

Supplementary Information

Synergistic Anti-tumor Effect of Palmitoylcarnitine and Dasatinib in Liver Cancer

Ragini Singh ¹, Shuang Cheng ¹, Qinghua Zeng ¹, Santosh Kumar ^{2,*} and Carlos Marques ^{3,*}

¹ College of Agronomy, Liaocheng University, Liaocheng 252059, China

² Shandong Key Laboratory of Optical Communication Science and Technology, School of Physics Science and Information Technology, Liaocheng University, Liaocheng 252059, China

³ i3N, Department of Physics, University of Aveiro, 3810-193 Aveiro, Portugal

* Correspondence: santosh@lcu.edu.cn (S.K.); carlos.marques@ua.pt (C.M.)

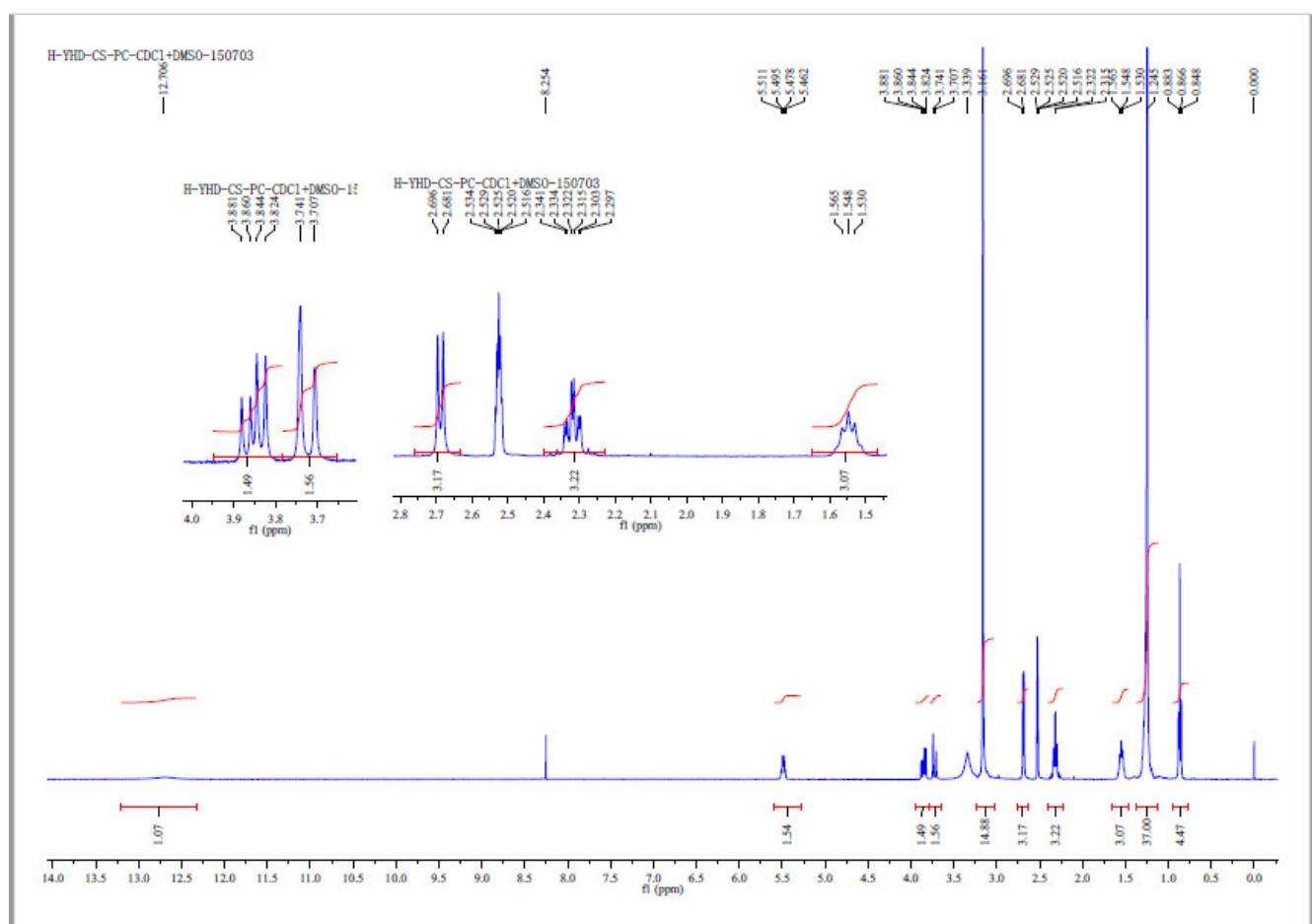


Figure S1. NMR spectra of synthesized Pcar.

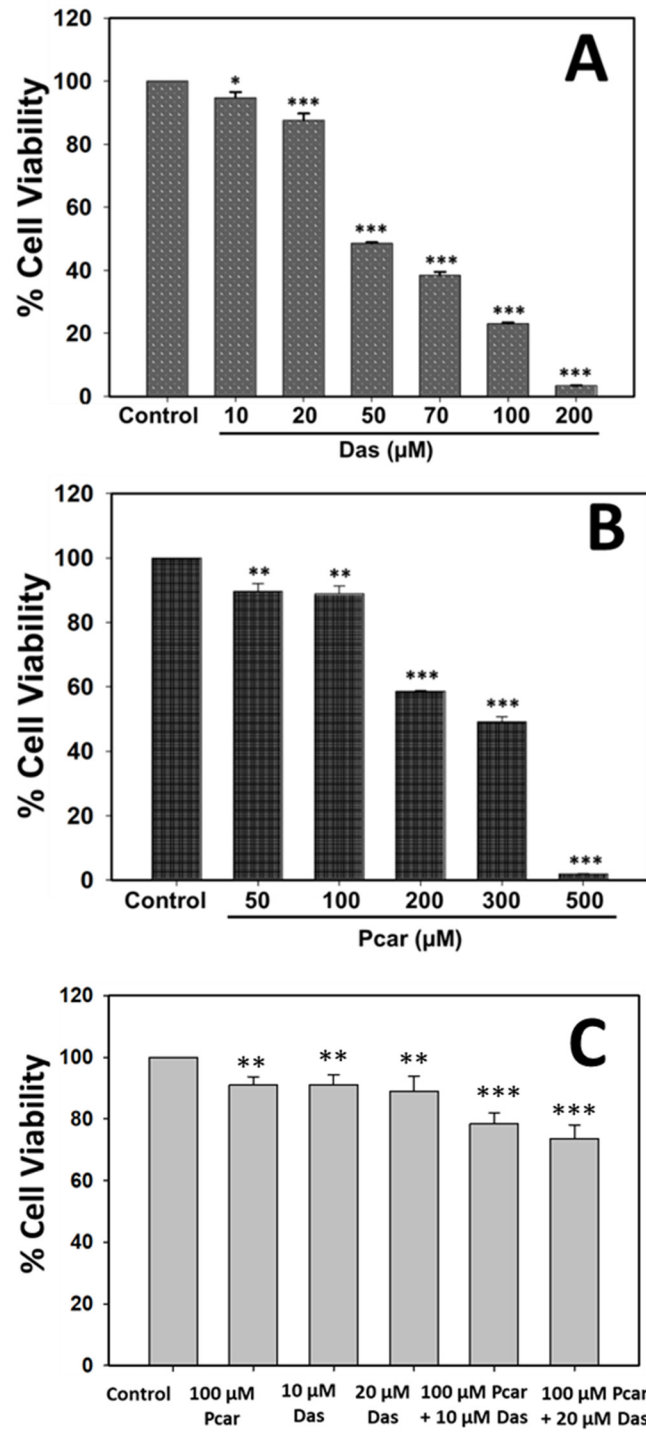


Figure S2. MTT assay showing the concentration dependent toxicity of (A) Das, (B) Pcar, and (C) Pcar And Das alone and in combination in HEK293 cells.

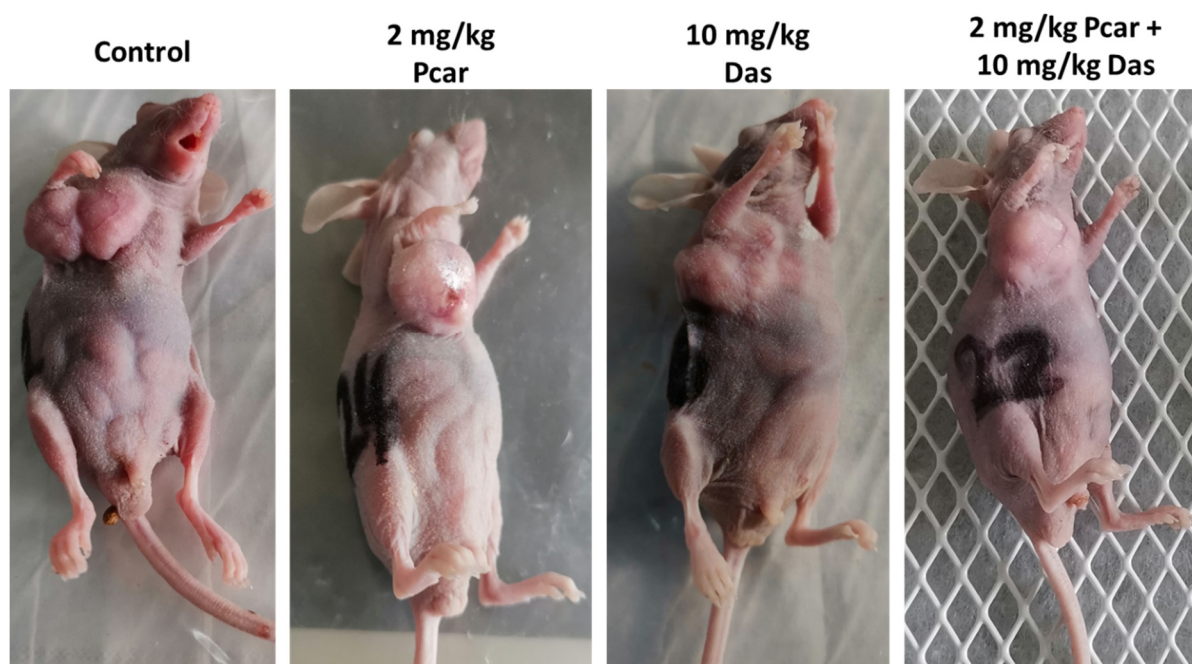


Figure S3. Representative image showing tumor growth in control mouse as well as Pcar and Das treated mouse both in combination and alone.



Figure S4. Representative image showing tumor migration on Das treated group.

Table S1. Tumor measurement (length and width).

Mouse	Day1		Day 2		Day 3		Day 4		Day 5	
	Length (mm)	Width (mm)	Length (mm)	Width (mm)	Length (mm)	Width (mm)	Length (mm)	Width (mm)	Length (mm)	Width (mm)
Control	6.94	5.76	9.58	5.61	9.17	5.3	11.01	8.41	12.12	7..78
	6.75	3.16	9.16	4.32	10.32	4.73	9.89	5.99	11.17	6.88
	7.39	6.57	8.55	8.76	10.11	9.1	10.65	10.18	10.94	9.31
2mg/kg PCar	4.99	4.73	7.6	7.35	9.67	8.4	10.43	10.35	11.3	10.7
	5.69	5.68	7.57	7.09	9.86	9.18	10.95	10.65	12.08	10.85
	6.17	4.45	7.42	6.7	9.73	7.46	10.36	10.13	11	10.78
10 mg/kg Das	6.82	3.68	8.68	5.43	7.95	5.84	11.62	8.18	12.91	8.77
	6.21	5.18	7.88	6.83	7.51	6.66	8.56	6.99	9.24	8.14
	6.39	4.54	8.06	4.38	9.08	4.63	10.32	5.17	10.8	6.16
2mg/kg PCar+ 10 mg/kg Das	7.49	4.01	8.87	5.56	7.81	4.91	10.63	6.03	11.27	6.08
	5.03	4.17	5.12	5.12	6.63	6.13	7.81	6.39	7.77	7.21
	6.44	3.92	5..27	5.19	5.89	5.46	8.53	5.73	7.66	6.59
Mouse	Day6		Day 7		Day 8		Day 9		Day 10	
	Length (mm)	Width (mm)	Length (mm)	Width (mm)	Length (mm)	Width (mm)	Length (mm)	Width (mm)	Length (mm)	Width (mm)
Control	12.78	7.83	13.31	8.67	13.5	8.55	14.45	8.93	12.22	9.2
	12.54	8.12	13	8.73	14.06	8.25	13.9	9.56	13.86	8.83

	11.72	9.19	11.67	9.25	11.96	10.5	13.18	11.29	12.79	9.84
	11.32	9.93	12.4	9.93	13.13	9.45	14.98	10.9	13.19	11.5
2mg/kg PCar	12.04	11.06	12.37	11.69	2.42	11.86	12.26	12.07	12.62	11.73
	11.76	11.14	12.73	11.56	12.5	10.87	12.33	10.72	12.82	12.37
	11.68	6.89	14.54	10.86	13.4	10.53	14.18	12.81	13.89	10.75
10 mg/kg Das	8.69	8.52	9.72	9.13	10.47	9.51	10.83	9.88	9.54	9.33
	10.95	6.5	11.54	5.56	11.74	6.86	12.72	7.08	12.49	6.99
	10.28	5.62	11.68	6.63	12.68	6.89	13.15	7.7	13.05	7.2
2mg/kg PCar+	7.23	8.27	9.03	7.82	9.37	7.97	8.42	7.34	9.04	8.04
10 mg/kg Das	9.7	6.54	10.27	6.81	8.23	9.76	12.28	8.95	9.73	8.1

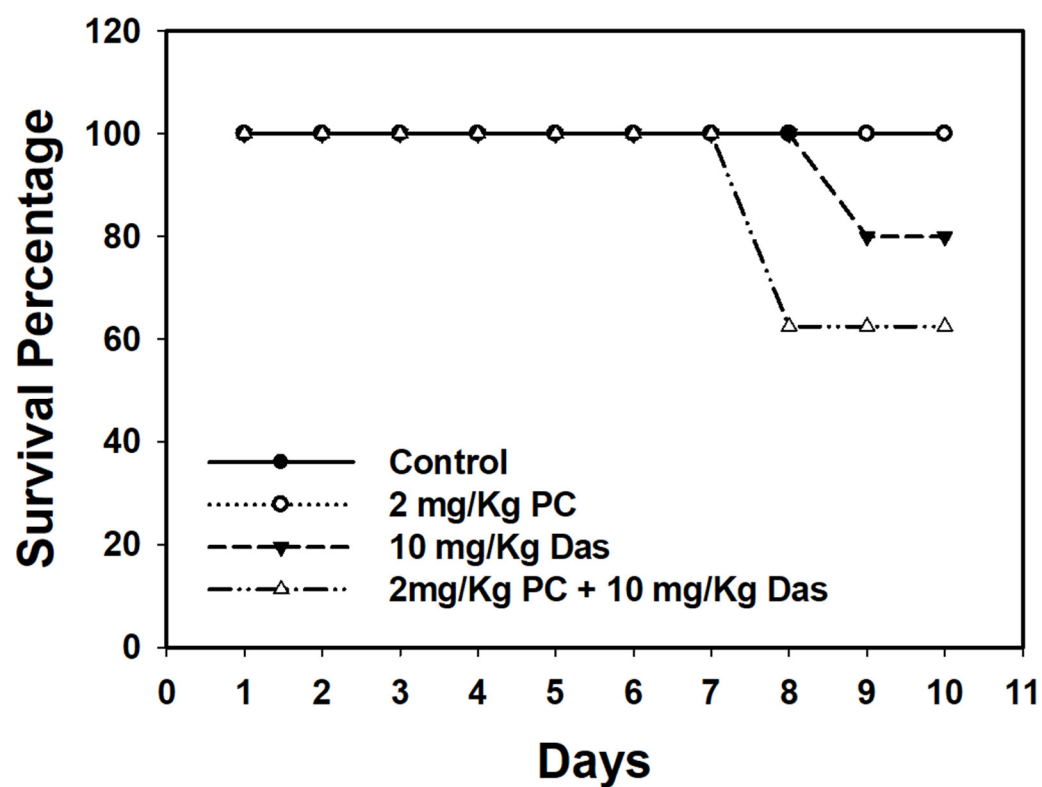


Figure S5. Mouse survival graph over time showing.