

# Supporting Information

## **Post-therapy via Integrated Curcumin and Doxorubicin Modified Cerium-based UiO-66 MOF for Antioxidant and Anticancer Therapeutic Strategy**

Chao-Jan Liu <sup>a</sup>, Jung-Hua Lin<sup>a</sup>, Man-Tzu Li<sup>b</sup>, Er-Chieh Cho<sup>b,c,d,e\*</sup>, Kuen-Chan Lee<sup>a,f\*</sup>

<sup>a</sup> Department of Science Education, National Taipei University of Education, No.134,  
Sec. 2, Heping E. Rd., Da-an District, Taipei City 106, Taiwan

<sup>b</sup> Master Program in Clinical Genomics and Proteomics, College of Pharmacy,  
Taipei Medical University, 250 Wuxing Street, Taipei City, 110, Taiwan

<sup>c</sup> School of Pharmacy, College of Pharmacy, Taipei Medical University, 250 Wuxing  
Street, Taipei City, 110, Taiwan

<sup>d</sup> Cancer Center, Wan Fang Hospital, Taipei Medical University, 110, Taiwan

<sup>e</sup> TMU Research Center of Cancer Translational Medicine

<sup>f</sup> Ph.D. Program in Medical Neuroscience, College of Medical Science and  
Technology, Taipei Medical University, Taipei City, 110, Taiwan

Corresponding to:

Prof. K.-C. Lee, Department of Science Education, National Taipei University of  
Education, No.134, Sec. 2, Heping E. Rd., Da-an District, Taipei City 106, Taiwan

Email: [klee@tea.ntue.edu.tw](mailto:klee@tea.ntue.edu.tw)

Prof. E.-C. Cho, School of Pharmacy, College of Pharmacy, Taipei Medical  
University, 250 Wuxing Street, Taipei City, 110, Taiwan

Email: [echo@tmu.edu.tw](mailto:echo@tmu.edu.tw)

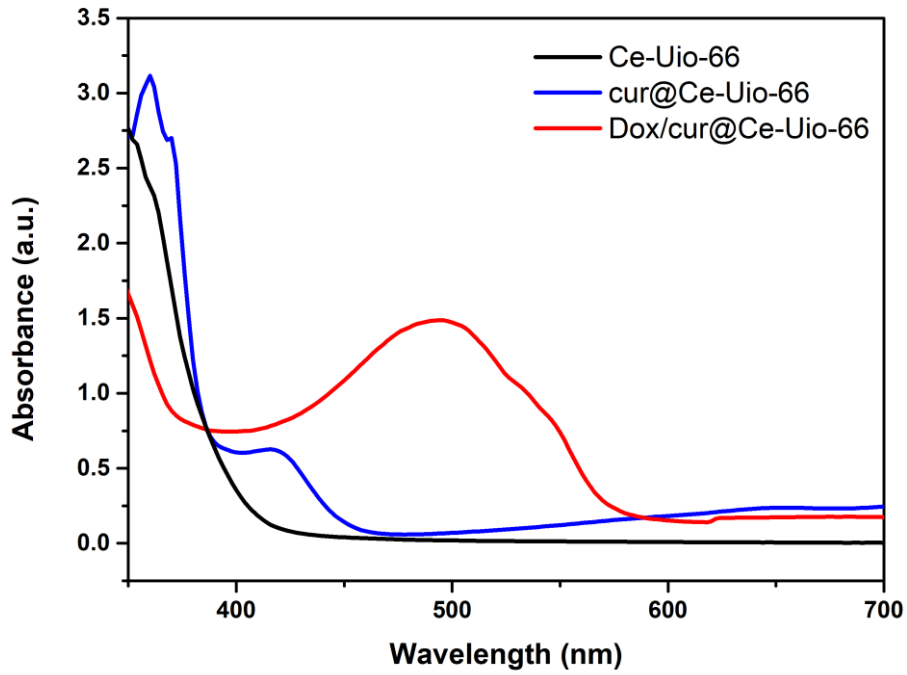


Figure S1. UV-Vis spectrum of Ce-Uio-66, cur@Ce-Uio-66 and dox/cur@Ce-Uio-66

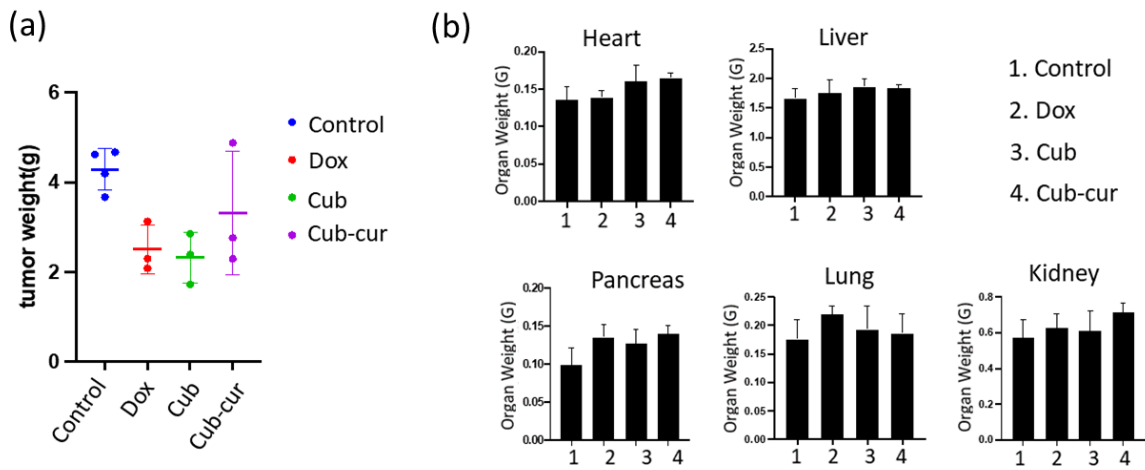


Figure S2. Mice xenograft experiment. (a) Tumor weight of the mice in each group at the end point. (b) Weight of the organs in mice within the experiment at end point.

Table S1. Ratio of curcumin and Ce-Uio-66 during synthesis and encapsulation efficiency of different sample.

Sample	Curcumin : CUB (mg)	Encapsulation efficiency (EE)
cur-Ce-Uio-66	1 : 1	--*
cur0.5-Ce-Uio-66	0.5 : 1	~37.67%
cur0.25-Ce-Uio-66	0.25: 1	~23.99%
cur@Ce-Uio-66	1 : 1	~52.80%
cur0.5@Ce-Uio-66	0.5 : 1	~41.19%
cur0.25@Ce-Uio-66	0.25 : 1	~32.94%

Table S2. Ratio of curcumin and Ce-Uio-66 during synthesis and encapsulation efficiency of different sample.

Sample	UiO-66	Ce-Uio-66	cur@Ce-Uio-66	
<b>Incubation time</b>	<b>1 hr</b>	~1.77 ± 0.8%	~2.01 ± 0.9%	~5.19 ± 1.2%
	<b>24 hrs</b>	~10.11 ± 3.0%	~63.01 ± 8.9%	~69.71 ± 10.1%