



Q K 2 2 0 6 2 2 3



现代
XIANDAI
SHENGWU YIXUE JINZHAN

生物医学进展

PROGRESS IN MODERN
BIOMEDICINE

中国科技核心期刊
科技部中国科技论文统计源期刊
中国学术期刊网络出版总库(CNKI)收录期刊
美国化学文摘(CA)检索期刊
俄罗斯文摘杂志(AJ)收录期刊
英国国际农业与生物科学研究中心(CABI)数据库收录期刊
美国剑桥文摘(CSA)收录期刊
英国Global Health数据库收录期刊
Genamics Journal Seek收录期刊
美国ProQuest数据库收录期刊
美国EBSCO数据库收录期刊
波兰白尼索引(IC)收录期刊
WHO西太区医学索引(WPRIM)收录期刊



ISSN 1673-6273



9 771673 627221



2022年 第22卷(第2期)
Vol. 22 No. 2 Jan 2022

现代生物医学进展

XIANDAI SHENGWUYIXUE JINZHAN

半月刊 2001年4月创刊 第22卷 第2期 2022年1月30日出版 Progress in Modern Biomedicine

主 管: 黑龙江省卫生健康委员会
主 办: 黑龙江省森工总医院
协 办: 哈尔滨工业大学
上海交通大学附属第一人民医院
编 辑: 现代生物医学进展编辑委员会
150040 哈尔滨市和兴路32号
电 话: 0451-82583800
E-mail: biomed_54@126.com
E-mail: liudhui_21@126.com
E-mail: biomagnetism@163.com
<http://biomed.cnjournals.com>
<http://www.shengwuyixue.com>
<http://swcx.periodicals.net.cn>
学 术 顾 问: 杨宝峰 刘颂豪
阮长耿 曾溢滔 贺 林
张亭栋 王迺谦 刘玉清
郝希山 曾益新 张岂凡
执行主编: 吴文忠
主 编: 徐万海
副 主 编: 李 钰 张贵祥
黄文华 黄菊芳 刘 平
吕传柱 曾乐平 唐一源
曾凡一 刘 明 代文杰
张清媛
编 辑 部 主任: 刘同奎
编 辑 部 副主任:
刘子馨 谢建平 郑林丰
编 辑 部 地址: 150001, 哈尔滨市54号信箱
(哈尔滨市花园街184号403)
电 话: 0451-82583800 0451-53658268
传 真: 0451-82583966
出 版: 现代生物医学进展杂志社
印 刷: 哈尔滨市工大节能印刷厂
发 行: 国内: 哈尔滨市报刊发行局
国 外: 中国国际图书贸易总公司
(北京399信箱, 100044)
国外发行代号: Q1728
订 购: 全国各地邮局
邮发代号: 14-12
邮 购: 现代生物医学进展编辑部
(150001 哈尔滨市54号信箱)
定 价: 30.00元 / 期, 全年 720.00元
中国标准刊号: ISSN 1673-6273
CN 23-1544/R
2022年版权归现代生物医学进展杂志社所有
本刊刊出的所有文章不代表编委会的观点,
除非特别声明 本刊如有印刷质量问题, 请向
现代生物医学进展杂志编辑部调换

目 次

·论 著·

·基础研究·

- 分泌蛋白 YKL-40 增强肿瘤细胞的上皮间质样转化 朱博文 虞海惠 罗 静等 (201)
LncRNA SNHG4 在结直肠癌中的表达及对细胞奥沙利铂耐药性的影响 庄晓鹏 刘友东 郑宾宾等 (207)
促性腺激素释放激素类似物缓解环磷酰胺导致卵巢损伤的机制研究 陈璇 刘思旋 李晓林等 (213)
蒙药乌力吉-18 对大鼠下丘脑-垂体-卵巢轴相关激素及受体表达的影响 包春霞 董立群 何乌云嘎等 (220)
槐耳清膏抑制非小细胞肺癌细胞增殖和血管新生的作用机制研究 魏玉川 程万宏 应朝辉等 (226)
促甲状腺激素并非甲状腺乳头状癌发生发展的关键因素 梁声茹 杨阳 刘檗贊等 (230)
通窍明目IV号对青光眼模型大鼠视神经保护的机制研究 董霏雪 孙河 王丽媛等 (237)
利塞膦酸钠对去卵巢大鼠正畸牙齿移动期间破骨细胞中FAK蛋白表达的影响 左静 冯云霞 李光明等 (244)
·临床研究·
风险预判与主动干预在综合ICU患者多重耐药菌医院感染防控中的关键作用研究 耿苗苗 费凯虹 邹倩等 (249)
全身麻醉下达芬奇机器人手术在老年腹部手术中应用观察 周瑜 王小雨 徐黎等 (254)
疏肝健脾针法对肝郁脾虚证腹泻型肠易激综合征患者肠道菌群和血清5-HT、NPY、CGRP的影响 刘鸿儒 李俊 陆明等 (259)

现代生物医学进展

XIANDAI SHENGWUYIXUE JINZHAN

半月刊 2001年4月创刊 第22卷 第2期 2022年1月30日出版 Progress in Modern Biomedicine

纤维支气管镜吸痰联合肺泡灌洗在肺癌术后合并肺部感染患者中的临床应用价值

李君兰 雷 蕾 金琳羚等 (264)

缩唇腹式呼吸联合呼吸操训练对慢性阻塞性肺疾病患者血气分析指标、肺功能和生活质量的影响

吴珊珊 岳朝丽 张 梦等 (268)

精神分裂症患者暴力行为与全脑皮质厚度、甲状腺功能和 Th17 相关炎症因子的相关性分析

陈邦定 胡 波 彭东桃等 (273)

消栓肠溶胶囊联合阿加曲班对急性脑梗死患者血液流变学和神经损伤指标的影响

卓益民 王 唯 慕永勇等 (278)

铁死亡相关的 LncRNAs 在甲状腺癌中的预后价值及预后风险模型构建

章 静 王黎明 周金宝等 (282)

南京市栖霞区 3~5 岁儿童乳牙患龋现状调查及其影响因素分析

陈 嵩 计 艳 项 洁等 (289)

个体化康复运动训练联合八段锦运动对冠心病 PCI 术后患者心功能、生活质量和心境状态的影响

于晓燕 汤 婷 赵佳文等 (294)

卡贝缩宫素联合 Bakri 球囊压迫对宫缩乏力性产后出血患者卵巢功能和凝血功能的影响

王 梅 刘德佩 张成思等 (299)

经皮椎体成形术联合射频消融治疗脊柱转移瘤的临床疗效及术后预后的影响因素分析

姚珍松 李文超 梁 德等 (304)

小剂量罗哌卡因复合舒芬太尼硬膜外麻醉对高龄产妇分娩镇痛效果评估

李江玉 戴 庆 艾克拜尔·努尔买买提等 (310)

冠状动脉粥样硬化性心脏病患者血清 SFRP5、FGF21、IGF-I 水平与血脂和冠状动脉病变严重程度

的相关性研究 张 锦 尚茹茹 王兴兴等 (315)

血清锌- α 2-糖蛋白、骨硬化蛋白、胎球蛋白 A 水平与维持性血液透析患者冠状动脉钙化的关系

及其诊断价值研究 申世华 杨 静 王韦乐等 (320)

比伐卢定联合替罗非班在高血栓负荷拟行 PPCI 治疗的急性 ST 段抬高型心肌梗死患者中的应用价值

褚 杰 王喜福 杨 婷等 (325)

快速康复外科理念对单孔胸腔镜肺叶切除患者术后应激因子、肺功能及疼痛评分的影响

许哲源 张利斌 汪 洋等 (329)

床旁超声联合血乳酸对感染性休克患者容量反应性的预测价值分析

乔志飞 张丽骞 王 磊等 (333)

现代生物医学进展

XIANDAI SHENGWUYIXUE JINZHAN

半月刊 2001年4月创刊 第22卷 第2期 2022年1月30日出版 Progress in Modern Biomedicine

- 两种手术方式治疗 Krouse 分级 T2、T3 上颌窦内翻性乳头状瘤的疗效及对炎性应激指标的影响 王荣坤 余利波 徐艳辉等 (337)
- 支气管哮喘患者疾病认知状况调查及控制水平的影响因素分析 蒋文青 陈宗喻 周垒垒等 (342)
- 稳定期慢性阻塞性肺疾病患者营养不良与甲状腺激素、肺功能及血清 IL-6、IL-18 的关系研究 顾婷婷 齐保龙 苑仁祥等 (347)
- 复方谷氨酰胺联合双歧杆菌三联活菌胶囊对腹泻型肠易激综合征患者肠黏膜屏障功能、胃肠激素和血清 5-HT、SPY 水平的影响 朱烟林 康 敏 彭时成等 (352)
- DDIAS 在川崎病患儿血液中的表达及意义 李 敏 张艳敏 王娟莉等 (356)
- 关节镜手术联合胫骨高位截骨治疗内侧膝关节骨关节炎的临床研究 陈 涛 张 骏 潘 涵等 (364)
- 生物反馈电刺激联合 Kegel 训练对产后盆底功能障碍性疾病患者盆底功能电生理指标和生活质量的影响 曼梓宴 覃 旭 李春雷等 (369)
- 实时三维超声造影对输卵管伞端通畅性及功能的评价效果 李载红 王圣坦 韩丽珍等 (373)
- 腹腔内贝伐珠单抗辅助卵巢癌术后化疗对患者血清 AFP、VEGF、TGF-β1、MIF 的影响 李小峰 孙新宇 郝光军等 (379)
- 超声诊断持续性右脐静脉合并畸形的价值及其对于胎儿预后意义研究 王 科 高 源 吴娅妮等 (383)
- 加味苦参汤联合紫归解毒膏对肛瘘术后创面愈合、肛肠动力学及血清 TNF-α、IL-6、bFGF、TGF-β1 水平的影响 潘慧莹 石先明 齐 翊等 (388)
- 重组组织型纤溶酶原激活剂静脉溶栓治疗发病 4.5 小时内急性脑梗死近期疗效的回顾性研究 丁凤玲 张仲慧 康 宏等 (392)
- 全麻术后患者苏醒期躁动发生情况及影响因素分析 张 森 胡宪文 李 锐等 (397)
- 重要信息·
- 《现代生物医学进展》2022 年封面设计说明 (298)
- 《现代生物医学进展》杂志简介及投稿指南 (I ~IV)

责任编辑:王念、武海艳、郭晓东、李寿朋、王国华、陈文、田向荣、曾垂凯、陶维东、王沛坚、崔玉宝

英文编辑:田林杰、王娟、杨尚琴、李媛媛、吕志刚、马军、符波、朱杰、许愿忠、靳大川、岳颖、陈芸芸

执行编辑:谢建平、曾乐平、刘子馨、郑林丰、韩康、周利红、周颖、张玉环、董佩锋、朱英杰、万民熙

封面设计:谢建平、彭安安

Progress in Modern Biomedicine

Established in April 2001

Volume 22 Number 2

January 30 2022

Responsible: Health Commission of Heilongjiang province
Sponsor: Heilongjiang Province Forestry General Hospital
The Fourth Hospital of Harbin Medical University

Cosponsor: Harbin Institute of Technology
Shanghai Jiao Tong University
Affiliated First People's Hospital

Editing: Editorial Board of Progress in Modern Biomedicine

No.32, Hexing Road, Harbin 150040

Tel:(0451) 82583800

<http://biomed.cnjournals.com>

<http://www.shengwuyixue.com>

<http://swcx.periodicals.net.cn>

E-mail: biomed_54@126.com

E-mail: liudui_21@126.com

E-mail: biomagnetism@163.com

Academic Adviser: YANG Bao-feng

LIU Song-hao	RUAN Chang-geng
ZENG Yi-tao	HE Lin
ZHANG Ting-dong	WANG Nai-qian
LIU Yu-qing	HAO Xi-shan
ZENG Yi-xin	ZHANG Qi-fan

Executive-Editor-in-chief:

WU Wen-zhong

Editor-in-chief:

XU Wan-hai

Associate Editor-in-chief: LI Yu

ZHANG Gui-xiang	HUANG Wen-hua
HUANG Ju-fang	LIU Ping
LV huan-zhu	ZENG Le-ping
TANG Yi-yuan	ZENG Fan-yi
LIU Ming	DAI Wen-jie
ZHANG Qing-yuan	

Managing Director:

LIU Tong-kui

Managing Associate Director:

LIU Zi-xin	XIE Jian-ping
ZHENG Lin-feng	

Address of Editorial Department:

150001, Harbin No.54 Post-office box
(Room 403, No.184 at Huayuan Street, Harbin)
Tel: 0451-82583800 0451-53658268

Publishing: House, Journal of Progress in Modern Biomedicine

Printing: Harbin city Gongda save energy printing House

Overseas Distributor: China International Book Trading corporation.

P.O Box 399, Beijing, code No.Q1728

Mail-Order: Editorial Department of publishing House, Progress in Modern Biomedicine

Harbin 54 Post-office box, Harbin 150001

Tel: 0451-53658268 0451-82583800

CSSN: ISSN 1673-6273
CN 23-1544/R

Copyright 2022 by the publishing

House of Progress in Modern Biomedicine

All articles published represent the opinions of the authors, do not reflect the official policy of the Editorial Board of Progress in Modern Biomedicine unless this is clearly specified.

Contents in Brief

ORIGINAL ARTICLES

•BASIC RESEARCH•

Secreted Protein YKL-40 Enhances Epithelial Mesenchymal

Transition of Tumor Cells in Vitro

ZHU Bo-wen, YU Hai-hui, LUO Jing, et al

(201)

Expression of LncRNA SNHG4 in Colorectal Cancer and Its

Effects on Cell Oxaliplatin Resistance

ZHUANG Xiao-peng, LIU You-dong, ZHENG Bin-bin, et al

(207)

The Mechanism of Gonadotropin-releasing Hormone Analogs

to Relieve Ovarian Injury Induced by Cyclophosphamide

CHEN Xuan, LIU Si-xuan, LI Xiao-lin, et al

(213)

Effects of Mongolian Medicine Wulji-18 on Hypothalamus-

Pituitary-Ovarian Axis Related Hormones and Receptors

Expression in Rats

BAO Chun-xia, DONG Li-qun, HE Wu-yun ga, et al

(220)

Mechanism of Huaier on Inhibiting Proliferation and Angiogenesis

of Non-Small Cell Lung Cancer Cells

KUI Yu-chuan, CHENG Wan-hong, YING Chao-hui, et al

(226)

Progress in Modern Biomedicine

Established in April 2001

Volume 22 Number 2

January 30 2022

Thyroid Stimulating Hormone may not be a Key Factor for the Development

and Progression of Papillary Thyroid Cancer

LIANG Sheng-ru, YANG Yang, LIU Bo-yun, et al (230)

Mechanism of TongQiaoMingMu IV on the Mechanism of Optic Nerve Protection

in Rats of Glaucoma Model

DONG Fei-xue, SUN He, WANG Li-yuan, et al (237)

Effect of Risedronate Sodium on FAK Protein Expression in Osteoclasts during Orthodontic

Rooth Movement in Ovariectomized Rats

ZUO Jing, FENG Yun-xia, LI Guang-ming, et al (244)

·CLINICAL RESEARCH·

The effect of Risk Prediction and Active Intervention on the Control of Healthcare Associated

Infection Caused by Multi-drug Resistant Organism in GICU

GENG Miao-miao, FEI Kai-hong, ZOU Qian, et al (249)

Application of General Anesthesia and Da Vinci Robotic Surgery in Elderly Abdominal Surgery

ZHOU Yu, WANG Xiao-yu, XU Li, et al (254)

Effects of Shugan Jianpi Acupuncture on Intestinal Flora and Serum 5-HT, NPY and CGRP

in Patients with Diarrhea Irritable Bowel Syndrome with Liver Depression

and Spleen Deficiency Syndrome

LIU Hong-ru, LI Jun, LU Ming, et al (259)

Clinical Value of Fiberoptic Bronchoscope Sputum Suction Combined with Alveolar Lavage

in Patients with Lung Infection After Lung Cancer Surgery

LI Jun-lan, LEI Lei, JIN Lin-ling, et al (264)

Effects of Lip Contraction Abdominal Breathing Combined with Respiratory Exercises

on Blood Gas Analysis Indexes, Pulmonary Function and Quality of Life in Patients

with Chronic Obstructive Pulmonary Disease

WU Shan-shan, YUE Zhao-li, ZHANG Meng, et al (268)

Progress in Modern Biomedicine

Established in April 2001

Volume 22 Number 2

January 30 2022

Correlation Analysis between Violent Behavior and Whole Cerebral Cortex Thickness,

Thyroid Function and Th17 Related Inflammatory Factors in Patients with Schizophrenia

CHEN Bang-ding, HU Bo, PENG Dong-tao, et al (273)

Effects of Xiaoshuan Changrong Capsule Combined with Argatroban on Hemorheology

and Nerve Injury Indexes in Patients with Acute Cerebral Infarction

ZHUO Yi-min, WANG Wei, MU Yong-yong, et al (278)

Prognostic Value and Prognostic Risk Modeling of Ferroptosis-Related lncRNAs in Thyroid Cancer

ZHANG Jing, WANG Li-ming, ZHOU Jin-bao, et al (282)

Investigation Status and Influencing Factors of Caries of Deciduous Tooth

in Children Aged 3~5 Years in Qixia District, Nanjing

CHEN Song, JI Yan, XIANG Jie, et al (289)

Effects of Individualized Rehabilitation Exercise Training Combined with Baduanjin Exercise

on Cardiac Function, Quality of Life and Mood State of Patients with Coronary Heart

Disease after PCI

YU Xiao-yan, TANG Ting, ZHAO Jia-wen, et al (294)

Effects of Carbetocin Combined with Bakri Balloon Compression on Ovarian Function and

Coagulation Function in Patients with Uterine Asthenia Postpartum Hemorrhage

WANG Mei, LIU De-pei, ZHANG Cheng-si, et al (299)

Clinical Efficacy and Postoperative Prognostic Influencing Factors Analysis of Percutaneous

Vertebroplasty Combined with Radiofrequency Ablation in the Treatment of Spinal Metastases

YAO Zhen-song, LI Wen-chao, LIANG De, et al (304)

Effect of Low Dose Ropivacaine Combined with Sufentanil Epidural Anesthesia

on Labor Analgesia in Elderly Women

LI Jiang-yu, DAI Qing, AIKEBAIER Nuermaimaiti, et al (310)

Correlation Study of Serum SFRP5, FGF21, IGF-I Levels and Blood Lipids and Severity of Coronary

Artery Disease in Patients with Coronary Atherosclerotic Heart Disease

ZHANG Jin, SHANG Ru-ru, WANG Xing-xing, et al (315)

Progress in Modern Biomedicine

Established in April 2001

Volume 22 Number 2

January 30 2022

Relationship between Serum Zinc- α 2-Glycoprotein, Osteosclerotic Protein, Fetal Globulin A Levels

and Coronary Artery Calcification in Patients Undergoing Maintenance Hemodialysis

and its Diagnostic Value Study

- SHEN Shi-hua, YANG Jing, WANG Wei-le, et al (320)

Application Value of Bivalirudin Combined with Tirofiban in Patients with Acute ST Segment

Elevation Myocardial Infarction Undergoing PPCI with High Thrombus Load

- CHU Jie, WANG Xi-fu, YANG Ting, et al (325)

Effect of Fast Track Surgery on Stress Factors, Lung Function and Pain Score

in Patients Undergoing Single Port Thoracoscopic Lobectomy

- XU Zhe-yuan, ZHANG Li-bin, WANG Yang, et al (329)

Predictive Value of Bedside Ultrasound Combined with Serum Lactic Acid on Volume Responsiveness

of Patients with Septic Shock

- QIAO Zhi-fei, ZHANG Li-qian, WANG Lei, et al (333)

Therapeutic Effect of Two Surgical Methods in the Treatment of Maxillary Sinus Inverted Papilloma

with Kruse Grade T2 and T3 and its Influence on Inflammatory Stress Indexes

- WANG Rong-kun, YU Li-bo, XU Yan-hui, et al (337)

Investigation on Disease Cognition Status and Influencing Factors of Control Level

in Patients with Bronchial Asthma

- JIANG Wen-qing, CHEN Zong-yu, ZHOU Lei-lei, et al (342)

Relationship Study between Malnutrition and Thyroid Hormone, Lung Function, Serum IL-6,

IL-18 in Patients with Stable Chronic Obstructive Pulmonary Disease

- GU Ting-ting, QI Bao-long, YUAN Ren-xiang, et al (347)

Effects of Compound Glutamine Combined with Bifidobacterium Triple Viable Capsule

on Intestinal Mucosal Barrier Function, Gastrointestinal Hormone and Serum 5-HT

and SPY Levels in Patients with Diarrhea Irritable Bowel Syndrome

- ZHU Yan-lin, KANG Min, PENG Shi-cheng, et al (352)

Progress in Modern Biomedicine

Established in April 2001

Volume 22 Number 2

January 30 2022

The Expression and Significance of DDIAS in the Blood of Children with Kawasaki Disease

LI Min, ZHANG Yan-min, WANG Li-juan, et al (356)

Clinical Study of Arthroscopic Surgery Combined with High Tibial Osteotomy

in the Treatment of Medial Knee Osteoarthritis

CHEN Tao, ZHANG Jun, PAN Feng, et al (364)

Effects of Biofeedback Electrical Stimulation Combined with Kegel Training

on the Electrophysiological Indexes of Pelvic Floor Function and Quality of Life

in Patients with Postpartum Pelvic Floor Dysfunction Disease

YAN Zi-yan, QIN Xu, LI Chun-lei, et al (369)

Evaluation of the Patency and Function of Fimbria end of Fallopian Tube by Three-dimensional

Contrast-enhanced Ultrasound

LI Zai-hong, WANG Sheng-tan, HAN Li-zhen, et al (373)

The Effect of Chemotherapy with Bevacizumab in the Treatment of

Ovarian Cancer after Operation in Patients on Serum AFP, VEGF, TGF- β 1 and MIF

LI Xiao-feng, SUN Xin-yu, HAO Guang-jun, et al (379)

The Value of Ultrasonography in the Diagnosis of Persistent Right Umbilical Vein

with Malformation and Its Prognostic Significance for Fetus

WANG Ke, GAO Yuan, WU Ya-ni, et al (383)

Effect of Jiawei Kushen Decoction Combined with Zigui Jiedu Ointment on Wound Healing,

Anorectal Dynamics and Serum TNF- α , IL-6, bFGF and TGF- β 1 Levels

after Anal Fistula Operation

PAN Hui-ying, SHI Xian-ming, QI Yue, et al (388)

Retrospective Study on the Short-Term Efficacy of rt-PA Intravenous Thrombolysis

in the Treatment of Acute Cerebral Infarction within 4.5 Hours after Onset

DING Feng-ling, ZHANG Zhong-hui, KANG Hong, et al (392)

Analysis of Restlessness and Its Influencing Factors in Patients after General Anesthesia

ZHANG Miao, HU Xian-wen, LI Rui, et al (397)



中国科技核心期刊

(中国科技论文统计源期刊)

收录证书

CERTIFICATE OF SOURCE JOURNAL

FOR CHINESE SCIENTIFIC AND TECHNICAL PAPERS AND CITATIONS

现代生物医学进展

经过多项学术指标综合评定及同行专家
评议推荐，贵刊被收录为“中国科技核心期
刊”（中国科技论文统计源期刊）。

特颁发此证书。



中国科学技术信息研究所

Institute of Scientific and Technical Information of China

北京复兴路 15 号 100038 www.istic.ac.cn

2021年12月

证书编号：2020-F250-1706

有效期至：2022年12月

万方数据

