

# **Novel combination of sorafenib and biochanin-A synergistically enhances the anti-proliferative and pro-apoptotic effects on hepatocellular carcinoma cells**

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**Supplementary Table 1: Synergy analysis of SOR/Bio-A combination ratio 1:4 in HepG2 cancer cell line using Calcosyn software.**

Bio-A ( $\mu\text{M}$ )	SOR ( $\mu\text{M}$ )	Fa	CI
0.04	0.01	0.07	0.550
0.12	0.03	0.04	3.756
0.4	0.1	0.092	3.647
1.2	0.3	0.164	4.401
4	1	0.254	6.922
12	3	0.377	9.629
40	10	0.546	13.281
120	30	0.607	29.307
400	100	0.745	46.983

**Supplementary Table 2: Synergy analysis of SOR/Bio-A combination ratio 1:16 in HepG2 cancer cell line using Calcosyn software.**

Bio-A ( $\mu\text{M}$ )	SOR ( $\mu\text{M}$ )	Fa	CI
16	1	0.259	7.552
48	3	0.993	0.442
160	10	0.998	0.836
480	30	0.999	1.041

**Supplementary Table 3: Dose reduction index (DRI) for SOR/Bio-A 1:50 combination ratio in HepG2 cancer cell line using Calcosyn software.**

Fa	Drug alone		Dose Reduction Index (DRI)	
	Bio-A ( $\mu\text{M}$ )	SOR ( $\mu\text{M}$ )	Bio-A	SOR
0.17	8.0602	0.1994	53.735	66.468
0.24	10.1888	0.3706	20.378	37.058
0.283	11.4964	0.5100	7.664	16.999
0.425	16.1452	1.2518	3.229	12.518
0.708	30.7128	6.8558	2.048	22.853
0.985	183.1680	770.6528	3.663	770.653

**Supplementary Figure 1: Representative western blot for the effect of SOR/Bio-A combination on protein expression of Bax in HepG2 cells treated for 72 h**

