

## Description of additional supplementary files

### Supplementary data 1.

Lipidomic analysis acquired from the UPLC/QTOF MS spectra of WT and PLA2G7 KO H1299 cells.

### Supplementary data 2.

Lipidomic analysis based on the UPLC/QTOF MS spectra of Hs746T cells treated with 2  $\mu$ M darapladib for 1, 2, and 4 h.

### Supplementary data 3.

Concentrations of oxidised PE-18:0\_20:4, PE-18:0\_20:4, and PE-18:0\_22:4 in Hs746T cells treatment with RSL3 and/or 2  $\mu$ M darapladib for 4 h and in SNU-484 cells after treatment with RSL3 and/or 2  $\mu$ M darapladib for 3 h. The ratios of oxidised to non-oxidised PE-18:0\_20:4 are also shown. The concentrations were determined by LC-MS/MS and were normalised to the cellular protein level.

### Supplementary data 4.

PE-18:0\_20:4-d11 cleavage analysis of H1299 cell lysates incubated with the indicated concentrations of darapladib and (S)-BEL for 3 h and subjected to detection of AA-d11 by LC-MS/MS.

### Supplementary data 5.

Levels of AA and lysoPC species in the conditioned medium of Hs746T cells treated with 2  $\mu$ M darapladib for 0.5, 1, 2, and 4 h determined using LC-MS/MS.

### Supplementary data 6.

Relative levels of oxidised PE-18:0/20:4, PE-18:0\_20:4, and PE-18:0\_22:4 in Hs746T cells treated with RSL3 and/or 2  $\mu$ M darapladib. The ratios of oxidised to non-oxidised PE-18:0\_20:4 are also shown. The levels of lipids were determined by LC-MS/MS and normalised to the internal standard and cellular protein levels.

### Supplementary data 7.

Relative levels of oxidised and non-oxidised PE-18:0\_20:4 and their ratio in WT and PLA2G7 KO H1299 cells treated with RSL3 for 4 h.

### Supplementary data 8.

Analysis of AA-d11 cleavage by PE-18:0\_20:4-d11 using lysates from WT and PLA2G7 KO H1299 cells.

### Supplementary data 9.

Relative lipid composition of tumour tissues treated with darapladib, PACMA31, and ferrostatin-1 determined by UPLC/QTOF-MS