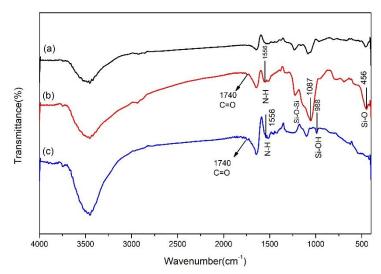
- Microfluidic-based Immuno-modulation of Immune Cells using Upconversion 1
- Nanoparticles in Simulated Blood Vessel-Tumor System 2
- Dulani Chandima Wimalachandra^{†#}, Yong Li^{‡#}, Jinliang Liu[‡], Swati Shikha[†], Jing 3
- Zhang ^{‡,*}, Yaw-Chyn Lim^{§,*}, and Yong Zhang^{†,*} 4
- 5
- 6

Supporting Information

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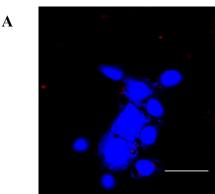


- 8
- Figure S1. FT-IR spectra of UCNPs@mSiO₂ (a), FA-UCNPs (b), CCL21-FA-UCNPs 9 (C)

B

- 10
- 11

12



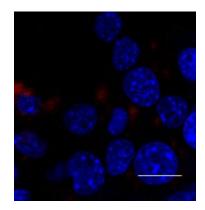
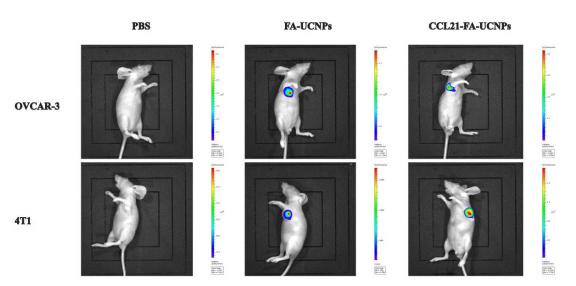


Figure S2. Intracellular uptake of nanoparticles by 4T1 cells. Cellular imaging of 13 upconversion fluorescence emitted by 4T1 cells loaded with 200 µg/mL of 14

- 1 UCNPs@mSiO₂ (left) and FA-UCNPs (right) nanoparticles. (A, scale bar = 30 μm; B,
- 2 20 µm, right)
- 3



4

5 Figure S3. *In vivo* upconversion luminescence imagings of PBS, FA-UCNPs and

6 CCL21-UCNPs in OVCAR-3 tumour-bearing mice and 4T1 tumour-bearing mice.