Supporting Information

Liposome-Tethered Supported Lipid Bilayer Platform for Capture and Release of Heterogeneous Populations of Circulating Tumor Cells

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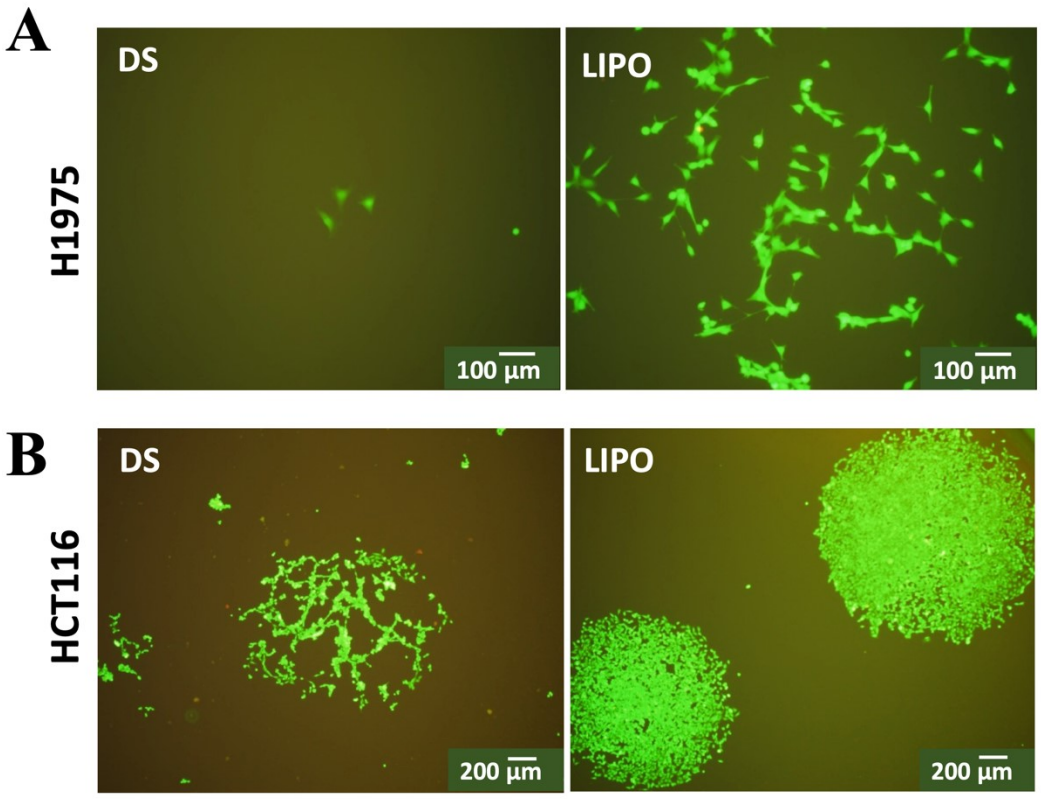

Fig. S1 Proliferation tests of DS and LIPO platforms. (**A**) The H1975 cell morphology after capture from whole blood spiking, released and subsequent 10-day culture on TCP plates using LIPO platform (166 cells) and DS platform (4 cells). The cells were labeled with cell tracker, CMFDA dye, for 30 min before taking IF images. (**B**) The morphology of HCT116 cell captured from whole blood, release and subsequent 8-day culture using the LIPO platform and DS platform. The cells were labeled with LIVE/DEAD Viability/Cytotoxicity assay, for 30 min before taking fluorescence images.

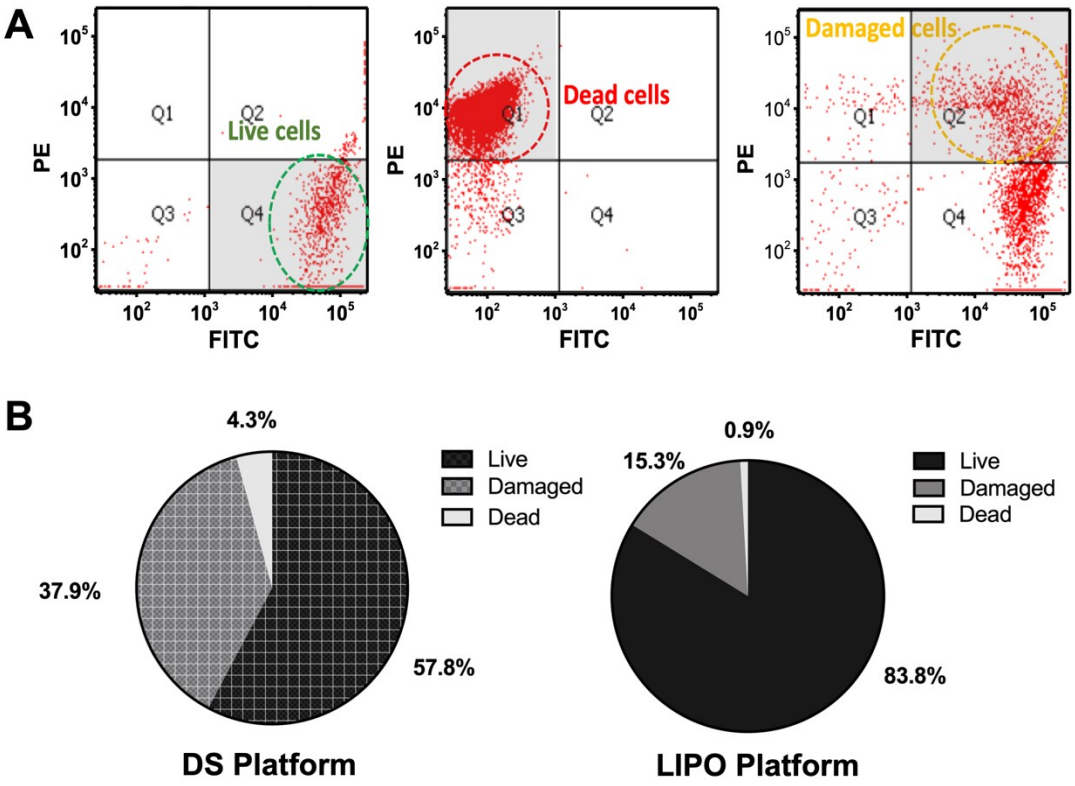

Fig. S2 The LIVE/DEAD assay determination by FACS analysis. (**A**) The gating regions of live, dead, and damaged H1975 cells by FACS flow cytometry. The H1975 cells were labeled with LIVE/DEAD cell viability assay before analyzed with FACS cytometry. (**B**) The pie chart of live/dead/damaged cell population released from either DS-SLB or LIPO-SLB platforms.

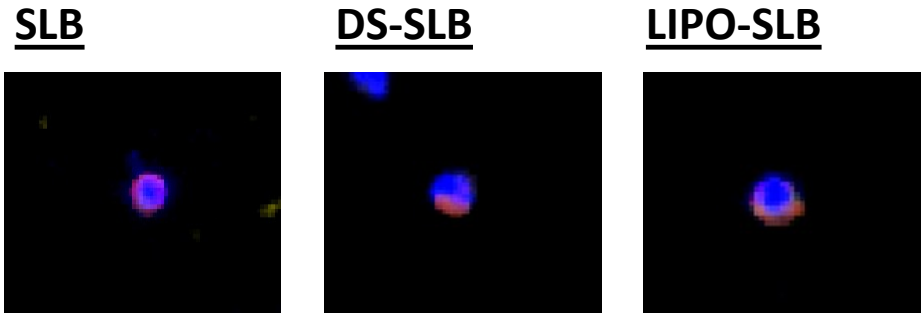

Fig. S3 Representative immune fluorescence staining images for head and neck squamous cell carcinoma (HNSCC) captured and released from the platforms of SLB, DS-SLB and LIPO-SLB. The captured cells were stained for antigens of EpCAM and panCK alone with DNA with DAPI.