

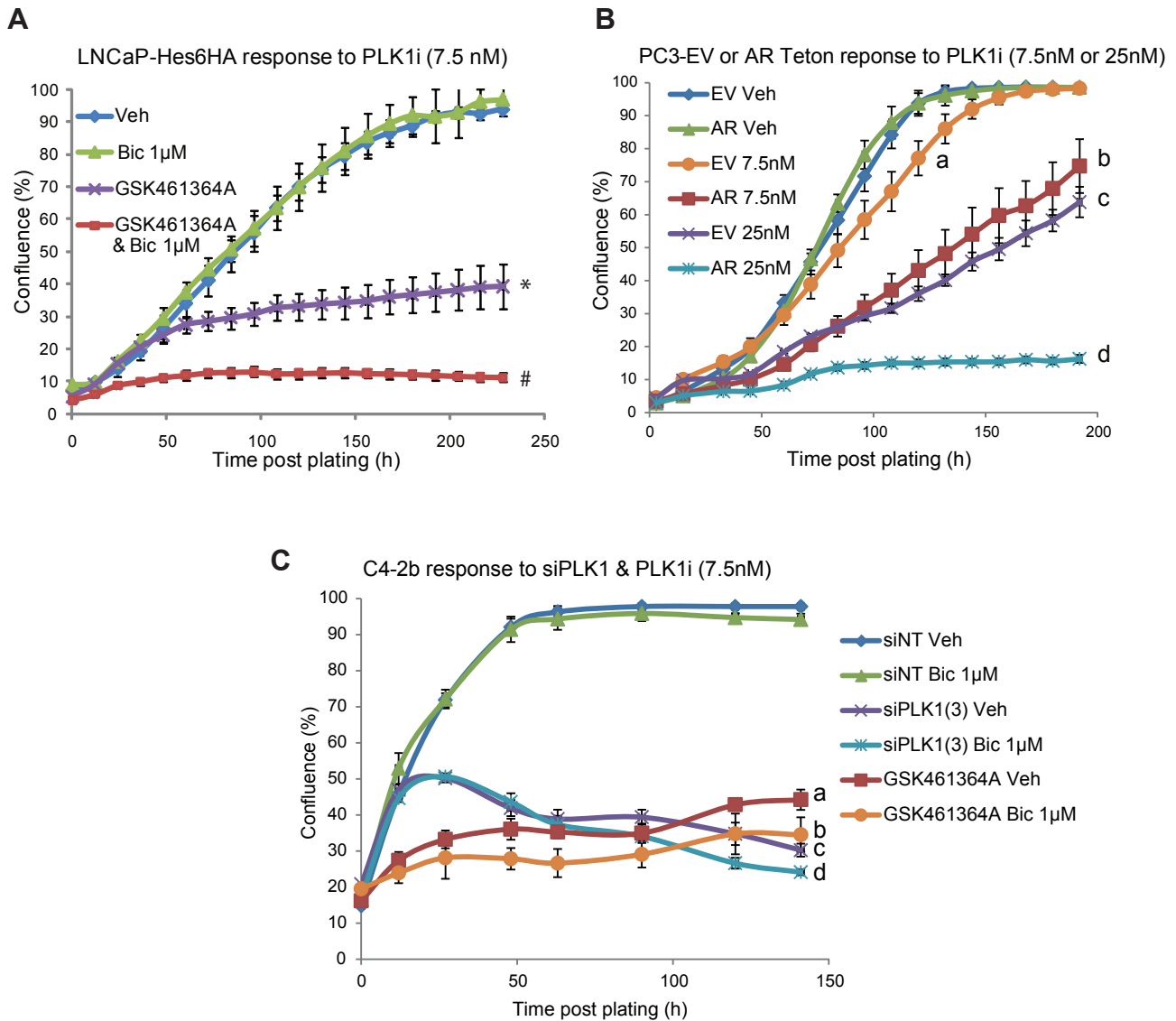


Figure S12, related to Figure 4. PLK1 inhibition reduces androgen-resistant growth.

(A) Selective polo-like kinase 1 (PLK1) inhibitor GSK461364A (7.5nM) attenuates growth of castrate-resistant LNCaP-Hes6HA cells and restores sensitivity to bicalutamide. Vehicle is ETOH, Bic is bicalutamide 1 μ M, GSK461364A 7.5 nM; n = 3, error bars represent mean $\pm$ SEM; *p = 0.0003, #p = 3.3E-8 compared to Veh at 225h by t-test.

(B) PLK1 inhibition by GSK461364A (7.5nM) leads to a small reduction in growth of aggressive AR negative PC3 cells, with greater effect at higher dose (25nM). PC3 cells expressing AR have a greater reduction in growth at the same dose. No effect with Bic 1 μ M. Doxycycline 2 μ g/ml to all. n = 4, error bars represent mean $\pm$ SEM; p = 0.013 PLK1i (7.5nM) versus vehicle p<0.05; all other conditions p<0.001 at 120hrs. ^ap = 0.013, ^bp = 3.3E-7, ^cp = 0.004, ^dp = 1.5E-8 compared to EV Veh at 120h by t-test.

(C) PLK1 inhibition by both GSK461364A and siRNA reduces growth of castrate resistant cell-line C4-2b with a small synergistic effect with bicalutamide. siPLK1(3) representative of 3 siRNAs. n = 4, error bars represent mean $\pm$ SEM; ^ap = 4.8E-7 compared to siNT Veh, ^bp = 0.041 compared to PLK1i alone, ^cp = 2.1E-10 compared to siNT Veh, ^dp = 0.001 compared to siPLK1(3) alone at 141h by t-test.