**Quantification of The Effect of Toxicants on the Intracellular Kinetic Energy and Cross-Sectional Area of Mammary Epithelial Organoids by OCT Fluctuation Spectroscopy**

**Xiao Yu,\* Ashley M. Fuller,**† **Richard Blackmon,**‡ **Melissa A. Troester,** §**,** ¶ **and Amy L. Oldenburg\*,** ‡**,** ¶

**Supplemental FIgures**

**Supplementary 3**:



Dose-dependent responses of MCF10DCIS.com organoids to Dox as measured by the OCT-based *E* metrics. \*\*p<0.001; \*\*\*p<0.0001 relative to the pre-exposure dose. Error bars represent mean + standard error.

**Supplementary 4**:



Time- and dose-dependent responses of MCF7 organoids to estrogen as measured by the OCT-based *α* (A), *M* (B) and *E* (C) metrics. \*p<0.01; \*\*p<0.001 relative to the pre-exposure time. Error bars represent mean + standard error.

**Supplementary 5**:



Time- and dose-dependent responses of MCF7 organoids to Tamoxifen as measured by the OCT-based *α* (A), *M* (B) and *E* (C) metrics. \*\*p<0.001; \*\*\*p<0.0001 relative to the pre-exposure time. Error bars represent mean + standard error.

**Supplementary 6**:



Time-course of measured MCF7 organoid CSA upon exposure to 17β-estradiol (A) and 4-OHT (B). \*p<0.01 6 days relative to 0 days (before exposure). Error bars represent mean + standard error.