

Supplemental Figure 1. Verification of PLA2R1 Expression with Different Antibodies. The expression of PLA2R1 protein in prostate cell lines were confirmed by antibodies from proteintech™ (**A**), a human anti-guinea pig antibody (**B**) and a rabbit polyclonal antibody from Atlas (**C**). A lysate from HEK cells transfected with full-length human PLA2R1 that was tagged with both FLAG and HA epitopes was used as a positive control (+) in **B** and **C**.

Supplemental Figure 2. Effect of PLA2R1 Inhibition on PC-3 Cell Growth.

PLA2R1 expression was inhibited using shRNA. Scrambled shRNA was used as a control. Assessment of cell growth was performed using crystal violet staining (upper panel), which was quantified and compared to control cells (lower panel). Data in the upper panel are representative of three experiments. Data in the lower panel are represented as the mean \pm SEM of at least 3 separate experiments (n = 3/study).

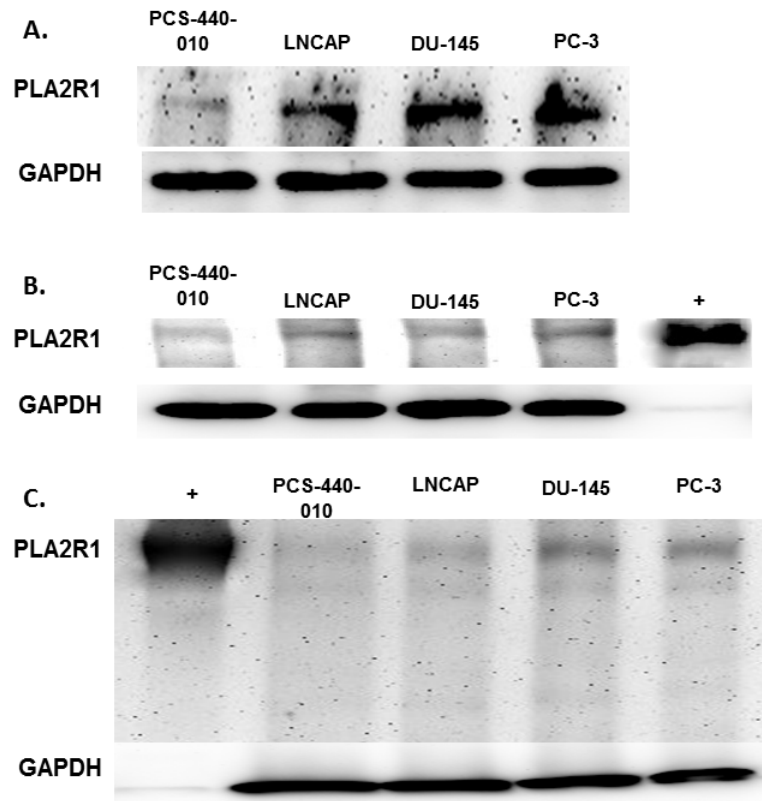
Supplemental Figure 3. Effect of PLA2R1 Inhibition on PC-3 Cell Growth with a Different PLA2R1 shRNA Plasmid.

PLA2R1 expression was inhibited using shRNA from GeneCopoeia. Decreased expression of PLA2R1 (**A**) was verified using a rabbit polyclonal antibody from Atlas. GFP and GAPDH were used as loading controls. Assessment of cell growth was performed using MTT assays (**B**). Data in **B** are represented as the mean \pm SEM of at least 3 separate experiments (n = 3/study).

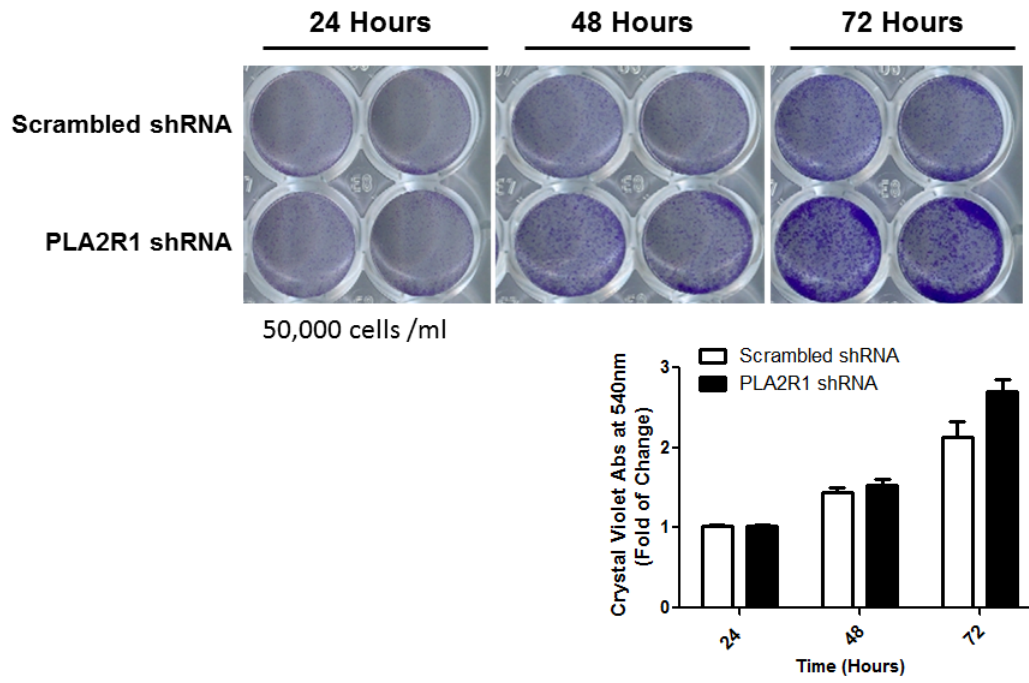
*Indicates a significant difference ($p < 0.05$) as compared to cells transfected with scrambled shRNA.

Supplemental Figure 4. Effect of PLA2R1 Knockdown on Chemotherapeutic-Induced and Liposome-induced Toxicity in PC-3 Cells. Cells were treated with docetaxel (**A**), cisplatin (**B**) and Dox (**C**) for 72 hours. Control (those transfected with scrambled shRNA) and PLA2R1 knockdown cells were treated with 2.5 μ M of Dox encapsulated in SSL and SPRL for 48 hours (**D**). MTT assays were used to determine the effect of knocking down PLA2R1 on chemotherapeutic-induced and liposome-induced cytotoxicity. Data in **A-D** are represented as the mean \pm SEM of at least 3 separate experiments (n = 3/study). *Indicates a significant difference ($p < 0.05$) as compared to cells transfected with scrambled shRNA.

Supplemental Figure 1

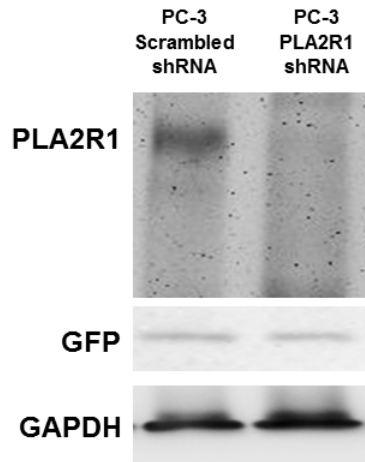


Supplemental Figure 2

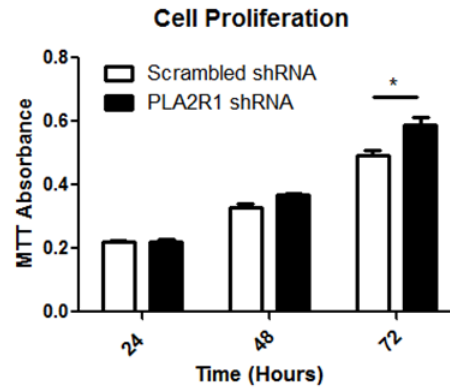


Supplemental Figure 3

A.

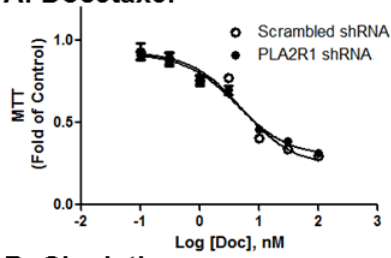


B.

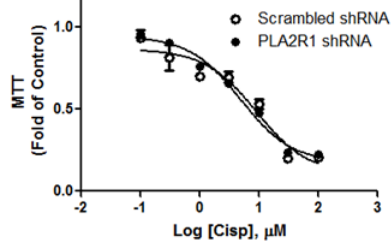


Supplemental Figure 4

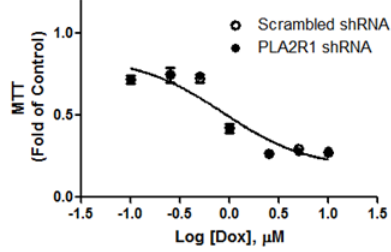
A. Docetaxel



B. Cisplatin



C. Doxorubicin



D. Doxorubicin Encapsulated Liposomes

