

Progress Report For the 29th of May 2023

Cancer Project

Menthor: Dr Cora Chen


Paper progress

Paper title	Journal	Situation(write 、 submit 、 review 、 accept 、)	reference	Author	Funding number
Synergistic action of 3-Hydroxyflavone and gefitinib in inducing apoptosis and inhibiting EMT via TGF- β downregulation in KRAS-mutant NSCLC	Journal of Cellular and Molecular Medicine	Submitted(11/7), Withdrawn manuscript (11/21) (Too expensive)		Indra Putra Taufani ¹ , Wei-Wen Kuo ² , Wan-Jing Chen ³ , Khan Farheen Badrealam ³ , 6Thetchinamoorthy Kannathan ³ , Marthandam Asokan Shibu ³ , Yu-Chun Chang ³ 7Liang-Yo Yang ^{4,5*} , Yi-Ting Chiang ^{6*} , Chih-Yang Huang	
	Journal of Cancer Research and Treatment (IF: 4.336; Q2)	Submitted (01/4/2023); Rejected (01/11/2023)		Indra Putra Taufani ¹ , Wei-Wen Kuo ² , Wan-Jing Chen ³ , Khan Farheen Badrealam ³ , 6Thetchinamoorthy Kannathan ³ , Marthandam Asokan Shibu ³ , Yu-Chun Chang ³ 7Liang-Yo Yang ^{4,5*} , Yi-Ting Chiang ^{6*} , Chih-Yang Huang	
	Scientific Reports (IF: 4.997; Q2)	Submitted (01/17/2023); Resubmitted (03/02/2023) Under review (03/07/2023) Waiting for editor decision (04/09/2023)		Indra Putra Taufani ¹ , Wei-Wen Kuo ² , Wan-Jing Chen ³ , Khan Farheen Badrealam ³ , 6Thetchinamoorthy Kannathan ³ , Marthandam Asokan Shibu ³ , Yu-Chun Chang ³ 7Liang-Yo Yang ^{4,5*} , Yi-Ting Chiang ^{6*} , Chih-Yang Huang	

2nd Cancer Project

3-Hydroxyflavone and Gefitinib suppress NSCLC by triggering ferroptosis via autophagy activation

The new cancer project : 3-Hydroxyflavone and Gefitinib suppress NSCLC by triggering ferroptosis via autophagy activation

ORIGINAL ARTICLE | [Open Access](#) | 

Curcumin induces ferroptosis in non-small-cell lung cancer via activating autophagy

Xin Tang, Hui Ding, Maoli Liang, Xing Chen, Yuxia Yan, Nansheng Wan, Qianqian Chen, Jing Zhang, Jie Cao 

First published: 03 March 2021 | <https://doi.org/10.1111/1759-7714.13904> | Citations: 25

> *Neoplasma*. 2022 May;69(3):648-656. doi: 10.4149/neo_2022_211103N1568. Epub 2022 Mar 24.

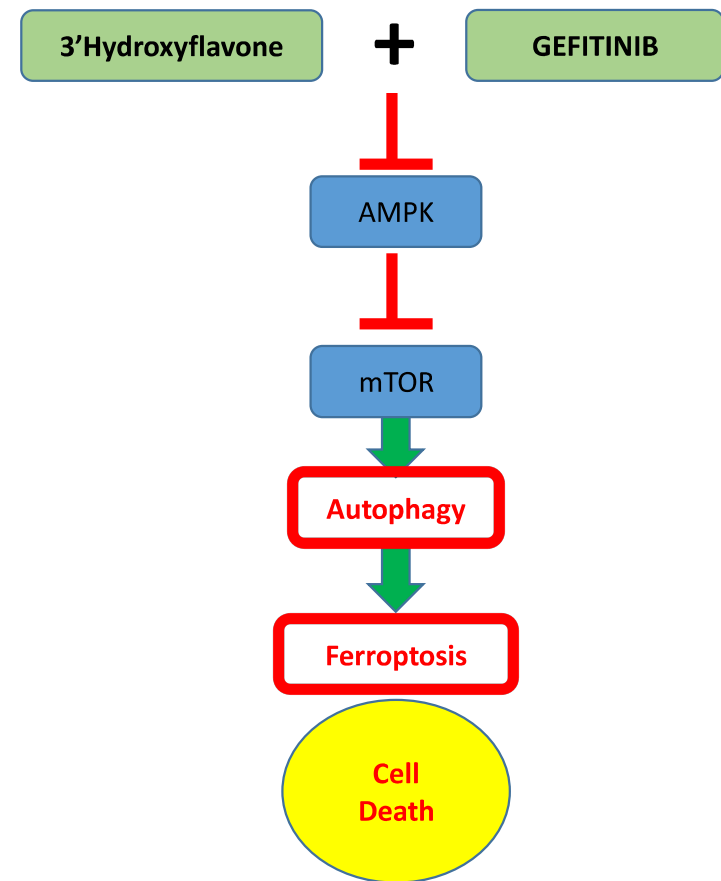
Co-treatment of betulin and gefitinib is effective against EGFR wild-type/KRAS-mutant non-small cell lung cancer by inducing ferroptosis

Wei-Ya Yan ¹, Jian Cai ¹, Jiang-Nan Wang ¹, Yong-Sheng Gong ¹, Xue-Bing Ding ¹

Affiliations + expand

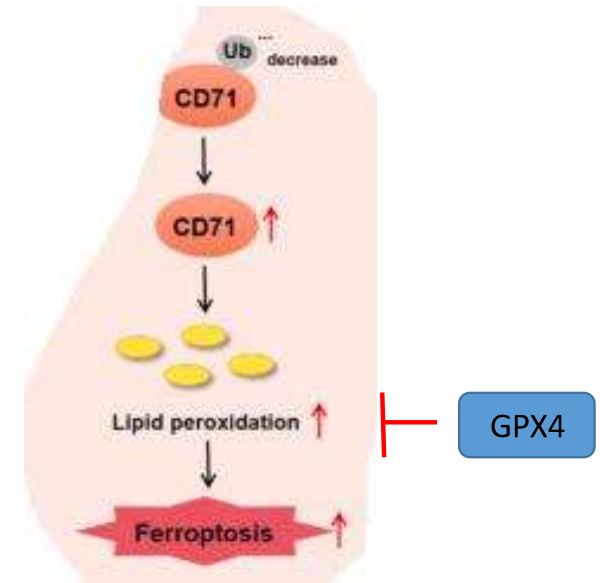
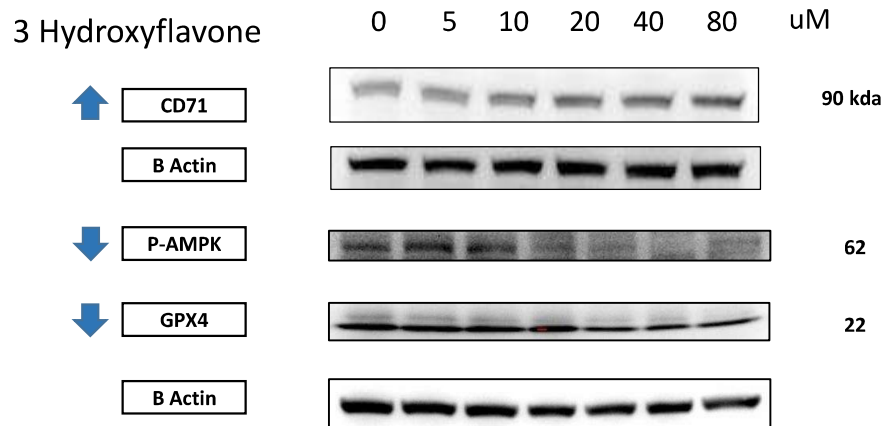
PMID: 35330996 DOI: 10.4149/neo_2022_211103N1568

To our knowledge, there are no publication that showed 3-Hydroxyflavone induce ferroptosis especially on NSCLC



Screening the effect of 3'Hydroxyflavone to ferroptosis on A549

Ferroptosis is a new type of cell death marked by iron and lipid ROS accumulation. GPX4 is one of the glutathione peroxidases known to regulate ferroptosis tightly. On the other hand, Nrf2 also plays a vital role in ferroptosis as it targets genes related to oxidant defense.



3 Hydroxyflavone treatment increase the iron uptake, indicated by an increase in the expression of CD71 (Tfr1). The drug also reducing the activity of Autophagy inhibitor (AMPK) and Lipid peroxidase inhibitor (GPX4).

Thank You