

Supplementary Tables

SUPPL. TABLE I- Cell material used for the study

Type of cell line	ATCC generic name	Disease	Disease markers
3T3	ATCC1®CRL-1658™	Normal Rat muscle	N/A
HT-29	ATCC1® HTB-38™	Colorectal adenocarcinoma	N/A
HCT-15	ATCC® CCL-225™	Colorectal adenocarcinoma, dukes type C/ resistant variant	P-gp

N/A: Not Applicable, P-gp: P-glycoprotein

SUPPL. TABLE II- Analysis for combination index range

Range of combination index	Description
<0.1	Very strong synergism
0.1-0.3	Strong synergism
0.3-0.7	Synergism
0.7-0.85	Moderate synergism
0.85-0.90	Slight synergism
0.90-1.10	Nearly additive
1.10-1.20	Slight antagonism
1.20-1.45	Moderate antagonism
1.45-3.3	Antagonism
3.3-10	Strong antagonism
>10	Very strong antagonism

TABLE III- The retention factors of the separated components of the *S. birrea* ethanol extract using different mobile phases

Mobile phases	Compound	Retention factor
DCM: Hexane: Ethyl Acetate	1	0.47
	2	0.65
	3	0.93
	4	0.99
	1	0.2
Benzene: methanol: Ammonium hydroxide	2	0.35
	3	0.54
	4	0.88
	5	0.95
	1	0.2

Suppl. Table IV. The IC₅₀ and combination index values of the DOX and VER on HT29 cells, n=3.

Drug/Combo	CI value	Dose VER	Dose DOX	DRI VER	DRI DOX
IC ₅₀					
VER		3.04		2.3	
DOX			0.45		1.7
DOX + VER	1.00	1.31	0.26		
IC ₇₅					3.5

VER		23.06		7.8	
DOX			2.07		
DOX + VER	0.41	2.94	0.59		
IC₉₀					
VER		175.1		26	
DOX			9.40		7
DOX + VER	0.17	6.61	1.32		
IC₉₅					
VER		695.4		60	
DOX			26.7		11.4
DOX+ VER	0.10	11.5	2.29		

Suppl. Table V. The IC and combination index values of the DOX and SBE extract on HT29 cells, n=3.

Drug/Combination	CI value	Dose-SBE	Dose-DOX	DRI-SBE	DRI-DOX
IC₅₀					
SBE		140.09		0.21	
DOX			0.35		0.20
SBE + DOX	9.6	669.89	1.70		
IC₇₅					
SBE		689.90		0.14	
DOX			1.26		0.10
SBE + DOX	17.1	4969.46	12.6		
IC₉₀					
SBE		3397.65		0.09	
DOX			4.5		0.04
SBE + DOX	31.6	36865.0	93.6		
IC₉₅					
SBE		10048.5		0.07	
DOX			10.7		0.02
SBE + DOX	48.5	144061	365.9		

Suppl. Table VI. The IC and combination index values of DOX and SBW extract on HT29 cells, n=3.

Drug/Combination	CI value	Dose <i>S.B H₂O</i>	Dose DOX	DRI SBW	DRI DOX
IC₅₀					
SBW		208.0		0.3	
DOX			0.47		0.4
SBW + DOX	2.5	275.4	0.57		
IC₇₅					
SBW		940.70		0.21	
DOX			2.04		0.50
SBW + DOX	0.97	467.39	0.97		
IC₉₀					
SBW		4253.9		0.13	
DOX			8.89		0.59
SBW + DOX	0.37	793.13	1.64		
IC₉₅					
SBW		11871.9		0.09	
DOX			24.18		0.66
SBW + DOX	0.19	1136.5	2.36		

Suppl. Table VII. The IC and combination index values of DOX and VER on HCT15 cells, n=3.

Drug/Combination	CI value	Dose VER	Dose DOX	DRI VER	DRI DOX
IC₅₀					
VER		6.63		2.64	
DOX			0.38		0.46
DOX + VER	1.33	2.99	0.33		
IC₇₅					
VER		217.40		355.6	
DOX			6.11		1.1
DOX + VER	0.34	14.82	1.66		
IC₉₀					
VER		7127.23		47807.7	
DOX			97.73		3.0
DOX + VER	0.09	73.44	8.25		
IC₉₅					
VER		7652.5		1340243	
DOX			643.6		4.2
DOX+ VER	0.04	218.07	24.50		

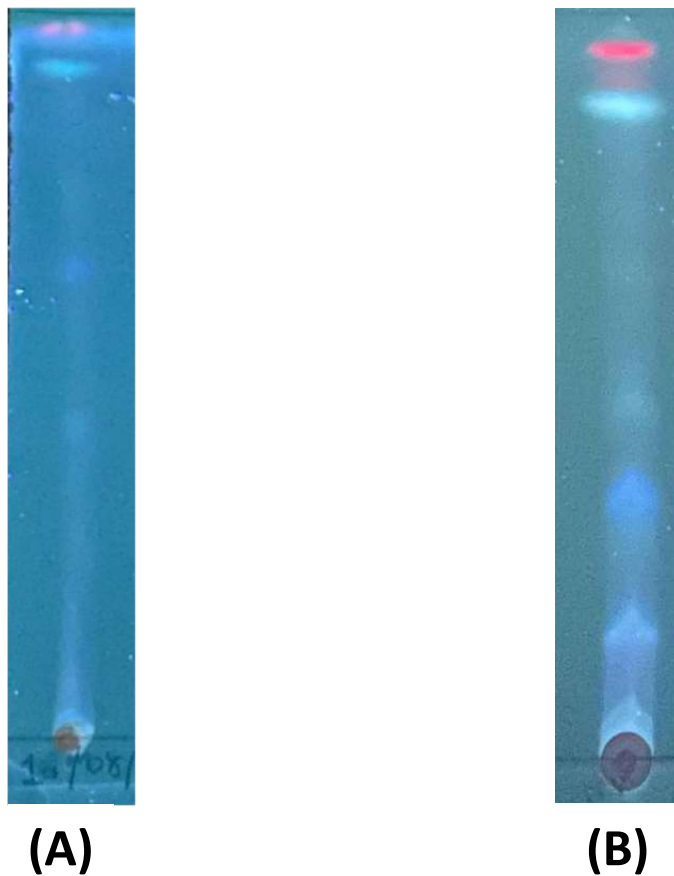
Suppl. Table VIII. The IC and combination index values of DOX and SBE extract on HCT15 cells.

Drug/Combination	CI value	Dose SB-EE	Dose DOX	DRI SB- EE	DRI DOX
IC₅₀					
SBE		49.35		0.54	
DOX			0.68		0.51
SBE + DOX	3.75	89.86	1.32		
IC₇₅					
SBE		256.47		7.37	
DOX			4.12		8.05
SBE + DOX	0.26	34.86	0.51		
IC₉₀					
SBE		1332.76		98.5	
DOX			24.87		125.1
SBE + DOX	0.01	13.53	0.20		
IC₉₅					
SBE		4088.34		578.37	
DOX			84.43		809.18
SBE + DOX	0.00297	7.11	0.10		

Suppl. Table IX. The IC and combination index values of DOX and SBW extract on HCT15 cells, n=3.

Drug/Combination	CI value	Dose SBW	Dose DOX	DRI SBW	DRI DOX
IC₅₀					
SBW		413.41		0.23	
DOX			1.54		0.23
SBW + DOX	5.30	1272.60	3.62		
IC₇₅					
SBW		1689.40		0.15	
DOX			11.33		0.18
SBW + DOX	6.66	7903.88	22.50		
IC₉₀					
SBW		6615.65		0.07	
DOX			83.28		0.14
SBW + DOX	10.00	49089.5	139.74		
IC₉₅					
SBW		16741.3		0.05	
DOX			323.40		0.11
SBW + DOX	11.65	169998	483.91		

Supplementary Figures



Suppl. Fig. 1 - TLC Chemical fingerprint of the SBE extract. (A) DCM: EA: HEX (B) Benzene: MeOH: NH₃OH at 366 nm.