Electronic supplementary information

Safe Core-Satellite Magneto-Plasmonic Nanostructures for Efficient Targeting and Photothermal Treatment of Tumor Cells

F. Bertorelle\textsuperscript{a}, M. Pinto\textsuperscript{b}, R. Zapp\textsuperscript{a}, R. Pilot\textsuperscript{a}, L. Litti\textsuperscript{a}, S. Fiameni\textsuperscript{c}, G. Conti\textsuperscript{d}, M. Gobbo\textsuperscript{a}, G. Toffoli\textsuperscript{e}, M. Colombatti\textsuperscript{b}, G. Fracasso\textsuperscript{b}, M. Meneghetti\textsuperscript{**}

\textsuperscript{a}. Department of Chemical Sciences, University of Padova, Via Marzolo 1, 31033, Padova, Italy
\textsuperscript{b}. Department of Medicine, Section of Immunology, University of Verona, c/o Policlinico G.B. Rossi, Piazzale L.A. Scuro, 37134 Verona, Italy
\textsuperscript{c}. IENI CNR, Corso Stati Uniti 4, 35127 Padova, Italy.
\textsuperscript{d}. Department of Neurological and Movement Sciences, University of Verona, c/o Policlinico G.B. Rossi, Piazzale L.A. Scuro 37134 Verona, Italy
\textsuperscript{e}. SOC Farmacologia Sperimentale e Clinica, Centro di Riferimento Oncologico, Via Franco Gallini 2, 33081 Aviano, Italy

* Reference author Email: moreno.meneghetti@unipd.it
**Figure S1.** EDX measurement of CS nanostructures.

**Figure S2.** Absorption spectra of D2B solution before conjugation (black line) and in the supernatant (red line) after conjugation and centrifugation.
Figure S3. Flow cytometry analysis of PC3 PIP (PSMA+) in the upper part and of PC3 (PSMA -) in the lower part. Cells are incubated with GAM-FITC ((a) and (d)), pure D2B and then with GAM-FITC ((b) and (e)) and CS-Ab at a concentration of 4.4 pM and then with GAM-FITC ((c) and (f)). The data show that CS-Ab has a targeting activity similar to pure D2B.

Figure S4. Temperature of FeOx with a silica shell (red) and CS-Ab (blue) loaded hydrogels irradiated for 10 minutes with a 647 nm laser line at a power density of 1.5 W cm$^{-2}$. 