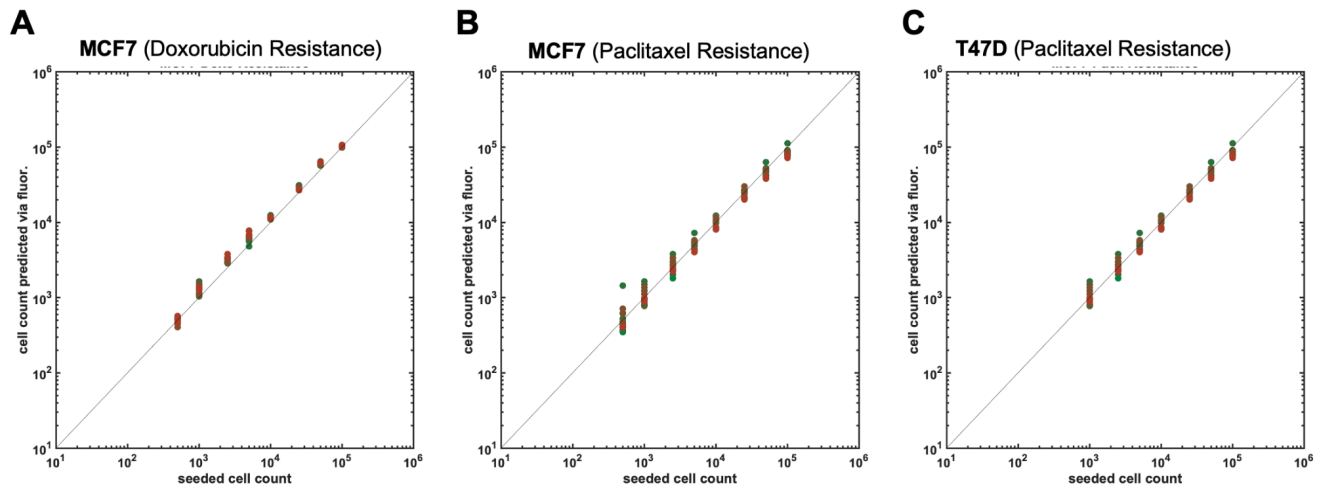## Supplemental Information

Figure S1: Validation of fluorescence intensity, F, to cell count, N, equation (see Methods). Known values of cells seeded (x-axis) are compared to predicted cell counts based on measured fluorescence intensity (y-axis). The model provides accurate cell count predictions, falling on the unity line (black line) across all initial sensitive-to-resistant ratios (color), repeated for (a) MCF7 DoxoR, (b) MCF7 PaclR, and (c) T47D PaclR lines.