## **Supplementary Information**

## Study of oxygen tension variation within live tumor spheroids using microfluidic devices and multi-photon laser scanning microscopy

Sreerupa Sarkar,<sup>a,b,c</sup> Chien-Chung Peng,<sup>b</sup> Chiung Wen Kuo,<sup>b</sup> Di-Yen Chueh,<sup>b</sup> Hsiao-Mei Wu,<sup>b</sup> Yuan-Hsuan Liu,<sup>b</sup> Peilin Chen<sup>b</sup> and Yi-Chung Tung<sup>b,c,d\*</sup>



**Figure S1.** The flow cytometry results of the MG-63 spheroids with diameters of  $140\pm10 \ \mu\text{m}$  cultured in the microfluidic devices for 48 hours. The flow cytometry analysis is performed according to the reported protocol<sup>47</sup>. (a) Plot of the side scatter and forward scatter signals. (b) Plot of the propidium iodide (PI) and Annexin V signals. The results show that the cells within the spheroids have high viability with very small amount of the cells are apoptotic or necrotic.