ADVANCED HEALTHCARE MATERIALS

Supporting Information

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A Generic Coordination Assembly-Enabled Nanocoating of Individual Tumor Cells for Personalized Immunotherapy

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Supporting Information

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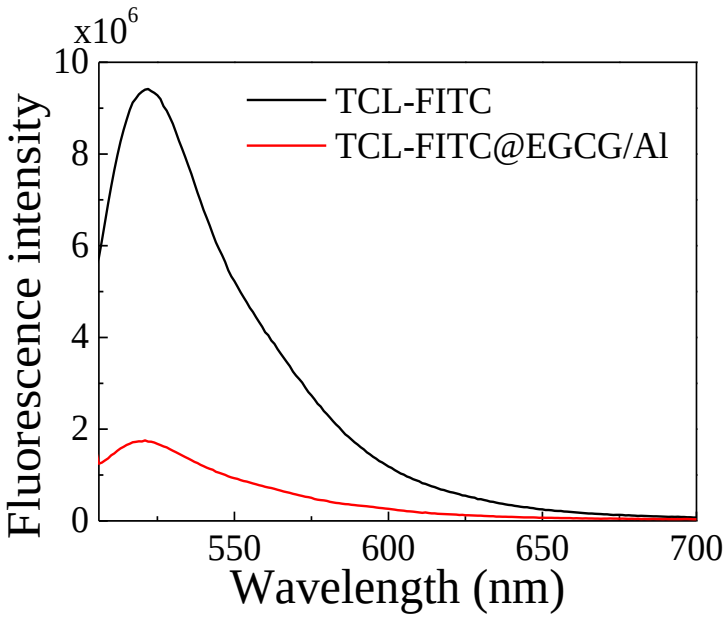

Figure S1. The fluorescence spectra of TCL-FITC and TCL-FITC@EGCG/Al in water, the excitation wavelength was 495 nm, the concentration of TCL-FITC in all the formulations was 10 μg ml^{-1}. The fluorescence intensity of TCL-FITC was obviously higher than that of TCL-FITC@EGCG/Al although the concentration of TCL-FITC in all the formulations was the same. This phenomenon was notoriously known as fluorescence aggregation-caused quenching (ACQ).[1, 2] Because of the high protein loading capacities, the concentration of TCL-FITC within microparticles were quite high, thus the aggregation of TCL-FITC caused fluorescence quenching.

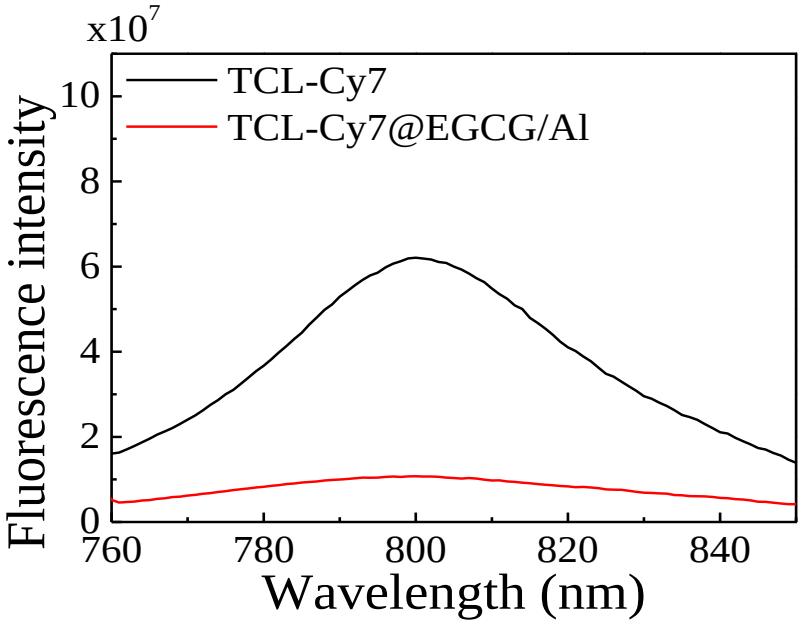

Figure S2. The fluorescence spectra of TCL-Cy7 and TCL-Cy7@EGCG/Al in water, the excitation wavelength was 750 nm, the concentration of TCL-Cy7 in all the formulations was 0.3 mg ml^{-1}.

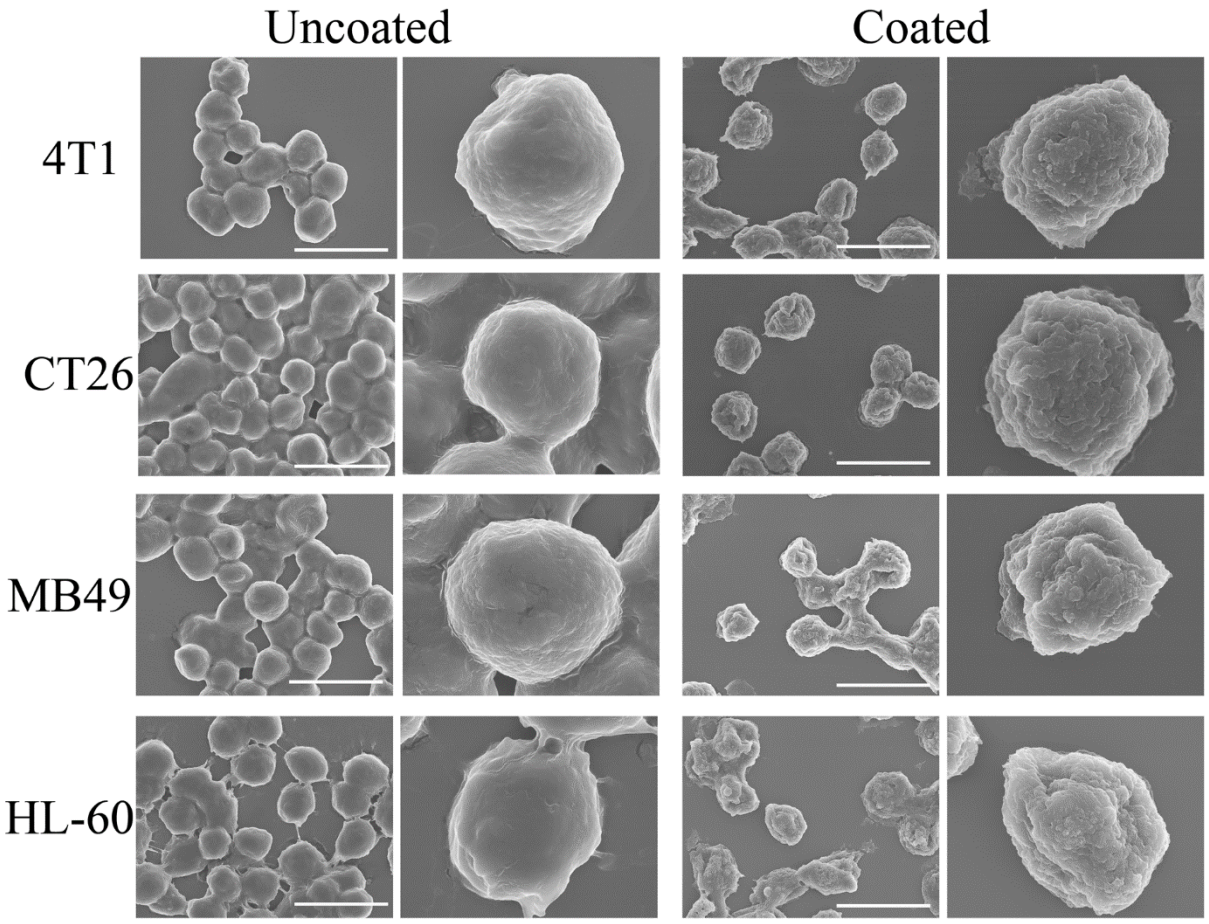

Figure S3. SEM images of 4T1, CT26, MB49 and HL-60 cells before and after coating by EGCG/Al layer. Uncoated cells were fixed by glutaraldehyde followed by washing with high-purity water. The ruler was 20 μm.

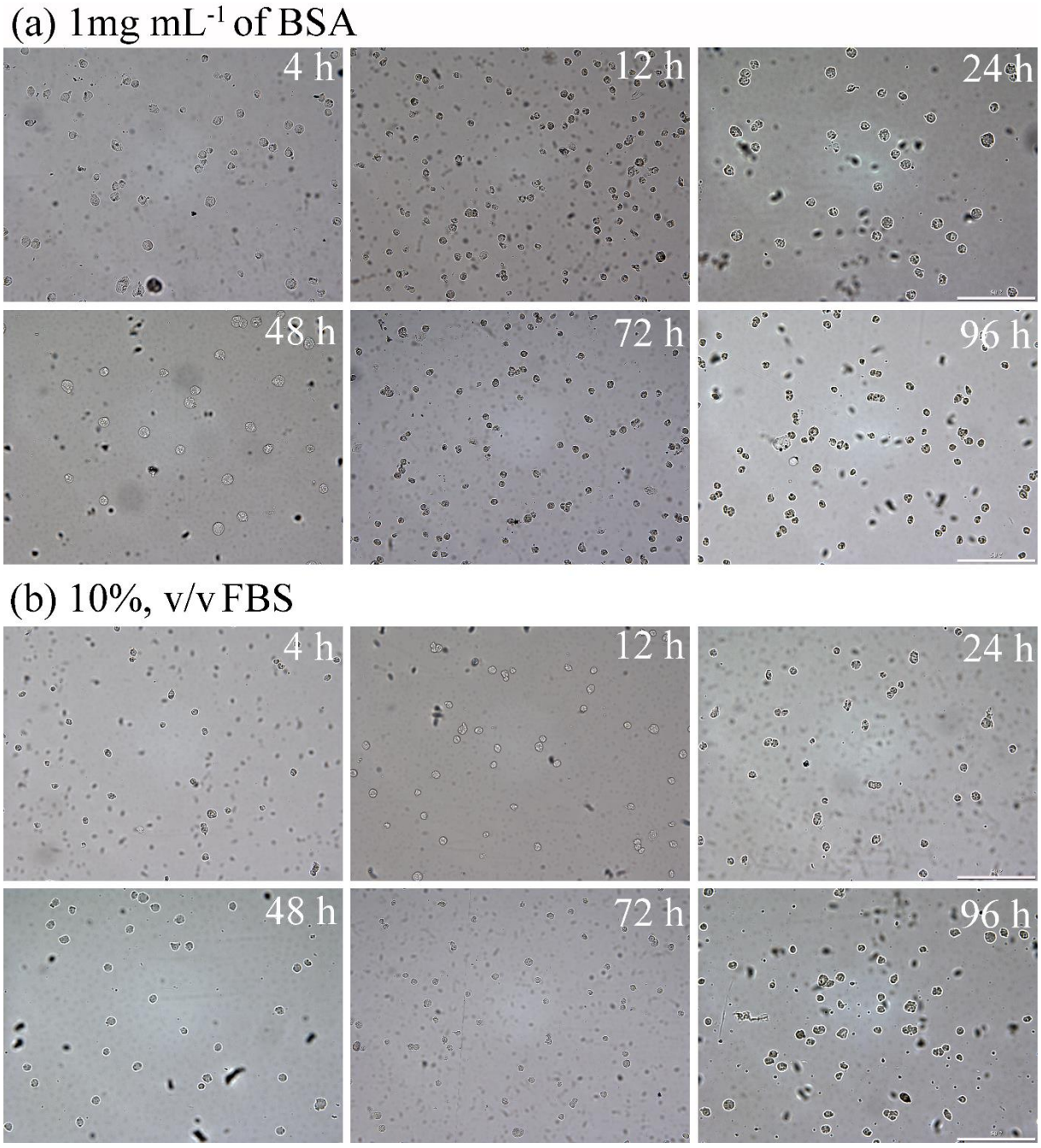

Figure S4. The optical images of TCL@EGCG/Al after suspending the microparticles vaccine in culture medium containing a known concentration of BSA or FBS at 37 ^{o}C for a period of time.

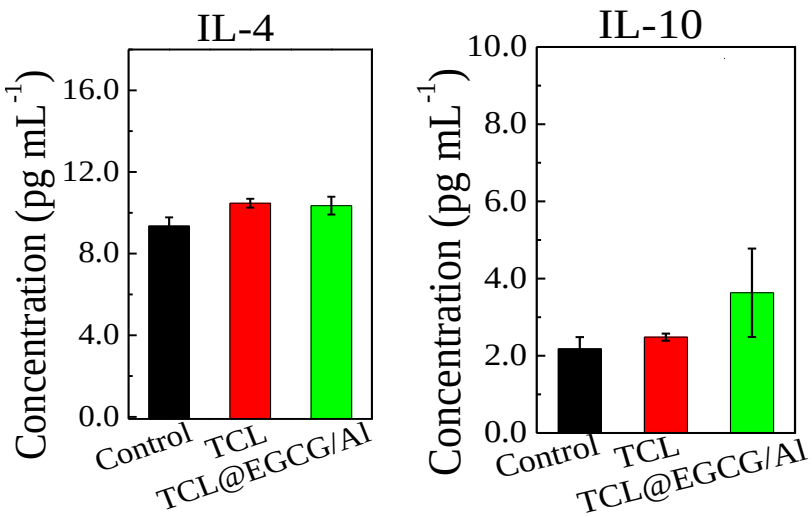

Figure S5. Secretion of IL-4 and IL-10 from BMDCs treated with different formulations, the differences were analyzed using unpaired student's t-test. *p < 0.05, **p < 0.01, ***p < 0.001.

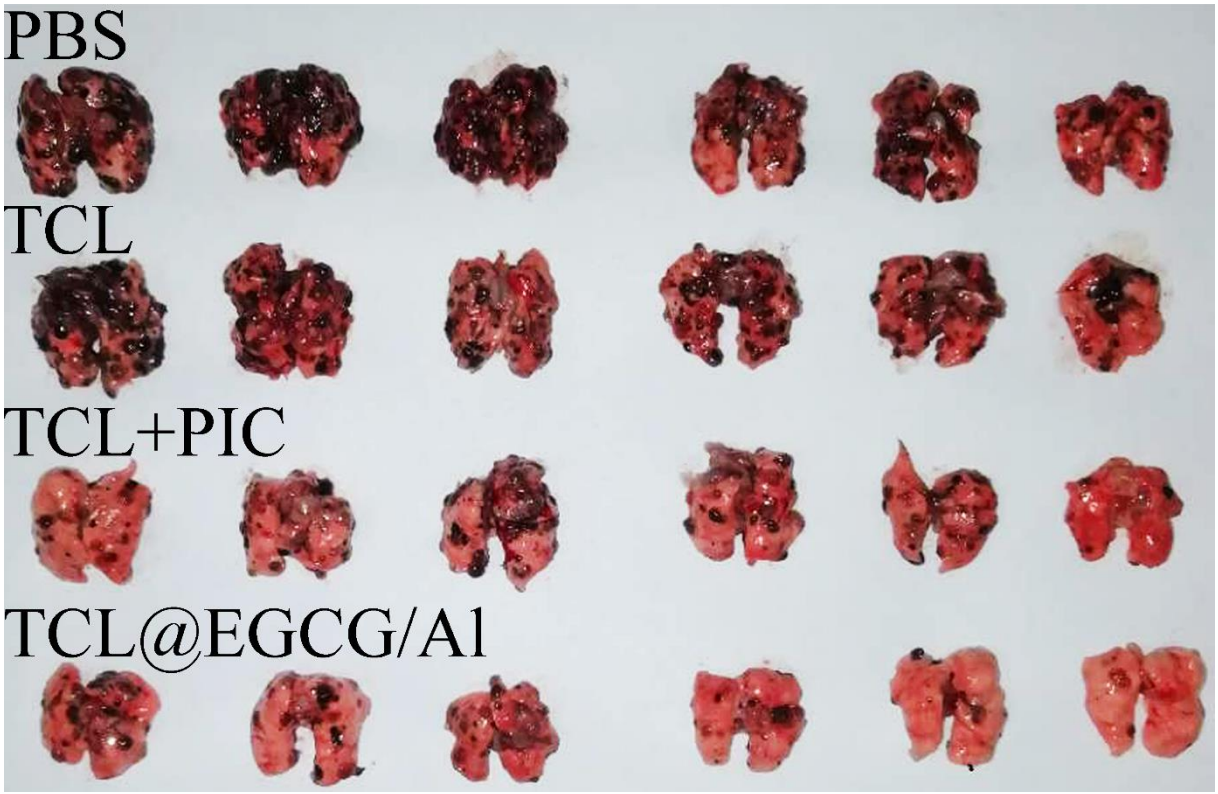

Figure. S6 Photographic images of lungs from tumor-bearing mice on day 18 post tumor challenge

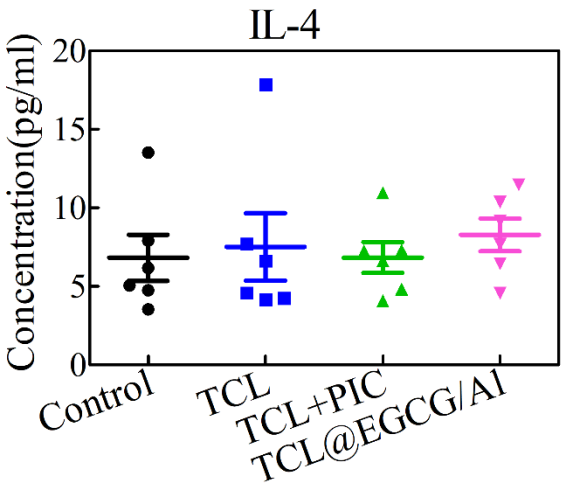

Figure. S7 IL-4 level of splenocyte culture supernatant after 3 days of antigen stimulation, the data are expressed as mean ± SD (n = 6), the differences were analyzed by one way ANOVA with Bonferroni multiple comparison post-test.

References

[1] a) X. Ma, R. Sun, J. Cheng, J. Liu, F. Gou, H. Xiang, X. Zhou, *J. Chem. Educ.* **2016**, 93, 345; b) J. Wu, W. Liu, J. Ge, H. Zhang, P. Wang, *Chem. Soc. Rev.* **2011**, 40, 3483.