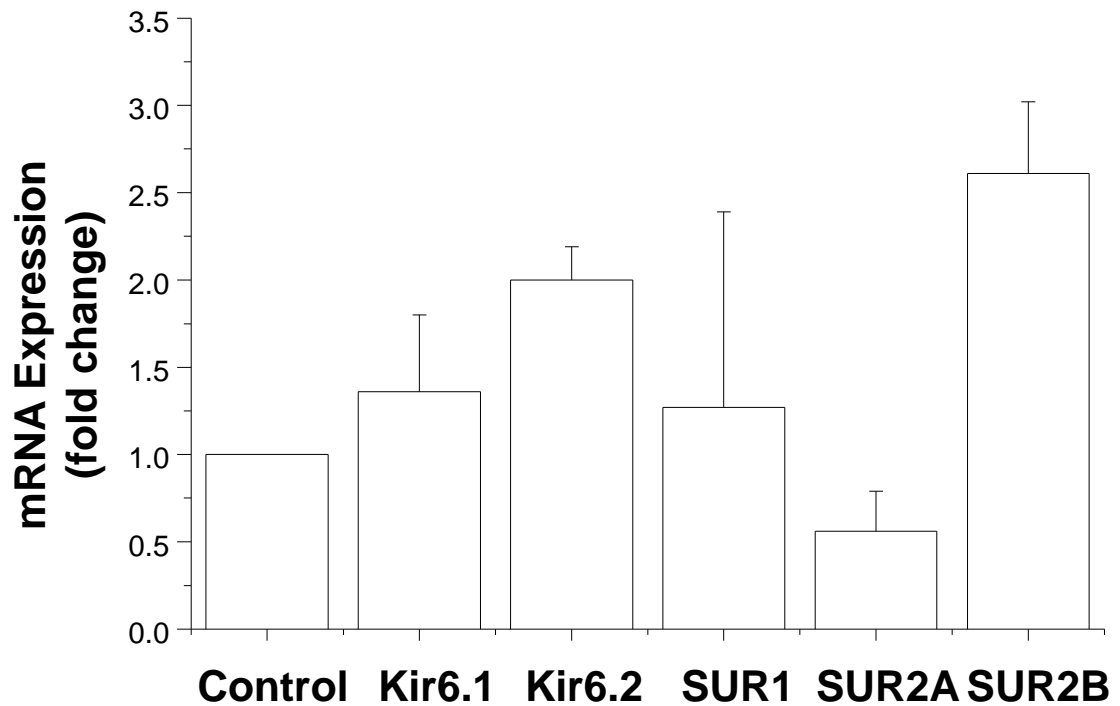


## **SUPPLEMENTARY DATA**

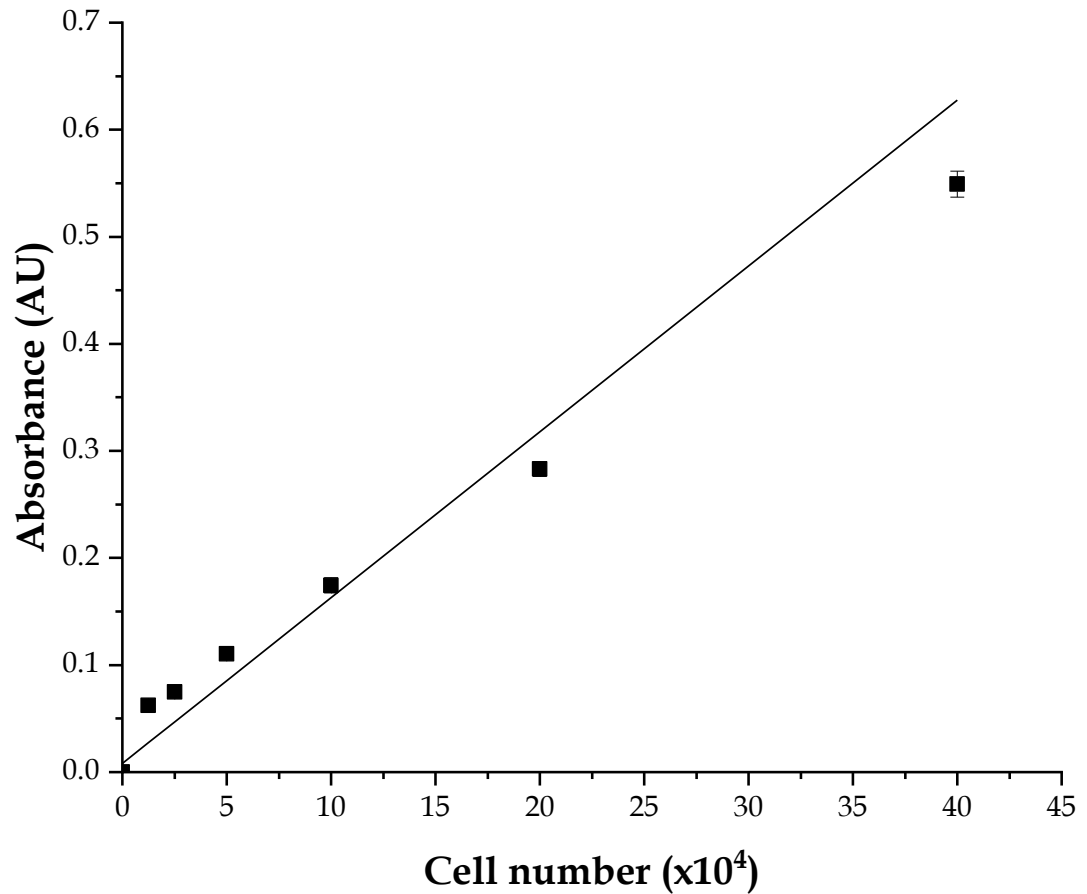
### **Anti-invasive effects of minoxidil on human breast cancer cells: Combination with ranolazine**

Shiwen Qiu, Scott P Fraser, Wayne Pires and

Mustafa B A Djamgoz

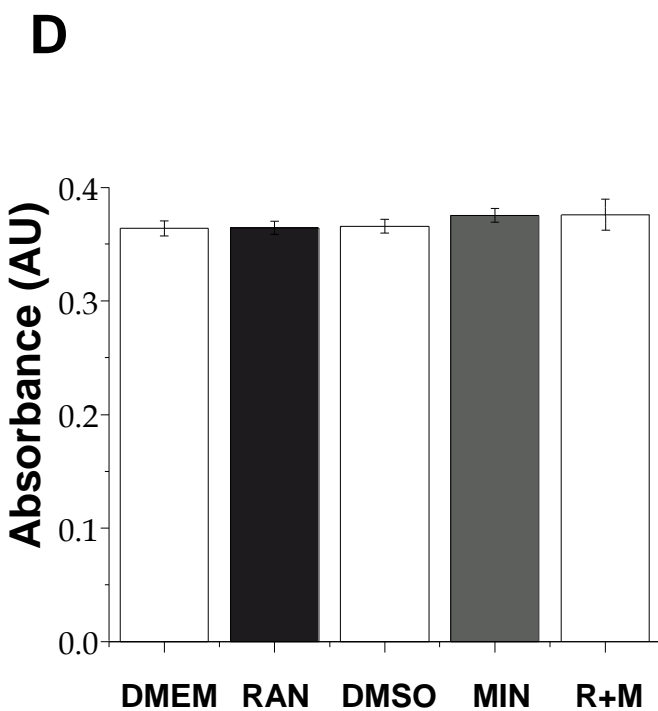
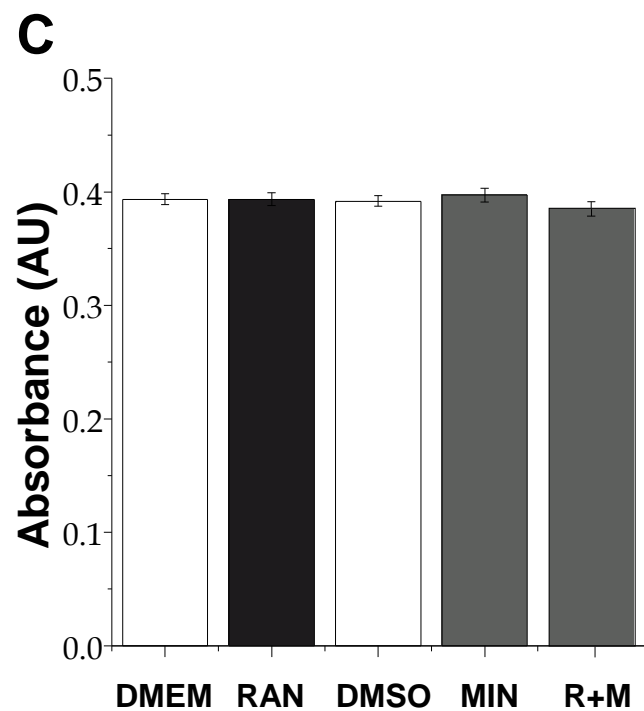
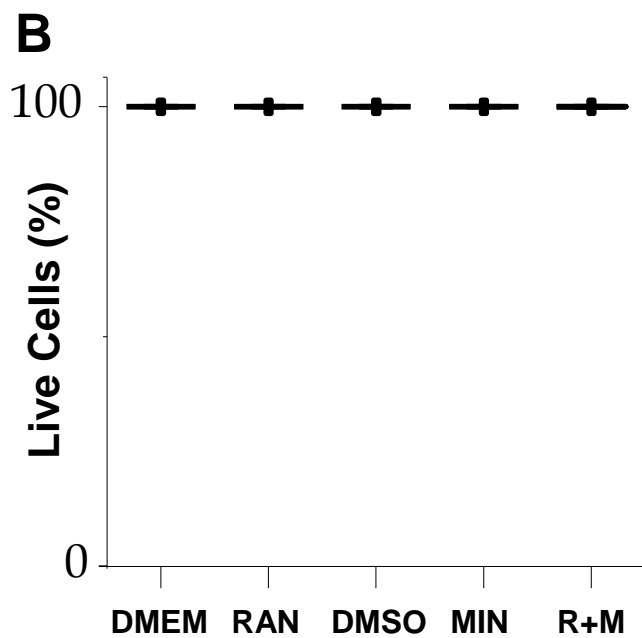
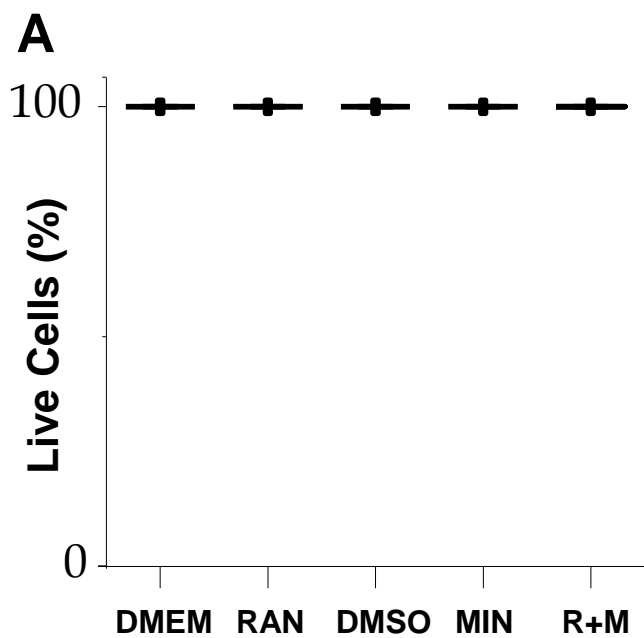


**Supplementary Figure 1.** Expression of  $K_{ATP}$  channel subunit Kir6.1, Kir6.2, SUR1, SUR2A and SUR2B mRNA levels in MDA-MB-231 and MDA-MB-468 cells. Histogram shows the expression levels in MDA-MB-468 cells relative to MDA-MB-231 cells (indicated as Control). Data are shown as means  $\pm$  standard errors of the mean (n=3).



**Supplementary Figure 2. Typical calibration graph for the MTT colorimetric assay.**

Standard curve for the MDA-MB-231 cells showing the linear relationship between absorbance at 570 nm in arbitrary units (AU) and cell number ( $r = 0.80$ ). Data points indicate means  $\pm$  SEMs ( $n=4$ ).



**Supplementary Figure 3** Plots showing the effects of ranolazine, (RAN), minoxidil (MIN) and combination treatment (R+M) on cell viability and proliferation of the MDA-MB-231 cells. Cell viability data under normoxia (A) and hypoxia (B) are presented as box plots showing medians, interquartile ranges, 99% and 1% confidence intervals (n=3). Proliferation data under normoxia (C) and hypoxia (D) are presented as histograms showing the mean  $\pm$  SEM. (n=6) There was no statistical difference for any treatment versus its respective control for both cell viability and proliferation data..