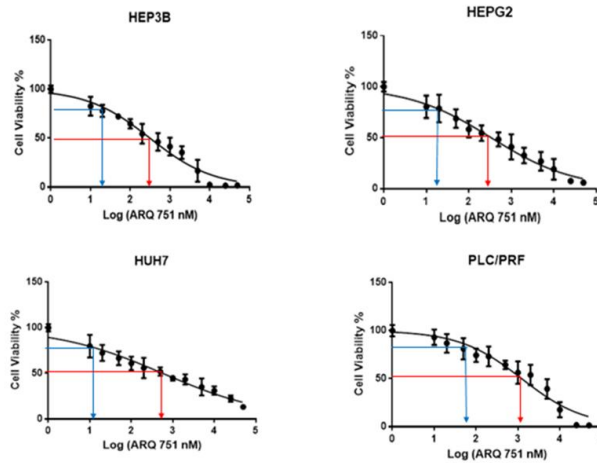


## Supplementary information:

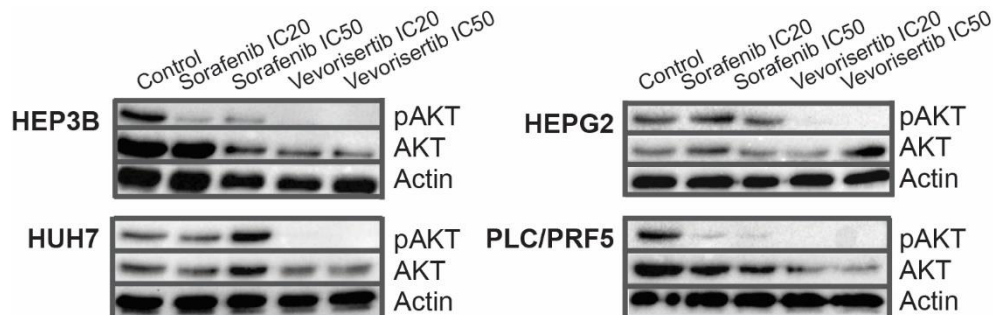
# Effect of novel AKT inhibitor Vevorisertib as single agent and in combination with Sorafenib on hepatocellular carcinoma in a cirrhotic rat model



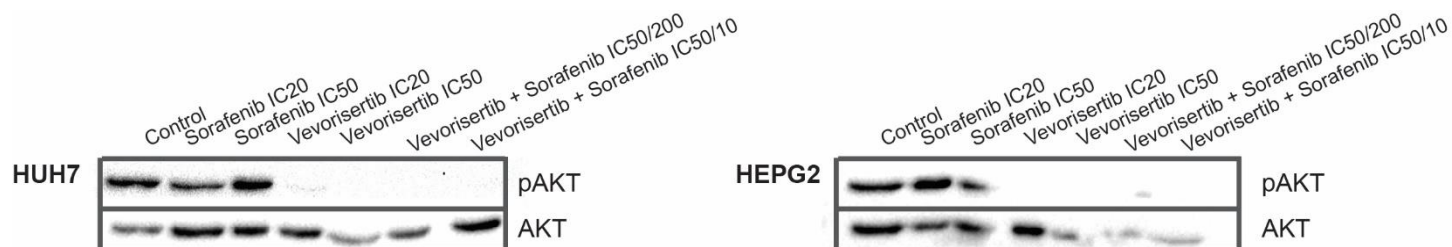
**Supplementary Figure S1: Cell viability assay on cell lines.** MTT assay was used to determine viability of Hep3B, HepG2, HuH7, PLC/PRF cells treated with different concentrations of Sorafenib or ARQ 751(vevorisertib) incubated during 48 hours. All experiments were done in triplicates and repeated three times. IC<sub>20</sub> blue line, IC<sub>50</sub> red line. Data are presented as mean  $\pm$  SD.

		HEP3B	HUH7	HEPG2	PLC/PRF/5
Vevorisertib	IC <sub>20</sub>	0.02 $\pm$ 0.002	0.01 $\pm$ 0.001	0.003 $\pm$ 0.0003	0.04 $\pm$ 0.009
	IC <sub>50</sub>	0.32 $\pm$ 0.05	0.58 $\pm$ 0.05	0.34 $\pm$ 0.02	1.24 $\pm$ 0.07
Sorafenib	IC <sub>20</sub>	0.89 $\pm$ 0.03	0.90 $\pm$ 0.01	1.48 $\pm$ 0.05	1.09 $\pm$ 0.06
	IC <sub>50</sub>	6.68 $\pm$ 0.03	11.58 $\pm$ 0.03	10.53 $\pm$ 0.04	12.69 $\pm$ 0.04
IC <sub>50</sub> Potency ratio	Sorafenib IC <sub>50</sub> / Vevorisertib IC <sub>50</sub>	21	20	30	10

**Supplementary Table S1: IC<sub>20</sub> and IC<sub>50</sub> of Vevorisertib, Sorafenib and the IC<sub>50</sub> potency ratio.** Inhibitory concentrations IC<sub>20</sub> and IC<sub>50</sub> for Sorafenib and Vevorisertib, using Hep3B, HuH7, HepG2, PLC/PRF cell lines. Data are presented as mean  $\pm$  SD. IC<sub>50</sub> potency ratio between Sorafenib and Vevorisertib was calculated for Hep3B, HuH7, HepG2, PLC/PRF cell lines as Sorafenib IC<sub>50</sub>/ Vevorisertib IC<sub>50</sub>.



**Supplementary Figure S2: Effect of Vevorisertib treatment on phosphorylation of AKT.** Representative western blot analysis of pAKT, AKT and Actin using Hep3B, HuH7, HepG2, PLC/PRF cell lines.



**Supplementary Figure S3: Effect of Veverisertib and Veverisertib + Sorafenib treatment on phosphorylation of AKT.**  
 Representative western blot analysis of pAKT and AKT using HuH7 and HepG2 cell lines.