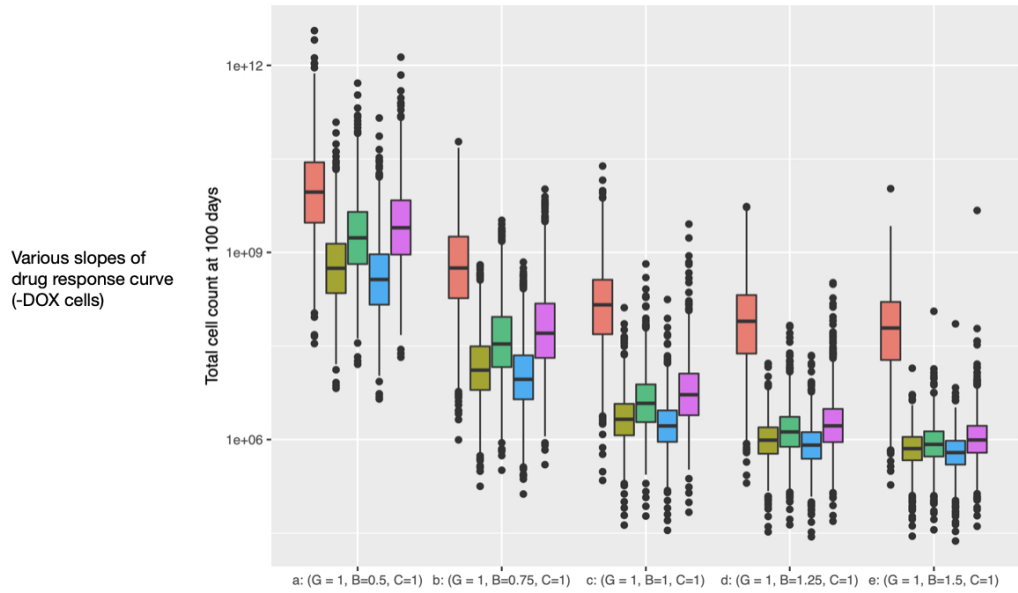


**Fig. S15** *In silico* simulation of new cell lines - 3 (A) for -DOX cells and (B) for +DOX cells are the standard box plots for the number of cells at day 100. From left to right, we varied the slopes of palbociclib response curve from the original cell line (MCF7) by giving different weights (0.5, 0.75, 1.0, 1.25, 1.5) of the original parameter  $b_P$ . In x-axis, G denotes the weight of G1-S growth rate, B denotes the weight of the slope of palbociclib response curve, and C denotes the weight of G1/S-TR50 of palbociclib response curve.

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

**A**



**B**

