

Supplementary Material

Oral delivery of MOMIPP lipid nanoparticles for methuosis-induced cancer chemotherapy

Zeyuan Mao¹, Guihong Chai^{1,2*}

1. School of Pharmaceutical Sciences, Sun Yat-sen University, Guangzhou, 510006, China
2. State Key Laboratory of Anti-Infective Drug Discovery and Development, School of Pharmaceutical Sciences, Sun Yat-sen University, Guangzhou, 51006, China

Corresponding author: Guihong Chai, E-mail: chaigh@mail.sysu.edu.cn

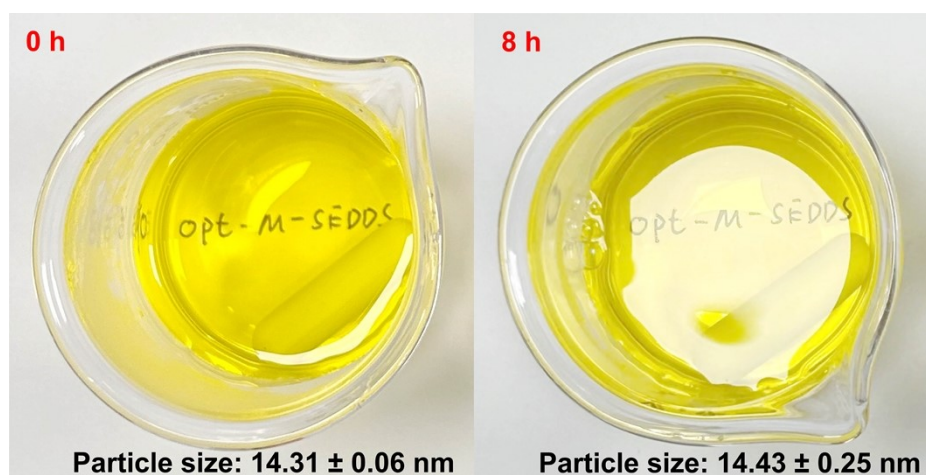


Figure S1. The stability of MOMIPP-SEDDS.

Table S1. Design and results of Mixture-Optimal (Custom).

Run	A: Maisine CC	B: RH 40	C: Transcutol HP	Drug loading (mg/g)	PDI
1	0.11	0.47	0.42	5.1784	0.110
2	0.00	0.50	0.50	6.2350	0.253
3	0.00	0.58	0.42	5.8633	0.275
4	0.10	0.40	0.50	4.9673	0.145
5	0.11	0.65	0.24	4.4643	0.189
6	0.20	0.40	0.40	4.0395	0.491
7	0.18	0.49	0.33	4.1983	0.301
8	0.00	0.70	0.30	5.2196	0.208
9	0.05	0.62	0.33	5.0240	0.218
10	0.00	0.70	0.30	5.4804	0.196
11	0.10	0.40	0.50	5.0939	0.154
12	0.00	0.50	0.50	5.9442	0.276
13	0.09	0.54	0.37	5.0247	0.156
14	0.20	0.56	0.24	3.8195	0.526
15	0.20	0.40	0.40	4.1086	0.462
16	0.20	0.56	0.24	3.7536	0.539

Table S2. Fitting table of various indicators.

Response	Model	Source	Sum of squares	df	Mean square	F value	P value	
Drug loading	Quadratic model	Model	8.74	5	1.75	98.46	<0.0001	Significant
		(1)Linear mixture	8.60	2	4.30	242.21	<0.0001	
		Residual	0.1776	10	0.0178			
		Lack of Fit	0.0887	5	0.0177	0.9985	0.5006	Not significant
		Pure Error	0.0889	5	0.0178			
		Cor Total	8.92	15				
PDI	Special quartic model	Model	0.3083	8	0.0385	292.90	<0.0001	Significant
		(1)Linear mixture	0.1363	2	0.0682	518.07	<0.0001	
		Residual	0.0009	7	0.0001			
		Lack of Fit	0.0000	2	0.0000	0.1102	0.8978	Not significant
		Pure Error	0.0009	5	0.0002			
		Cor Total	0.3092	15				