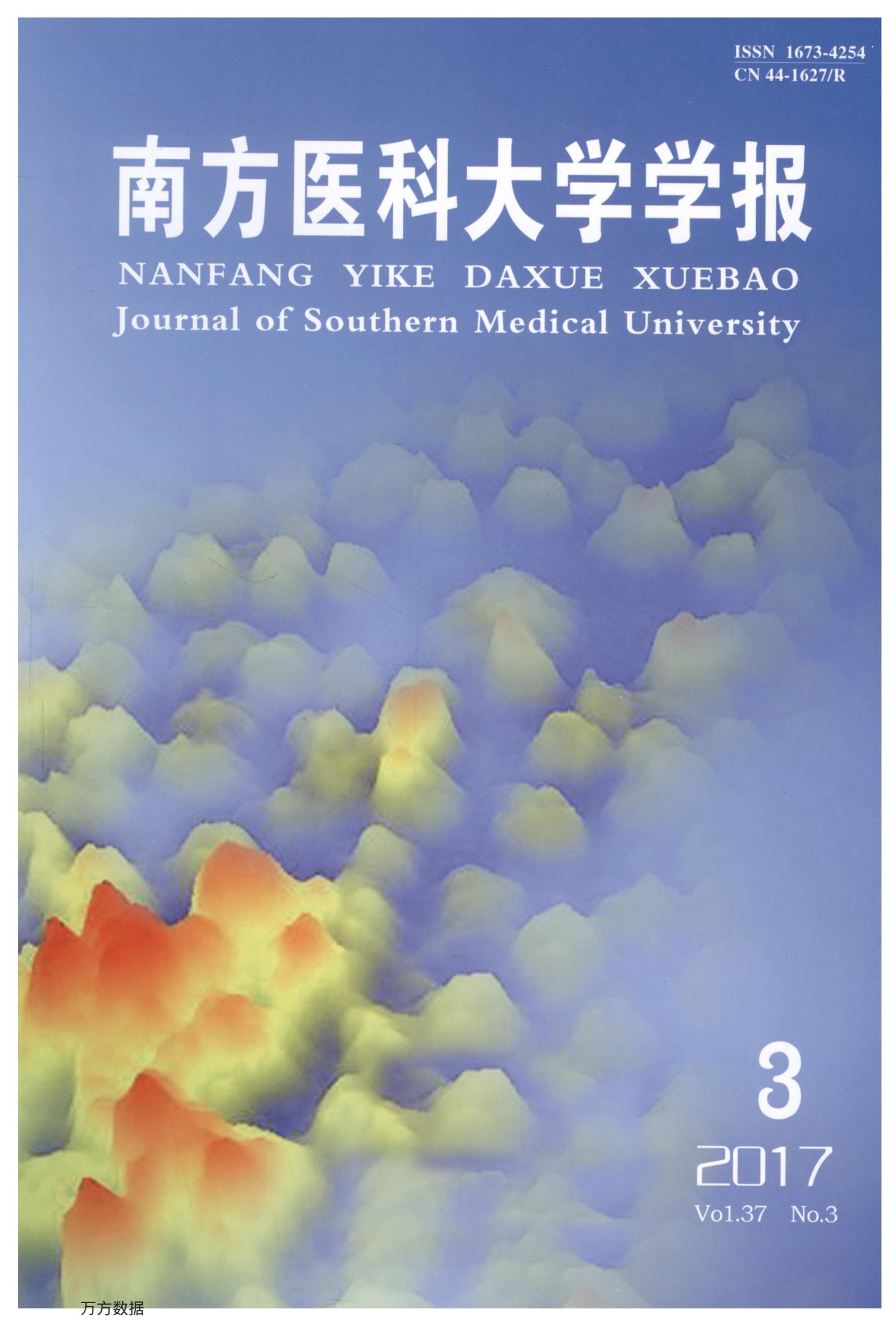


ISSN 1673-4254  
CN 44-1627/R

# 南方医科大学学报

NANFANG YIKE DAXUE XUEBAO  
Journal of Southern Medical University



3

2017

Vo1.37 No.3

# 南方医科大学学报

第 37 卷 第 3 期 2017 年 3 月

## 目 次

### 基础研究

- 301 基于数字全息显微术的登革病毒感染 C6/36 细胞的 3D 形态学  
余健海, 刘旭玲, 刘雨菁, 何晓恩, 惠媛, 张宝, 朱利, 赵卫
- 312 奇异变形杆菌聚磷酸盐激酶多克隆抗体的制备和鉴定  
彭亮, 区静怡, 潘嘉韵, 邓聪, 陈景红, 曹虹
- 317 大鼠雪旺细胞系 RSC96 条件培养液对少突胶质前体细胞的体外增殖作用  
齐琦, 朱安友, 吕合作, 胡建国
- 323 投影数据校正对数字乳腺层析成像质量的影响  
张忻宇, 张华, 边兆英, 曾栋, 何基, 田秀梅, 马建华, 黄静
- 367 甲磺酸阿帕替尼对结肠癌 HCT-116 细胞增殖的抑制作用及其机制  
殷亮, 王荩, 黄凤昌, 张云飞, 许宁, 文政琦, 李文亮, 董坚
- 373 Beclin1 基因在 SW620 细胞自噬和凋亡中作用  
吕梦, 陆航
- 388 雄激素受体对 IgG 蛋白表达及前列腺癌细胞增殖和迁移的影响  
邓煜麟, 郭凯, 曾颖科, 吴凯辉, 唐晨, 郑少波
- 402 超声辐射力结合靶向超声微泡评价小鼠肾缺血再灌注损伤  
王宝平, 罗利红, 吴凤林

### 临床研究

- 283 薄层 CT 与 <sup>18</sup>F-FDG PET/CT 联合运用可提高肺孤立性结节定性诊断的准确性  
任云燕, 李友财, 吴湖炳, 王全师, 韩彦江, 周文兰, 李洪生, 王珍, MOHAMMED Shah Alam
- 290 基于肠道菌群预测摄入胆碱后血氧化三甲胺的变化  
路浚齐, 王珊, 尹恕, 吴珊, 何彦, 郑慧敏, 盛华芳, 周宏伟
- 296 药物涂层球囊与普通球囊治疗股腘动脉硬化闭塞的疗效比较: 前瞻性随机对照试验  
鲁景元, 顾建平, 徐文健, 楼文胜, 汪涛
- 308 系膜区 IgG 沉积对 IgA 肾病临床及病理影响  
徐小蒙, 祝爽爽, 王晓红, 邵小飞, 李宾, 张瑛, 刘琴, 黎嘉敏, 王红蕾, 李永强, 邹和群
- 330 典型哮喘与咳嗽变异性哮喘的小气道功能差异分析  
陈树煜, 方泽葵, 方思, 沈其晓, 何熹, 王翠兰, 于化鹏
- 337 脑损伤后意识障碍患者意识恢复影响因素的 Logistic 回归分析  
林清, 谢秋幼, 何艳斌, 陈炎, 倪啸晓, 郭叶群, 申艳, 虞容豪
- 342 丙泊酚联合吲哚美辛对离体人肺内小动脉的影响  
郝宁, 邓春玉, 尹素娟, 马珏, 张光燕, 崔建修
- 354 miR-501-5p 在宣威地区肺腺癌组织中的表达及临床意义  
陈帅, 周永春, 陈颖, 陈小波, 李光剑, 雷玉洁, 田林玮, 赵光强, 黄秋博, 黄云超
- 360 年龄因素对牙周膜干细胞增殖和分化能力的影响  
杜婷婷, 刘娜, 张维, 石海刚, 张彤
- 378 3D 打印计算机虚拟辅助技术在髋臼骨折术前规划中的应用  
柳鑫, 曾参军, 卢键森, 林旭晨, 黄华军, 谭新宇, 蔡道章

- 383** 雌激素及其受体、芳香化酶在子宫腺肌病中的作用  
曾玉燕,关永格,李坤寅
- 393** miR-206/CDK4信号在卵巢癌生长和化疗增敏中的作用  
凌晨,刘蜀,王勇,张逢春,杜鹰
- 398** 伤柏膏治疗急性踝关节外侧副韧带损伤患者疼痛的临床效果  
周霖,孙凯,陈彦,陈国良,邓德钧,焦根龙,李志忠
- 407** 急性白血病死亡相关蛋白激酶基因启动子的甲基化  
赵卫华,孟凡义,赖永榕,彭志刚,马劫
- 415** 超敏反应蛋白、纤维蛋白原和D-二聚体在结缔组织病相关间质性肺炎中的临床意义  
袁思捷,谢海庭,李忠丽

## 技术方法

- 347** 椭球先验约束的前列腺磁共振图像分割  
李雪丽,庞树茂,阳维,冯前进
- 411** 定位大鼠下丘脑视上核方法的改良  
冯展鹏,张源,雷清梅,周立志,邱炳辉,包贊,漆松涛,武广森

## 综述

- 420** 皮肤源性前体细胞的研究进展  
陈若思,苗勇,胡志奇

封面图片:数字全息显微术下C6/36细胞的三维全息图(余健海,南方医科大学公共卫生学院三级生物安全实验室,正文见本期301~307页)。

主 编:陈敏生  
编 辑 部 主任:陈望忠  
本期责任编辑:经媛  
英文责任编辑:宋建武  
本期技术编辑:林立华  
本期责任校对:吴锦雅 孙昌朋  
本期责任编辑:王均 刘红艳  
期刊基本参数:CN44-1152/R\*1981\*m\*A4\*120\*zh+en\*P\* ¥ 10:00\*1500\*26\*2017-03

# Journal of Southern Medical University

Volume 37 Number 3 March 2017

## Contents

### Basic Research

- 301 Three-dimensional morphology of C6/36 cells infected by dengue virus: a study based on digital holographic microscopy  
YU Jianhai, LIU Xuling, LIU Yujing, HE Xiaoen, HUI Yuan, ZHANG Bao, ZHU Li, ZHAO Wei
- 312 Expression of *Proteus mirabilis* polyphosphate kinase and preparation of its polyclonal antibodies  
PENG Liang, OU Jingyi, PAN Jiayun, DENG Cong, CHEN Jinghong, CAO Hong
- 317 Conditioned medium from rat RSC96 cells promotes proliferation of oligodendrocyte progenitor cells *in vitro*  
QI Qi, ZHU Anyou, LÜ Hezuo, HU Jianguo
- 323 Influence of projection data correction on digital breast tomosynthesis imaging  
ZHANG Xinyu, ZHANG Hua, BIAN Zhaoying, ZENG Dong, HE Ji, TIAN Xiumei, MA Jianhua, HUANG Jing
- 367 Inhibitory effect of apatinib on HCT-116 cells and its mechanism  
YIN Liang, WANG Jin, HUANG Fengchang, ZHANG Yunfei, XU Ning, WEN Zhengqi, LI Wenliang, DONG Jian
- 373 Role of Beclin 1 gene in autophagy and apoptosis of SW620 cells  
LÜ Meng, LU Hang
- 388 Effect of androgen receptor on IgG expression, proliferation and migration of prostate cancer cells *in vitro*  
DENG Yulin, GUO Kai, ZENG Yingke, WU Kairui, TANG Chen, ZHENG Shaobo
- 402 Evaluation of renal tissue ischemia-reperfusion injury with ultrasound radiation force and targeted microbubbles  
WANG baoping, LUO Lihong, WU Fenglin

### Clinical Research

- 283 Combined use of thin-section CT and <sup>18</sup>F-FDG PET/CT for characterization of solitary pulmonary nodules  
REN Yunyan, LI Youcai, WU Hubing, WANG Quanshi, HAN Yanjiang, ZHOU Wenlan, LI Hongsheng, WANG Zhen, MOHAMMED Shah Alam
- 290 A machine learning model using gut microbiome data for predicting changes of trimethylamine-N-oxide in healthy volunteers after choline consumption  
LU Junqi, WANG Shan, YIN Jia, WU Shan, HE Yan, ZHENG Huimin, SHENG Hufang, ZHOU Hongwei
- 296 Efficacy of drug-coated balloon and common balloon for treatment of superficial femoral artery and popliteal artery arteriosclerosis obliterans: prospective randomized controlled trial  
LU Jingyuan, GU Jianping, XU Wenjian, LOU Wensheng, WANG Tao
- 308 Clinical and pathological features in IgA nephropathy with IgG deposition in the glomerular mesangial area  
XU Xiaomeng, ZHU Shuangshuang, WANG Xiaohong, SHAO Xiaofei, LI Bin, ZHANG Ying, LIU Qin, LI Jiamin, WANG Honglei, LI Yongqiang, ZOU Hequn
- 330 Comparison of functional parameters of small airways between patients with typical asthma and cough-variant asthma  
CHEN Shuyu, FANG Zekui, FANG Si, SHEN Qixiao, HE Xi, WANG Cuilan, YU Huapeng
- 337 Factors affecting recovery of consciousness in patients with disorders of consciousness following brain trauma: a logistic regression analysis  
LIN Qing, XIE Qiuyou, HE Yanbin, CHEN Yan, NI Xiaoxiao, GUO Yequn, SHEN Yan, YU Ronghao
- 342 Effects of propofol combined with indomethacin on contraction of isolated human pulmonary arteries  
HAO Ning, DENG Chunyu, KUANG Sujuan, MA Jue, ZHANG Guangyan, CUI Jianxiu
- 354 Expression profile of miR-501-5p in lung adenocarcinoma patients from Xuanwei area  
CHEN Shuai, ZHOU Yongchun, CHEN Ying, CHEN Xiaobo, LI Guangjian, LEI Yujie, TIAN Linwei, ZHAO Guangqiang, HUANG Qiubo, HUANG Yunchao
- 360 Effect of aging on proliferative and differentiation capacity of human periodontal ligament stem cells  
DU Tingting, LIU Na, ZHANG Wei, SHI Haigang, ZHANG Tong

- 378 Application of 3D printing and computer-assisted surgical simulation in preoperative planning for acetabular fracture  
LIU Xin, ZENG Canjun, LU Jiansen, LIN Xuchen, HUANG Huajun, TAN Xinyu, CAI Daozhang
- 383 Role of estrogen, estrogen receptors, and aromatase in the pathogenesis of uterine adenomyosis  
ZENG Yuyan, GUAN Yongge, LI Kunyin
- 393 Role of miR-206/CDK4 in modulating the growth and chemotherapy sensitivity of ovarian cancer cells  
LING Chen, LIU Shu, WANG Yong, ZHANG Fengchun, DU Ying
- 398 Efficacy of *Shangbai* ointment in alleviating pain in patients with acute ankle joint lateral collateral ligament injury: a randomized controlled trial  
ZHOU Lin, SUN Kai, CHEN Yan, CHEN Guoliang, DENG Dejun, JIAO Genlong, LI Zhizhong
- 407 Promoter methylation and expression of death-associated protein kinase gene in acute leukemia  
ZHAO Weihua, MENG Fanyi, LAI Yongrong, PENG Zhigang, MA Jie
- 415 Clinical significance of hypersensitive C-reactive protein, fibrinogen and D-dimmer in connective tissue disease-related interstitial lung disease  
YUAN Sijie, XIE Haiting, LI Zhongli

## Techniques and Methods

- 347 Segmentation of the prostate on magnetic resonance images using an ellipsoidal shape prior constraint algorithm  
LI Xueli, PANG Shumao, FENG Qianjin, YANG Wei
- 411 An improved method for stereotactic location of the supraoptic nucleus with oblique stereotactic puncture in rats  
FENG Zhanpeng, ZHANG Yuan, LEI Qingmei, ZHOU Lizhi, QIU Binghui, BAO Yun, QI Songtao, WU Guangsen

## Review

- 420 Research progress of skin-derived precursor cells  
CHEN Ruosi, MIAO Yong, HU Zhiqi

**Cover image:** Three-dimensional morphology of C6/36 cells observed with digital holographic microscopy. Provided by Yu Jianhai (Lab of Biosafety Level 3, School of Public Health, Southern Medical University). See full-text article on page 301-307 in this issue.

**Editor-in-Chief:** CHEN Minsheng

**Editorial Director:** CHEN Wangzhong

**Executive Editor:** JING Yuan

**English Editor:** SONG Jianwu

**Executive Technical Editor:** LIN Lihua

**Executive Proofreaders:** WU Jinya SUN Changpeng

**Photo Editor:** WANG Jun

**Editorial Assistant:** LIU Hongyan



## 中国精品科技期刊 中国百种杰出学术期刊

- ★ 美国《医学索引》(Medline/PubMed)源期刊
- ★ 美国《化学文摘》(CA)源期刊
- ★ 荷兰《医学文摘》(EMBASE)收录期刊
- ★ 荷兰 Scopus 收录期刊
- ★ 《中文核心期刊要目总览(2014年版)》收录期刊
- ★ 中国科学引文数据库(CSCD)源期刊
- ★ 中国核心期刊(遴选)数据库源期刊
- ★ 中国精品科技期刊
- ★ RCCSE 中国权威学术期刊
- ★ 中国高校精品科技期刊

南方医科大学学报

2017 年 3 月 20 日 第 37 卷第 3 期

月刊 1981 年创刊

主 管 单 位 广东省教育厅

主 办 单 位 南方医科大学

编 辑 出 版 南方医科大学学报编辑部

510515 广州市广州大道北 1838 号

电话: 020-61648175, 61647352 传真: 020-61360558

网址: [www.j-smu.com](http://www.j-smu.com) 电子邮箱: [xbbjb@fimmu.com](mailto:xbbjb@fimmu.com)

主 编 陈敏生

印 刷 单 位 广州市艺彩印务有限公司

国 内 发 行 广东省报刊发行局

发 行 范 围 国内外

国 内 定 购 全国各地邮局

国 外 定 购 中国出版对外贸易总公司(北京 782 信箱)

Journal of Southern Medical University

Vol.37 No.3 March 2017

Monthly, Founded in 1981

Responsible Institution Department of Education of  
Guangdong Province

Sponsored by Southern Medical University

Edited and Published by Editorial Department of Journal  
of Southern Medical University, Guangzhou 510515, China

Tel: 86-20-61648175, 61647352 Fax: 86-20-61360558

[Http://www.j-smu.com](http://www.j-smu.com), E-mail: [xbbjb@fimmu.com](mailto:xbbjb@fimmu.com)

Editor-in-Chief: CHEN Minsheng

Printed by Guangzhou Yi Cai Printing Co., Ltd

Subscription

Domestic: Local Post Offices

Foreign: China National Publications Trading

Export Corporation (P.O.Box. 782, Beijing, China)

ISSN 1673-4254  
CN 44-1627/R

国内邮发代号: 46-10

国内定价: 10.00 元/册



万方数据

ISSN 1673-4254



9 771673 425179

0 3>