

Fig. S16 *In silico* trial predictions of the cell count at day 100 with initial tumor heterogeneity. (A) for the original cell line (MCF7) (B) for a simulated cell line with a high untreated G1-S transition rate ($1.8 * \lambda_{\alpha}$) (C) for a simulate cell line with high palbociclib resistance ($10 * c_P$). (A)-(C) are the standard box plots for the number of cells at day 100 with different degrees of initial tumor heterogeneity at day 0. From left to right, a: 100% -DOX cells, b: 80% -DOX cells + 20% +DOX cells, c: 50% -DOX cells + 50% +DOX cells, d: 20% -DOX cells + 80% +DOX cells, e: 100% +DOX cells.

Schedule 3 weeks on, 1 week off, 125mg BID, 50mg BID, 50mg in morning, 25mg at night daily, 100mg daily, 75mg

