A  $S/G_2(t)$  $G_1(t)$ α Supp. Figure 2 β  $G_1(t)$  $S/G_2(t)$  $\gamma_2$  $S/G_2(t)$  $G_1(t)$ α  $\alpha \beta$  progression rates through  $G_1$  and  $S/G_2$  $\gamma_2$ death rate В C Expon Model Fits - Lapatinib Expon Model Fits - Lapatinib model fits ---- data avg model fits ---- data avg 2.5 2.5 control control S-G<sub>2</sub> cell number 2.0 25.0 nM 2.0 25.0 nM  $G_1$  cell number -50.0 nM -100.0 nM -250.0 nM -500.0 nM 50.0 nM 100.0 nM 250.0 nM .5 −500.0 nM 1.0 0.5 0.5 0.0 0.0 24 72 96 48 48 72 24 0 time [hr] time [hr] Expon Model Fits - Gemcitabine D Expon Model Fits - Gemcitabine Ε model fits model fits ----- data avg ---- data avg 2.5 2.5 control control S-G<sub>2</sub> cell number 0.0 1.5 0.5 2.0 1.5 1.0 0.5 0.5 2.5 nM --- 5.0 nM --- 10.0 nM --- 30.0 nM --- 100.0 nM 2.5 nM — 5.0 nM — 10.0 nM — 30.0 nM — 100.0 nM 0.5 0.0 0.0

48

time [hr]

24

0

72

96

96

96

48

time [hr]

24

72