

Accepted Manuscript

Title: Sustained-release mitochondrial protonophore reverses nonalcoholic fatty liver disease in rats

Authors: Guangfei Wei, Xu Song, Yao Fu, Tao Gong, Quan Zhang



PII: S0378-5173(17)30680-4
DOI: <http://dx.doi.org/doi:10.1016/j.ijpharm.2017.07.072>
Reference: IJP 16887

To appear in: *International Journal of Pharmaceutics*

Received date: 24-5-2017
Revised date: 22-7-2017
Accepted date: 24-7-2017

Please cite this article as: Wei, Guangfei, Song, Xu, Fu, Yao, Gong, Tao, Zhang, Quan, Sustained-release mitochondrial protonophore reverses nonalcoholic fatty liver disease in rats. *International Journal of Pharmaceutics* <http://dx.doi.org/10.1016/j.ijpharm.2017.07.072>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Sustained-release mitochondrial protonophore reverses nonalcoholic fatty liver disease in rats

Guangfei Wei^a, Xu Song^a, Yao Fu^a, Tao Gong^a, Quan Zhang^{b, *}

^a Key Laboratory of Drug Targeting and Drug Delivery System, Ministry of Education, West China School of Pharmacy, Sichuan University, Chengdu 610041, PR China

^b School of Pharmacy, Chengdu Medical College, Chengdu 610083, China

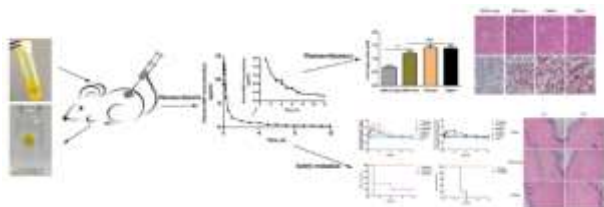
***Corresponding author:**

Quan Zhang

School of Pharmacy, Chengdu Medical College, No. 783, Xindu Avenue, Chengdu, Sichuan 610500, China

Phone: + 86 028 62739515. E-mail: zhangquancdmc@126.com

Graphical Abstract



Abstract

As a mitochondrial uncoupler, 2,4-dinitrophenol (DNP) is proven therapeutically effective against nonalcoholic fatty liver disease (NAFLD) by uncoupling oxidation and phosphorylation. However, a major factor that impedes the clinical application of DNP is the significant side effects derived from its frequent hyperthermia and even death. In this study, we developed an injectable liquid crystal gel (DNP-LC-gel) to reduce the toxicity of DNP. DNP-LC-gel achieved sustained release and maintained DNP plasma

Download English Version:

<https://daneshyari.com/en/article/5550119>

Download Persian Version:

<https://daneshyari.com/article/5550119>

[Daneshyari.com](https://daneshyari.com)