Description of dataset “Dual Killing Strategy: Photocatalytic generation of singlet oxygen with concomitant Pt(IV) prodrug activation”

Excel file “Figures_data.xlsx”:

Sheet 1: Table1

ICP-MS data correlating to the cell uptake in three cell lines: SKOV-3-wt, SKOV-3-OxR and HCT116. The lines 5 and 6 are blank samples, lines 7-14 are calibration samples of known concentration used to generate a standard curve, lines 15-17 are reference samples which are also known concentrations used to check that ICP-MS is analysing and extrapolating from standard curve correctly. Lines 18-26 show the data for each cell type done in triplicate. The right half of the sheet shows the quantitative data which is used to work back through dilution steps to calculate the ultimate cell uptake (see methods of linked article for all dilution steps used prior to ICP-MS analysis - Norman, D, Gambardella, A, Mount, A, Murray, A & Bradley, M 2019, 'A Dual Killing Strategy - Photocatalytic Generation of Singlet Oxygen with Concomitant Pt(IV) Prodrug Activation', *Angewandte Chemie International Edition*. https://doi.org/10.1002/anie.201908511).

Counts per second (cps) and the root square deviation (%rsd) in the raw data (left side of sheet) is used to calculate the µg/L in each sample for the quanititative data (right side of sheet). This is done automatically by the ICP-MS software.

Sheet 2: Fig1a

Figure 1a shows the HPLC analysis of the photocatalytic conversion of Pt(IV) to Pt(II) by **PS-1** following 30 and 60 minutes of irradiation. Data is presented as x axis = time and y axis = absorbance at 254 nm. This shows the decrease of the Pt(IV) species over time as it is converted to the corresponding Pt(II) species.

Sheet 3: Fig 2b

Cell viability data plotted in Figure 2b to show the change in viability of cells for each conditions as a percentage of the healthy controls. Conditions are PS-1 (1 µM or 18 µM) in combination with P**t-c** (20 µM) in both dark conditions or exposed to light of 470 nm for 30 min. Statistics performed with this data (one-way ANOVA with Tukey post-test) were done in GraphPad Prism.

FID file: NMR data (Fig 1b)

These files are the raw data from NMR spectrometer used to measure the Pt(IV) conversion over time. They can be opened with NMR analysis software such as MNova or Topspin.

TIFF file: Fig 2a cell imaging

These files have been analysed using the software ImageJ to create a stack of images for each channel of confocal microscope (i.e. red, green and blue with brightfield). The portion used to the highlight the overlap of green (Mitotracker green) with red (PS-1) can be seen in the red box. The blue channel shows the nuclei of cells stained with Hoechst.