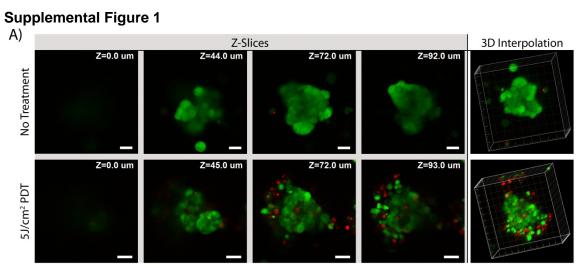
## **Supplemental Figure Captions**

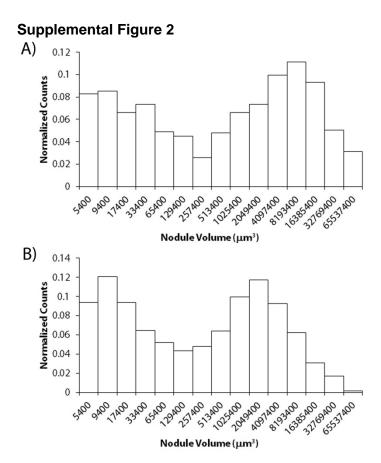
**Supplemental Figure 1:** 40X Z-stacks of 3D AsPC-1 Nodules during Viability Assessment. Images acquired from Z-stacks at four different Z-positions and 3D renderings of each whole Z-stack for AsPC-1 day 12 nodules receiving either no treatment or 5 J/cm<sup>2</sup> PDT (1.5 hours of BPD uptake) from fluorescence images obtained during viability assessment. All scale bars are 80 μm.

**Supplemental Figure 2:** Nodule Size Distributions of AsPC-1 and PANC-1 Pre-**Treatment.** Nodule volume histograms illustrating the distribution of acini sizes present at the time of imaging and treatment for (A) day 12 AsPC-1 and (B) day 10 PANC-1 cultures. The yaxis of each histogram gives the normalized object count, or the number of nodules that fall into each individual bin divided by the sum of all nodules in the distribution.

Supplemental Figure 3: Comparison of Imaging-Based Viability Assessment to MTT Assay. Comparison of PDT dose response curves (continuous irradiation) for OVCAR5 monolayer cultures as obtained by the MTT assay to that obtained by the imaging-based technique presented in this work and previously published by Rizvi et al. [9]. The agreement between the curves validates the use of the imaging-based method in monolayer cultures and suggests the technique is a plausible approach to treatment assessment in 3D cultures.

## **Supplemental Figures**





**Supplemental Figure 3** 

