

## Review Article

- 2347 Phenome-wide association study and precision medicine of cardiovascular diseases in the post-COVID-19 era  
Qian Cao, Xin Du, Xiao-yan Jiang, Yuan Tian, Chen-hao Gao, Zi-yu Liu, Ting Xu, Xing-xing Tao, Ming Lei, Xiao-qiang Wang, Lingyu Linda Ye and Dayue Darrel Duan
- 2358 Regulation of toll-like receptor (TLR) signaling pathways in atherosclerosis: from mechanisms to targeted therapeutics  
Mei Jin, Jian Fang, Jiao-jiao Wang, Xin Shao, Suo-wen Xu, Pei-qing Liu, Wen-cai Ye and Zhi-ping Liu

## Article Neuropharmacology

- 2376 Chemogenetic inhibition of subicular seizure-activated neurons alleviates cognitive deficit in male mouse epilepsy model  
Lin Yang, Qi Zhang, Xue-qing Wu, Xiao-yun Qiu, Fan Fei, Nan-xi Lai, Yu-yi Zheng, Meng-di Zhang, Qing-yang Zhang, Yu Wang, Fei Wang, Ceng-lin Xu, Ye-ping Ruan, Yi Wang and Zhong Chen
- 2388 Vincamine as an agonist of G-protein-coupled receptor 40 effectively ameliorates diabetic peripheral neuropathy in mice  
Jia-wen Xu, Xu Xu, Yun Ling, Yan-chun Wang, Yu-jie Huang, Juan-zhen Yang, Jia-ying Wang and Xu Shen
- 2404 DI-3-n-butylphthalide promotes angiogenesis in ischemic stroke mice through upregulating autocrine and paracrine sonic hedgehog  
Mei-jie Dai, Xing-xing Gui, Shu-miao Jia, Shu-ting Lv, Hao Dou and Wei Cui
- 2418 PACAP/PAC1-R activation contributes to hyperalgesia in 6-OHDA-induced Parkinson's disease model rats via promoting excitatory synaptic transmission of spinal dorsal horn neurons  
Li-guo Dong, Meng-qi An, Han-ying Gu, Li-ge Zhang, Jin-bao Zhang, Cheng-jie Li, Cheng-jie Mao, Fen Wang and Chun-feng Liu

## Pulmonary, Gastrointestinal, Hepatic, and Renal Pharmacology

- 2432 Serum granulosa cell-derived TNF- $\alpha$  promotes inflammation and apoptosis of renal tubular cells and PCOS-related kidney injury through NF- $\kappa$ B signaling  
Hui-yun Ye, Ya-li Song, Wen-ting Ye, Chong-xiang Xiong, Jie-mei Li, Jin-hua Miao, Wei-wei Shen, Xiao-long Li and Li-li Zhou
- 2445 Decreased syntaxin17 expression contributes to the pathogenesis of acute pancreatitis in murine models by impairing autophagic degradation  
Tian-tian Wang, Li-chun Zhang, Zhen Qin, Shu-jun Chen, Jing-min Zeng, Jing-yan Li, Lin An, Cai-yan Wang, Yong Gao, Li-ming Wang, Zhong-xiang Zhao, Zhong-qiu Liu and Shao-gui Wang
- 2455 Satellite cell-derived exosome-mediated delivery of microRNA-23a/27a/26a cluster ameliorates the renal tubulointerstitial fibrosis in mouse diabetic nephropathy  
Jia-ling Ji, Hui-min Shi, Zuo-lin Li, Ran Jin, Gao-ting Qu, Hui Zheng, E. Wang, Yun-yang Qiao, Xing-yue Li, Ling Ding, Da-fa Ding, Liu-cheng Ding, Wei-hua Gan, Bin Wang and Ai-qing Zhang
- 2469 Natural compound fraxinellone ameliorates intestinal fibrosis in mice via direct intervention of HSP47-collagen interaction in the epithelium  
Jie Wang, Mei Bai, Cui Zhang, Ning An, Li Wan, Xiao-ning Wang, Rong-hui Du, Yan Shen, Zhi-yao Yuan, Xu-dong Wu, Xue-feng Wu and Qiang Xu
- 2479 LncRNA H19-EZH2 interaction promotes liver fibrosis via reprogramming H3K27me3 profiles  
Xiao-jiao-yang Li, Fei Zhou, Ya-jing Li, Xiao-yong Xue, Jiao-rong Qu, Gui-fang Fan, Jia Liu, Rong Sun, Jian-zhi Wu, Qi Zheng and Run-ping Liu

## Endocrine Pharmacology

- 2492 Downregulated calmodulin expression contributes to endothelial cell impairment in diabetes  
Tian-tian Liu, Huan-huan Xu, Ze-juan Liu, He-ping Zhang, Hai-tao Zhou, Zhi-xiang Zhu, Zhi-qiang Wang, Jing-yi Xue, Qiang Li, Yi Ma, Hong-jie You and Da-li Luo

## Inflammation and Immunopharmacology

- 2504 Sinomenine ameliorates collagen-induced arthritis in mice by targeting GBP5 and regulating the P2X7 receptor to suppress NLRP3-related signaling pathways  
Juan-min Li, Hai-shan Deng, Yun-da Yao, Wei-ting Wang, Jia-qin Hu, Yan Dong, Pei-xun Wang, Liang Liu, Zhong-qiu Liu, Ying Xie, Lin-lin Lu and Hua Zhou

## Chemotherapy

- 2525 Heat shock protein family A member 8 serving as a co-activator of transcriptional factor ETV4 up-regulates PHLDA2 to promote the growth of liver cancer  
Shuai Wang, Yu-fei Wang, Guang Yang, Hui-hui Zhang, Hong-feng Yuan, Chun-yu Hou, Li-na Zhao, Yu-hong Suo, Jiao Sun, Lin-lin Sun, Pan Lv, Yan Sun, Ning-ning Zhang, Xiao-dong Zhang and Wei Lu
- 2537 Targeting proteasomal deubiquitinases USP14 and UCHL5 with b-AP15 reduces 5-fluorouracil resistance in colorectal cancer cells  
Wa Ding, Jin-xiang Wang, Jun-zheng Wu, Ao-chu Liu, Li-ling Jiang, Hai-chuan Zhang, Yi Meng, Bing-yuan Liu, Guan-jie Peng, En-zhe Lou, Qiong Mao, Huan Zhou, Dao-lin Tang, Xin Chen, Jin-bao Liu and Xian-ping Shi

## Correction

- 2549 Author Correction: Pharmacokinetics, mass balance, and metabolism of [<sup>14</sup>C]vicagrel, a novel irreversible P2Y<sub>12</sub> inhibitor in humans  
Yuan-dong Zheng, Hua Zhang, Yan Zhan, Yi-cong Bian, Sheng Ma, Hai-xian Gan, Xiao-juan Lai, Yong-qiang Liu, Yan-chun Gong, Xue-fang Liu, Hong-bin Sun, Yong-guo Li, Da-fang Zhong, Li-yan Miao, and Xing-xing Diao
- 2550 Author Correction: Discovery of toxoflavin, a potent IRE1 $\alpha$  inhibitor acting through structure-dependent oxidative inhibition  
Kai-long Jiang, Chang-mei Liu, Li-tong Nie, Hai-ni Jiang, Lei Xu, Kun-zhi Zhang, Li-xia Fan, An-hui Gao, Lu-lin Lin, Xiang-yu Wang, Min-jia Tan, Qi-qing Zhang, Yu-bo Zhou and Jia Li

## Cover

Schematic illustration of RVG-miR-23a/27a/26a-Exos for the treatment of diabetic nephropathy (DN). Delivery of miR-23a/27a/26a cluster by RVG-modified satellite cell-derived Exos could be a promising targeted treatment for DN. RVG-miR-23a/27a/26a-Exos could effectively ameliorate tubular injury and tubulointerstitial fibrosis (TIF) by a mechanism that synergistically targets several profibrotic regulators, which not only regulated miRNA cluster-targeting Lpp simultaneously, but controlled miR-27a-3p-targeting Zbtb20 and miR-26a-5p-targeting Kihl42, respectively. See the article in pages 2455–2468.

EXECUTIVE EDITOR FOR THIS ISSUE XU, Jia (Shanghai)

## ACTA PHARMACOLOGICA SINICA (Monthly)

2023 December; Volume 44 Number 12

(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  
E-mail aps@simm.ac.cn or aps@sibs.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 © 2023 Shanghai Institute of Materia Medica, Chinese Academy of Sciences and Chinese Pharmacological Society