



Frontiers of Medicine

Aims & Scope

Frontiers of Medicine is a general medical journal devoted to publishing original research and review articles on the latest advances in clinical and basic medicine with a focus on epidemiology, traditional Chinese medicine, translational research, healthcare, public health and health policies. The journal employs a rigorous peer-review and editing process to ensure the scientific accuracy, novelty and importance of

the manuscripts. *Frontiers of Medicine* is committed to promoting health and health care through communications among professionals in medical care, disease prevention and scientific research throughout the world by updating the progress in medicine, sharing experiences in disease control and treatment and exchanging views on health policies, medical services and health care reform.

Supervised by

Ministry of Education of the People's Republic of China

Sponsored by

Chinese Academy of Engineering

Administered by

Higher Education Press, China
Ruijin Hospital Affiliated to Shanghai Jiao Tong University School of Medicine, China

Submission information

Manuscripts should be submitted to
<http://mc.manuscriptcentral.com/fmd>
fmd@pub.hep.cn

Subscription information

ISSN print edition: 2095-0217

ISSN electronic edition: 2095-0225

Subscription rates

For information on subscription rates please contact Springer Customer Service Center:
customerservice@springer.com

China

customercenter@pub.hep.cn

Orders and inquiries

中国大陆地区

高等教育出版社

100029 北京市朝阳区 惠新东街 4 号 富盛大厦 15 层

电话: +86-10-58556485

<http://journal.hep.com.cn>

The Americas (North, South, Central America and the Caribbean)

Springer Journal Fulfillment,

233 Spring Street, New York, NY, 10013-1578, USA

Tel. 800-SPRINGER (777-4643); 212-460-1500

(outside North America)

Outside the Americas

Springer Customer Service Center GmbH

Haberstr. 7, 69126 Heidelberg, Germany

Tel.: +49-6221-345-4303

Journal website

journal.hep.com.cn/fmd

www.springer.com/journal/11684

Electronic edition

An electronic version is available at

journal.hep.com.cn/fmd

link.springer.com/journal/11684

For the actual version of record please always check the online version of the publication.

Publication information

Frontiers of Medicine is published 6 times a year.

Volume 15 (1–6 issues) will be published in 2021.

Production

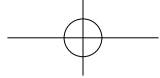
Higher Education Press

4 Huixin Dongjie, Beijing 100029, China

Printed in the People's Republic of China

Imprint

Higher Education Press, co-published with Springer



Frontiers of Medicine

Table of Contents

Vol.15 No.2 2021

Reviews

- 155 **Adjuvant treatment strategy after curative resection for hepatocellular carcinoma**
Wei Zhang, Bixiang Zhang, Xiao-ping Chen
- 170 **Immune response triggered by the ablation of hepatocellular carcinoma with nanosecond pulsed electric field**
Jianpeng Liu, Xinhua Chen, Shusen Zheng
- 178 **Metabolism and immunity in breast cancer**
Deyu Zhang, Xiaojie Xu, Qinong Ye
- 208 **Overcoming resistance to endocrine therapy in hormone receptor-positive human epidermal growth factor receptor 2-negative (HR⁺/HER2⁻) advanced breast cancer: a meta-analysis and systemic review of randomized clinical trials**
Wenjie Zhu, Binghe Xu
- 221 **mTOR-targeted cancer therapy: great target but disappointing clinical outcomes, why?**
Shi-Yong Sun
- 232 **Recent advances in myeloid-derived suppressor cell biology**
Mahmoud Mohammad Yaseen, Nizar Mohammad Abuharfeil, Homa Darmani, Ammar Daoud

Research Articles

- 252 **Degradation of SARS-CoV-2 receptor ACE2 by the E3 ubiquitin ligase Skp2 in lung epithelial cells**
Guizhen Wang, Qun Zhao, Hui Zhang, Fan Liang, Chen Zhang, Jun Wang, Zhenyin Chen, Ran Wu, Hong Yu, Beibei Sun, Hua Guo, Ruie Feng, Kaifeng Xu, Guangbiao Zhou
- 264 **Clinical characteristics and risk factors for mortality in cancer patients with COVID-19**
Junnan Liang, Guannan Jin, Tongtong Liu, Jingyuan Wen, Ganxun Li, Lin Chen, Wei Wang, Yuwei Wang, Wei Liao, Jia Song, Zeyang Ding, Xiao-ping Chen, Bixiang Zhang
- 275 **Comprehensive functional annotation of susceptibility variants identifies genetic heterogeneity between lung adenocarcinoma and squamous cell carcinoma**
Na Qin, Yuancheng Li, Cheng Wang, Meng Zhu, Juncheng Dai, Tongtong Hong, Demetrius Albanes, Stephen Lam, Adonina Tardon, Chu Chen, Gary Goodman, Stig E. Bojesen, Maria Teresa Landi, Mattias Johansson, Angela Risch, H-Erich Wichmann, Heike Bickeboller, Gadi Rennert, Susanne Arnold, Paul Brennan, John K. Field, Sanjay Shete, Loic Le Marchand, Olle Melander, Hans Brunnstrom, Geoffrey Liu, Rayjean J. Hung, Angeline Andrew, Lambertus A. Kiemeny, Shan Zienolddiny, Kjell Grankvist, Mikael Johansson, Neil Caporaso, Penella Woll, Philip Lazarus, Matthew B. Schabath, Melinda C. Aldrich, Victoria L. Stevens, Guangfu Jin, David C. Christiani, Zhibin Hu, Christopher I. Amos, Hongxia Ma, Hongbing Shen
- 292 **Bioactive hyaluronic acid fragments inhibit lipopolysaccharide-induced inflammatory responses via the Toll-like receptor 4 signaling pathway**
Na You, Sasa Chu, Binggang Cai, Youfang Gao, Mizhou Hui, Jin Zhu, Maorong Wang
- 302 **DDB1- and CUL4-associated factor 8 plays a critical role in spermatogenesis**
Xiuli Zhang, Zhizhou Xia, Xingyu Lv, Donghe Li, Mingzhu Liu, Ruihong Zhang, Tong Ji, Ping Liu, Ruibao Ren
- 313 ***H. sinensis* mycelium inhibits epithelial–mesenchymal transition by inactivating the midkine pathway in pulmonary fibrosis**
Li Lu, Haiyan Zhu, Hailin Wang, Huaping Liang, Yayi Hou, Huan Dou



Erratum

330 **Screening for main components associated with the idiosyncratic hepatotoxicity of a tonic herb, *Polygonum multiflorum***
Chunyu Li, Ming Niu, Zhaofang Bai, Congen Zhang, Yanling Zhao, Ruiyu Li, Can Tu, Huifang Li,
Jing Jing, Yakun Meng, Zhijie Ma, Wuwen Feng, Jinfa Tang, Yun Zhu, Jinjie Li, Xiaoya Shang, Zhengsheng Zou,
Xiaohe Xiao, Jiabo Wang

Cover Figure

Scanning electron microscopy micrographs of typical bent head malformation of sperm in *Dcaf8* knockout mice.
(Courtesy of Dr. Ruibao Ren. See pages 302-312 by Xiuli Zhang *et al.* for more information.)