

Review Article

- 1145 New advances in novel pharmacotherapeutic candidates for the treatment of metabolic dysfunction-associated steatohepatitis (MASH) between 2022 and 2024
Shu Wei Wong, Yong-yu Yang, Hui Chen, Li Xie, Xi-zhong Shen, Ning-ping Zhang and Jian Wu
- 1156 Therapeutic potential and pharmacological mechanisms of Traditional Chinese Medicine in gout treatment
Jing-wen Guo, Guo-qiang Lin, Xin-yi Tang, Jia-ying Yao, Chen-guo Feng, Jian-ping Zuo and Shi-jun He

Articles Neuropharmacology

- 1177 Compound 38, a novel potent and selective antagonist of adenosine A_{2A} receptor, enhances arousal in mice
Hui Zhang, Wei-xiang Ma, Qiong Xie, Li-fang Bu, Ling-xi Kong, Ping-chuan Yuan, Rong-hui Zhou, Yong-hui Wang, Lei Wu, Chen-yu Zhu, Zhi-lin Wang, Jun Han, Zhi-li Huang and Yi-qun Wang
- 1190 Electrophysiological characterization of human KCNT1 channel modulators and the therapeutic potential of hydroquinine and tipepidine in KCNT1 mutation-associated epilepsy mouse model
Qing Guo, Jun Gan, En-ze Wang, Yu-ming Wei, Jie Xu, Yun Xu, Fei-fei Zhang, Meng Cui, Meng-xing Jia, Ming-jian Kong, Qiong-yao Tang and Zhe Zhang
- 1205 Inhibition of CD36 ameliorates mouse spinal cord injury by accelerating microglial lipophagy
Bei-ni Wang, An-yu Du, Xiang-hang Chen, Ting Huang, Abdullah Al Mamun, Ping Li, Si-ting Du, Yan-zheng Feng, Lin-yuan Jiang, Jie Xu, Yu Wang, Shuang-shuang Wang, Kwonseop Kim, Kai-liang Zhou, Yan-qing Wu, Si-wang Hu and Jian Xiao
- 1221 Visceral adipose tissue-derived extracellular vesicles promote stress susceptibility in obese mice via miR-140-5p
Hao Wang, Li Zhang, Wan-yue Yang, Xiao-yi Ji, An-qi Gao, Yi-hong Wei, Xin Ding, Yue Kang, Jian-hua Ding, Yi Fan, Ming Lu and Gang Hu

Cardiovascular Pharmacology

- 1236 eIF4A1 exacerbates myocardial ischemia-reperfusion injury in mice by promoting nuclear translocation of transgelin/p53
Dan-yang Li, Xiao-xi Hu, Zhong-rui Tian, Qi-wen Ning, Jiang-qi Liu, Ying Yue, Wei Yuan, Bo Meng, Jia-liang Li, Yang Zhang, Zhen-wei Pan, Yu-ting Zhuang and Yan-jie Lu
- 1250 Semaglutide administration protects cardiomyocytes in *db/db* mice via energetic improvement and mitochondrial quality control
Meng-yun Tian, Ji-qin Yang, Jin-chuan Hu, Shan Lu and Yong Ji
- 1262 YTHDF3-mediated FLCN/cPLA2 axis improves cardiac fibrosis via suppressing lysosomal function
Yue Zhang, Hong-tao Diao, Ming-yang Leng, Ying-zi Wu, Bing-ying Huang, Xu Li, Wen-yue Tang, Kai-li Wu, Hui-ling Tan, Liang Wang, Wen Lu, Ao Xiong, Xiao-qi Shao, Hai-hai Liang and Jiao Guo
- 1275 JOSD2 inhibits angiotensin II-induced vascular remodeling by deubiquitinating and stabilizing SMAD7
Si-rui Shen, Zhu-qi Huang, Yu-die Yang, Ji-bo Han, Zi-min Fang, Yue Guan, Jia-chen Xu, Ju-lian Min, Yi Wang, Gao-jun Wu, Zhong-xiang Xiao, Wu Luo, Zhou-qing Huang and Guang Liang
- 1289 Endothelial Gs α deficiency promotes ferroptosis and exacerbates atherosclerosis in apolipoprotein E-deficient mice via the inhibition of NRF2 signaling
Li-fan He, Lei Wang, Jing-wei Li, Xiao Xiong, Xiao-lin Yue, Pei-dong Yuan, Han-lin Lu, Jian-gang Gao, Fang-pu Yu, Min Chen, Lee S. Weinstein, Jian-min Yang, Cheng Zhang, Xiaoteng Qin and Wencheng Zhang
- 1303 Dehydrocorydaline maintains the vascular smooth muscle cell contractile phenotype by upregulating Spta1 [Open](#)
Yuan-ye Dang, Cui Chen, Qiu-fen Wei, Li-feng Gao, Shun-chi Zhang, Yong-xian Li and Xiao-yan Dai

	1317	Deletion of smooth muscle ZFP36 promotes neointimal hyperplasia in mice Lei Wang, Li-fan He, Xiao Xiong, Zhi-nan Wu, Mi Tian, Guang-qing Cao, Hui-xia Lu, Xiao-ping Ji, Yan-ling Zhang, Pavel Kovarik, Wencheng Zhang and Yan Liu
Hepatic Pharmacology	1329	Peptidoglycan isolated from the fruit of <i>Lycium barbarum</i> alleviates liver fibrosis in mice by regulating the TGF- β /Smad7 signaling and gut microbiota Ying-min Nie, Wan-qi Zhou, Ting Niu, Meng-fei Mao, Yu-xue Zhan, Yun Li, Kai-ping Wang, Mei-xia Li and Kan Ding
Renal Pharmacology	1345	Activation of MST1 protects filtration barrier integrity of diabetic kidney disease in mice through restoring the tight junctions of glomerular endothelial cells Ting-ting Yang, Ying Liu, Yu-ting Shao, Lin Li, Dan-dan Pan, Tao Wang, Zhen-zhou Jiang, Bao-jing Li, Si-tong Qian, Meng Yan, Xia Zhu, Cai Heng, Jun-jie Liu, Qian Lu and Xiao-xing Yin
Immunopharmacology	1361	Gentiopicroside ameliorates psoriasis-like skin lesions in mice via regulating the Keap1-Nrf2 pathway and inhibiting keratinocyte activation Jing Ren, Xin Chen, Hao-yu Wang, Tao Yang, Kai-rong Zhang, Shu-yue Lei, Lu-yao Qi, Chun-lan Feng, Rong Zhou, Hu Zhou and Wei Tang
Anti-tumor Pharmacology	1375	Humanized dual-targeting antibody–drug conjugates specific to MET and RON receptors as a pharmaceutical strategy for the treatment of cancers exhibiting phenotypic heterogeneity <i>Open</i> Minghai Wang, Qi Ma, Sreedhar Reddy Suthe, Rachel E. Hudson, Jing-ying Pan, Constantinos Mikelis, Miao-jin Zhu, Zhi-gang Wu, Dan-rong Shi and Hang-ping Yao
	1390	Concurrent inhibition of p300/CBP and FLT3 enhances cytotoxicity and overcomes resistance in acute myeloid leukemia <i>Open</i> Yu-jun Chen, Yu Zhao, Ming-yue Yao, Ya-fang Wang, Ming Ma, Cheng-cheng Yu, Hua-liang Jiang, Wu Wei, Jie Shen, Xiao-wei Xu and Cheng-ying Xie
	1404	Organoid modeling identifies USP3-AS1 as a novel promoter in colorectal cancer liver metastasis through increasing glucose-driven histone lactylation Jia-min Zhou, Wei-xing Dai, Ren-jie Wang, Wei-qi Xu, Zhen Xiang, Yi-xiu Wang, Ti Zhang, Yi-ming Zhao, Lu Wang and An-rong Mao
	1419	Genome-wide CRISPR-Cas9 screening identifies ITGA8 responsible for abivertinib sensitivity in lung adenocarcinoma Xuan-guang Li, Guang-sheng Zhu, Pei-jun Cao, Hua Huang, Yu-hao Chen, Chen Chen, Pei-jie Chen, Di Wu, Chen Ding, Zi-he Zhang, Rui-hao Zhang, Zi-xuan Hu, Wen-hao Zhao, Ming-hui Liu, Yong-wen Li, Hong-yu Liu and Jun Chen
	1433	BE-43547A ₂ exerts hypoxia-selective inhibition on human pancreatic cancer cells through targeting eEF1A1 and disrupting its association with FoxO1 Can Liu (刘璨), Can Liu (刘灿), Guang-ju Liu, Meng-meng Wang, Yan Jiao, Yuan-jun Sun, Hui Guo, Liang Wang, Ya-xin Lu, Yue Chen and Ya-hui Ding
	1445	Apolipoprotein B100 acts as a tumor suppressor in ovarian cancer via lipid/ER stress axis-induced blockade of autophagy Ze-yuan Yin, Shi-min He, Xin-yuan Zhang, Xiao-chen Yu, Kai-xuan Sheng, Tong Fu, Yi-xue Jiang, Liu Xu, Bing-xuan Hu, Jing-bo Zhang, Yan-yu Li, Qing Wang, Bei-bei Zhang, Yun-meng Qi, Joseph Adu-Amankwaah, Xue-yan Zhou, Qi Qi, Bei Zhang and Cheng-lin Li

Drug Discovery	1462	MAI-TargetFisher: A proteome-wide drug target prediction method synergetically enhanced by artificial intelligence and physical modeling Shi-wei Li, Peng-xuan Ren, Lin Wang, Qi-lei Han, Feng-lei Li, Hong-lin Li and Fang Bai
	1476	Identifying a non-conserved site for achieving allosteric covalent inhibition of CECR2 Cai-ling Tang, Yuan-qing Li, Xi-kun Du, Xiao-xia Fang, Yi-man Guang, Pei-zhuo Li, Shuang Chen, Sheng-yu Xue, Jia-min Yu, Xiao-yi Liu, Yi-pan Luo, Lan-xin Zhou, Cheng Luo, Huan Xiong, Zhong-jie Liang and Hong Ding
Editorial Expression of Concern	1492	Editorial Expression of Concern: The combination of baicalin and baicalein enhances apoptosis via the ERK/p38 MAPK pathway in human breast cancer cells Qian-mei Zhou, Song Wang, Hui Zhang, Yi-yu Lu, Xiu-feng Wang, Yoshiharu Motoo and Shi-bing Su
Retraction	1493	Retraction Note: Physcion, a naturally occurring anthraquinone derivative, induces apoptosis and autophagy in human nasopharyngeal carcinoma Ming-jie Pang, Zhun Yang, Xing-lin Zhang, Zhao-fang Liu, Jun Fan and Hong-ying Zhang
Correction	1494	Correction: Chemokine CCL2 promotes cardiac regeneration and repair in myocardial infarction mice via activation of the JNK/STAT3 axis Wei Wang, Xiao-kang Chen, Lu Zhou, Feng Wang, Yan-ji He, Bing-jun Lu, Ze-gang Hu, Zhu-xin Li, Xue-wei Xia, Wei Eric Wang, Chun-yu Zeng and Liang-peng Li
Cover		Semaglutide activates the GLP-1R/AMPK pathway in <i>db/db</i> mice cardiomyocytes, enhancing mitochondrial energy metabolism via ULK1-mediated mitophagy (Parkin/LC3-dependent) and MCU-driven calcium elevation. This dual mechanism highlights its potential in improving diabetic cardiomyopathy. See the article in pages 1250–1261.

EXECUTIVE EDITOR FOR THIS ISSUE ZHU, Qian-rong (Shanghai)

ACTA PHARMACOLOGICA SINICA (Monthly)
2025 May; Volume 46 Number 5
(Founded in September, 1980)

Sponsored by
Chinese Pharmacological Society
Shanghai Institute of Materia Medica, Chinese Academy of Sciences
Supervised by
China Association for Science and Technology
Editor-in-chief
DING, Jian
Edited by
Editorial Board of Acta Pharmacologica Sinica
294 Tai-yuan Road, Shanghai 200031, China
[Http://www.chinaphar.com](http://www.chinaphar.com)
E-mail aps@simm.ac.cn
Phn 86-21-5492-2821, 5492-2822; Fax 86-21-5492-2823

Published jointly by
Editorial Office of Acta Pharmacologica Sinica
Springer Nature
Publication date
5th every month
Printed by
Shanghai Shengtong Times Printing Co Ltd
568 Guang-ye Road, Shanghai 201506, China

Copyright © 2025 Shanghai Institute of Materia Medica, Chinese Academy of Sciences and Chinese Pharmacological Society