.01$  and \*\*\* $P < 0.001$ ).



**Figure S3.** Representative viability of 5-8F cells treated by PBS, HPPS-(Fluo-BOA), HPPS-CO and complex with a concentration of 100 nM. Data are representative of at least three independent experiments. There is no significant difference between each other ( $P > 0.05$ ).