

Mechanistic Insights into the Anticancer Effects of Homeopathic Arsenicum Iodatum: Apoptosis Induction, Cell-Cycle Arrest, and Caspase Activation in A549 Lung Cancer Cells

Vinu Krishnan^{a,b} Manju Sreeranganathan^c

^aHomoeopathic Cancer Centre, Government of Kerala, ^bVinayaka Mission Research Foundation, Salem, Tamil Nadu, ^cDepartment of Homeopathy, Government of Kerala

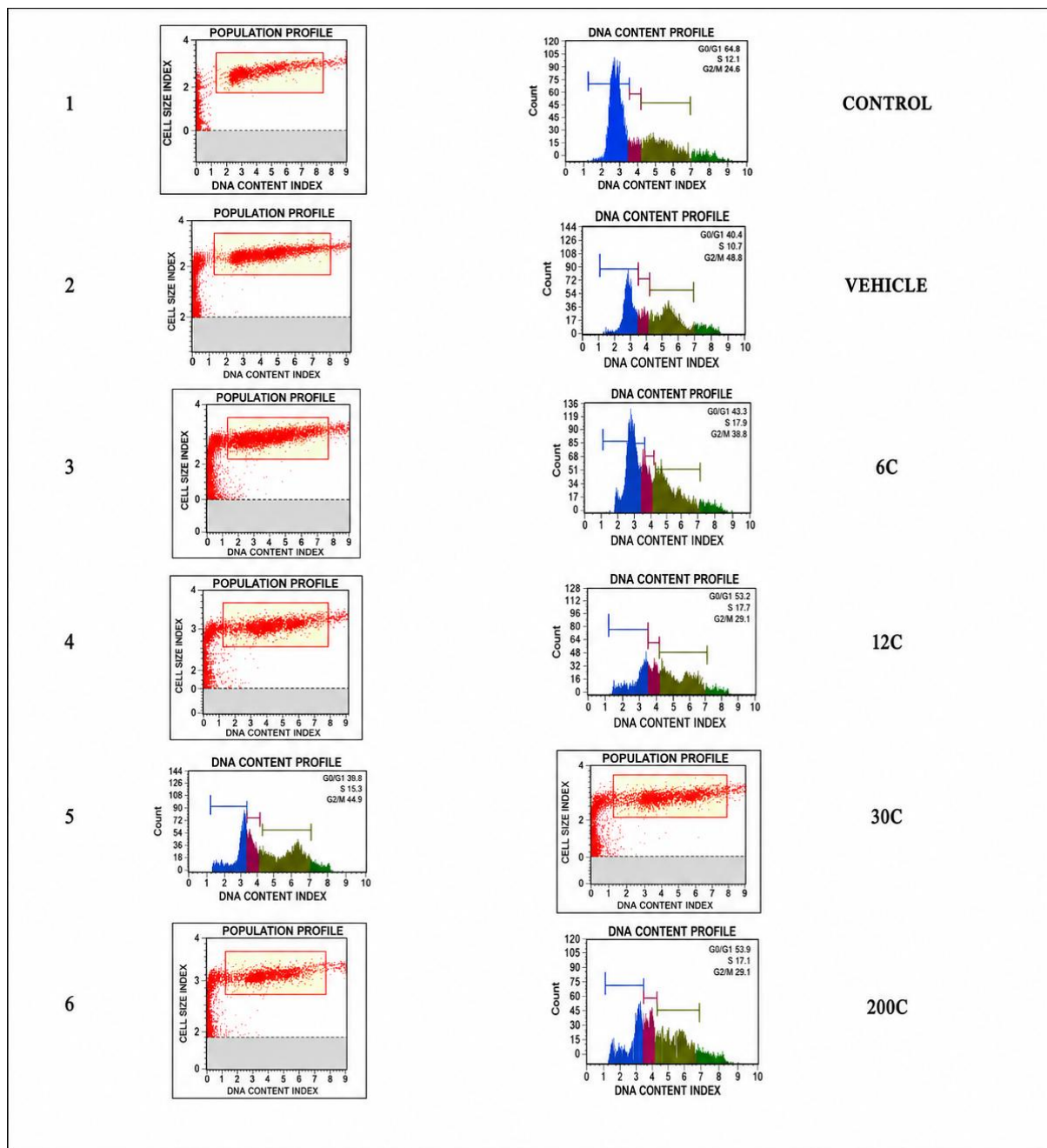


Figure S1. Representative flow cytometry plots showing the effects of *A. iodatum* on apoptosis in A549 cells. Panel 1 (Control): Untreated A549 cells showing the baseline cell population profile. Panel 2 (Vehicle): Vehicle-treated A549 cells showing the corresponding cell population profile. Panel 3 (6C): A549 cells treated with *A. iodatum* 6C showing alterations in the apoptotic cell population. Panel 4 (12C): A549 cells treated with *A. iodatum* 12C showing changes in the apoptotic cell population. Panel 5 (30C): A549 cells treated with *A. iodatum* 30C showing marked alterations in the apoptotic cell population. Panel 6 (200C): A549 cells treated with *A. iodatum* 200C showing pronounced alterations in the apoptotic cell population. Supplementary Table S1: Source data underlying the TCGA/UALCAN gene expression analyses.

Table S1. Expression of CASP7 in LUAD Based on Sample Types (TCGA Dataset).

TCGA Samples	n	Low	Q1	Median	Q3	High
Normal	59	18.118	28.220	32.551	35.789	44.338
Primary Tumor	515	6.232	21.228	27.001	33.955	53.368

Table S2a-f. Source data for TCGA-LUAD gene expression analyses of CCNB1, CDKN1A, BCL2, BAX, CASP9, and CASP7.

a)

Expression of CCNB1 in LUAD based on Sample types					
TCGA samples	Series 1				
	low	q1	median	q3	high
Normal	2.485	3.862	4.669	5.729	7.703
(n=59)					
Primary tumor	4.576	16.115	31.252	54.25	117.95
(n=515)					

b)

Expression of CDKN1A in LUAD based on Sample types					
TCGA samples	Series 1				
	low	q1	median	q3	high
Normal	32.29	94.083	121.747	187.694	356.478
(n=59)					
Primary tumor	9.092	60.592	91.493	130.657	243.806
(n=515)					

c)

Expression of BCL2 in LUAD based on Sample types					
TCGA samples	Series 1				
	low	q1	median	q3	high
Normal	1.534	2.676	3.942	4.895	8.036
(n=59)					
Primary tumor	0.219	1.565	2.688	4.122	9.147
(n=515)					

d)

Expression of BAX in LUAD based on Sample types					
TCGA samples	Series 1				
	low	q1	median	q3	high
Normal	35.525	71.21	83.974	99.507	137.491
(n=59)					
Primary tumor	21.797	81.629	102.987	126.683	198.159
(n=515)					

e)

Expression of CASP9 in LUAD based on Sample types					
TCGA samples	Series 1				
	low	q1	median	q3	high
Normal	7.81	12.193	14.094	16.227	21.051
(n=59)					
Primary tumor	4.951	11.606	14.151	17.917	27.703
(n=515)					

f)

Expression of CASP7 in LUAD based on Sample types					
TCGA samples	Series 1				
	low	q1	median	q3	high
Normal	18.118	28.22	32.551	35.789	44.338
(n=59)					
Primary tumor	6.232	21.228	27.001	33.955	53.368
(n=515)					