



中华中医药学会系列期刊



CSCD来源期刊  
中国中文核心期刊  
中国科技核心期刊  
RCCSE权威学术期刊(A+)



Q K 1 8 6 8 4 6 8

ZHONGGUO

SHIYAN

FANGJIXUE

ZAZHI

# 中国实验方剂学杂志

— Chinese Journal of Experimental Traditional Medical Formulae —

## 本期推荐

- 香薷白朮散对溃疡性结肠炎小鼠 NLPR3, NLPR6 蛋白及相关炎症因子表达的影响
- 人参-三七-川芎提取物延缓高糖诱导的小鼠血管衰老的机制探讨
- 中医药通过 mTOR 途径调节细胞凋亡与自噬的研究进展

4

2019

2019年2月 第25卷 第4期  
February Vol.25 No.4



杂志官方微信

主管：国家中医药管理局  
主办：中国中医科学院中药研究所  
中华中医药学会

万方数据

# 中国实验方剂学杂志

Zhongguo Shiyan Fangjixue Zazhi

半月刊 1995 年 10 月创刊

第 25 卷

第 4 期

2019 年 2 月 20 日出版

主 管 国家中医药管理局

(100027 北京市东城区工体西路 1 号)

主 办 中国中医科学院中药研究所

(100700 北京市东直门内南小街 16 号)

中华中医药学会

(100029 北京市朝阳区樱花园东街甲 4 号)

主 编 吴以岭

编辑出版 中国实验方剂学杂志编辑部

(100700 北京市东直门内南小街 16 号)

电话:(010)84076882

传真:(010)84076882

E-mail:syfjx\_2010@188.com

网址:www.syfjxzz.com

广告代理 数源汇通(北京)医药科技有限公司

北京市海淀区西三环北路 11 号

海通时代商务中心 A1 栋

电话:(010)68469866

传真:(010)68469866

印 刷 北京博海升彩色印刷有限公司

(101102 北京通州区环宇路 6 号)

国内发行 北京报刊发行局

(100055 北京丰台区莲花池东路 126 号)

订阅 全国各地邮局

邮发代号 2-417

国外发行 中国国际图书贸易集团有限公司

订阅代号 SM4655

邮 购 中国实验方剂学杂志社

(100700 北京市东直门内南小街 16 号)

电话:(010)84076882

中国标准连续出版物号 ISSN 1005-9903  
CN 11-3495/R

广告许可证 京东工商广登字 20170076 号

国内定价 每期 48 元,全年 1152 元

## 目 次

### · 中药外用研究专题 ·

中药临床外治技术规范的现状及发展趋势

田硕, 白明, 武晏屹, 苗明三 ..... ( 1 )

基于神经-内分泌-免疫网络探讨中药外用作用机制

—“三微调平衡”

田硕, 苗明三 ..... ( 6 )

银黄参精油对日光性皮炎模型小鼠皮肤损伤的保护作用

李孟艳, 田硕, 苗明三 ..... ( 13 )

三参草精油对大鼠血栓闭塞性脉管炎模型的影响

刘静, 田硕, 苗明三 ..... ( 18 )

生姜糊外用对大、小鼠痔疮模型的影响

娄鑫, 白明, 田硕, 魏湘萍, 苗明三 ..... ( 23 )

### · 配伍 ·

脑心通胶囊肠吸收液保护过氧化氢致 H9c2 心肌细胞

损伤的作用机制及有效药味筛选

何子龙, 赵晔, 张毅, 李德凤, 张方博, 杨洪军 ..... ( 29 )

### · 经典名方 ·

参苓白术散对溃疡性结肠炎小鼠 NLPR3, NLPR6 蛋白及

相关炎症因子表达的影响

张嘉骏, 施家希, 黄娟, 施旭光, 刘翠英, 王奇 ..... ( 36 )

地黄饮子对脑缺血再灌注损伤大鼠保护作用及其机制

王俊杰, 楼琦, 汤娟娟, 白亚平, 李倩, 张培璐,  
杜月光 ..... ( 42 )

麦门冬汤加减联合顺铂对 A549 细胞化疗增敏的作用机制

方芳, 谢伶俐, 宁雪坚, 范先基, 吴万垠 ..... ( 49 )

基于中药整合药理学平台分析黄连汤治疗胃炎的作用机制	
吴智春,于华芸,张成博,马婷,宗鑫,季旭明	( 57 )
独活续断汤对不同类型腰间盘突出症患者临床疗效、生活能力的影响及机制	
王志光,商艳慧,谭涛,荣兵	( 63 )
加味消风散治疗支气管哮喘风哮证的疗效观察及对炎症因子的影响	
贾琳,武蕾,李博林,魏莉瑛	( 70 )
通窍活血汤加减联合“回阳九针”治疗卒中后认知障碍的临床观察	
李俊,胡小军,王青,訾璐,陈瑶	( 75 )
· 药理 ·	
人参-三七-川芎提取物延缓高糖诱导的小鼠血管衰老的机制探讨	
方靖漪,王雪,雷燕,杨静,修成奎,田伟	( 81 )
胡桃醌-PLGA 纳米粒制备及对 A375 恶黑细胞的体外抗肿瘤作用	
岳武恒,梅瑞,蔡娟,钱汉清,刘宝瑞,邹征云	( 87 )
甘草查尔酮 A 通过调节 TGF- $\beta$ /Smad 信号通路抑制小鼠肺纤维化	
付钰,吴瑕,陈随清	( 94 )
基于 RNA-seq 技术的活血化瘀法治疗乳腺癌关键基因的筛选和验证	
赵利南,赵益,孙有智	( 101 )
柴竭抑肝纤对硫代乙酰胺诱导的大鼠肝纤维化的影响	
郭会君,蔡悦青,魏炜,余晓玲,张志毕,姜莉云	( 109 )
化瘀祛痰方对 ApoE <sup>-/-</sup> 小鼠主动脉 MAPK 信号通路相关蛋白表达的影响	
冷雪,李阳,宋因,王莹	( 116 )
· 临床 ·	
桂附地黄丸加减对冠心病 PCI 术后患者生活质量的影响及用药安全性评价	
何文锦,杨石,刘凡,李瑛,袁佳	( 122 )
大株红景天胶囊对颈动脉不稳定斑块气虚血瘀证的干预分析	
刘颖,韩吉祥,左小芹,许慧宁,刘洁,赵成玉	( 128 )
· 药剂与炮制 ·	
絮凝法去除川乌炮制废水中生物碱类成分的可行性分析	
易剑平,迟玉明,李东影,张宏宇,崔有为	( 134 )
基于 HPLC-DAD 特征图谱分析莱菔子饮片酶解过程中化学成分的变化	
朱立俏,于绍华,张茜,周洪雷,盛华刚	( 140 )
星点设计-效应面法优化阴道用儿黄散白及胶缓释双层膜的处方	
王艳宏,杨柳,王超,关枫,韩凤娟	( 146 )

**· 资源与质量评价 ·**

针捕集法、静态顶空法和水蒸气蒸馏法结合 GC-MS 对紫花地丁挥发性成分的比较

秦艳, 翁静艳, 庞英明, 程志红 ..... (153)

不同产地葛根与粉葛的 HPLC 指纹图谱及其多成分化学模式识别分析

杨园珍, 王雅琪, 胡恋琪, 焦姣姣, 杨明 ..... (162)

川黄柏和关黄柏全球产地生态适宜性分析

杨俐, 孟祥霄, 李洪运, 丁丹丹, 孙成忠, 叶萌, 向丽 ..... (167)

基于促斑马鱼血管生成的不同产地巴戟天比较分析

冉志芳, 杨小彤, 许子欣, 郝庆秀, 周洁, 郭兰萍, 余意 ..... (175)

基于灰色关联分析探索艾纳香非挥发性部位的抗炎活性谱效关系

汪洋, 彭潇, 何燕玲, 孙绪, 马雪, 王广成, 兰燕宇, 李勇军 ..... (180)

东风菜挥发油化学成分及抗氧化活性

张彬, 张蕾, 谭芬, 张洪权, 吴田 ..... (187)

栀子皮、仁、须中 3 个成分含量测定及指纹图谱

梁献葵, 王艳慧, 雷敬卫, 龚海燕, 唐维维, 谢彩侠, 杨春静 ..... (193)

UPLC-MS/MS 测定参芎葡萄糖注射液中阿拉伯糖、果糖、甘露糖和葡萄糖

罗君, 赵琳珺, 朱迪, 包江平, 谭家华, 黄健 ..... (201)

**· 本草考证 ·**

佛手的传统应用

岳玲, 程轩轩, 唐晓敏, 杨全 ..... (206)

**· 数据挖掘 ·**

葛根在保健食品中的应用规律分析

管咏梅, 姜鄂, 朱卫丰, 金晨, 董欢欢, 朱懿敏 ..... (212)

**· 综述 ·**

中医药通过 mTOR 途径调节细胞凋亡与自噬的研究进展

郜然然, 周慧, 吴也可, 贺宇, 吴克明 ..... (218)

金银花中的化学成分及其药理作用研究进展

吴娇, 王聪, 于海川 ..... (225)

[期刊基本参数] CN11-3495/R \* 1995 \* s \* 16 \* 234 \* zh \* P \* ¥48.00 \* 1000 \* 36 \* 2019-04

本期责任编辑: 周冰冰

# CHINESE JOURNAL OF EXPERIMENTAL TRADITIONAL MEDICAL FORMULAE

Semimonthly

Established in October, 1995

Vol. 25 No. 4

February 2019

## Responsible Institution

State Administration of Traditional Chinese Medicine  
(No. 1, Gongtixilu, Dongcheng District, Beijing, 100027)

## Sponsor

Institute of Chinese Materia Medica, China Academy of Chinese Medical Sciences  
(No. 16, Nanxiaojie, Dongzhimennei, Beijing, 100700)  
China Association of Chinese Medicine  
(No. 4, Yinghuayuandongjie, Chaoyang District, Beijing, 100029)

## Editor-in-Chief

WU Yi-ling

## Edited and Published by

Editorial Office of Chinese Journal of Experimental Traditional Medical Formulae  
(No. 16, Nanxiaojie, Dongzhimennei, Beijing, 100700)  
Tel: (010)84076882  
Fax: (010)84076882  
E-mail: syfjx\_2010@188.com  
Website: <http://www.syfjxzz.com>

## Printed by

Beijing BOHS Colour Printing Co. Ltd.  
(No. 6, Huanyu Road, Tongzhou District, Beijing, 101102)

## Domestic Subscription

Distributed by Beijing Subscription Bureau  
(No. 126, Lianhuachidonglu, Fengtai District, Beijing, 100055)  
Subscription Code 2-417

## Overseas Subscription

China International Book Trading Corporation  
(P. O. Box 399, Beijing, 100044)  
Code SM4655

## Order from Local Post Office

Order from Mail Publishing House of China Journal of Experimental Traditional Medical Formulae  
(No. 16, Nanxiaojie, Dongzhimennei, Beijing, 100700)  
Tel: (010)84076882

ISSN 1005-9903  
CN 11-3495/R

## CONTENTS IN BRIEF

### Current Situation and Development Trend of Chinese Medicines External Treatment Techniques

TIAN Shuo, BAI Ming, WU Yan-ji, MIAO Ming-san ..... ( 1 )

### Mechanism of External Use of Traditional Chinese Medicine—"Three Micro- Regulations for Balance"

#### Based on Neural-Endocrine-Immune Network

TIAN Shuo, MIAO Ming-san ..... ( 6 )

### Protective Effect of Yinhuangshen Essential Oil on Skin

#### Damage in Mice with Solar Dermatitis

LI Meng-yan, TIAN Shuo, MIAO Ming-san ..... ( 13 )

### Effect of Sanshencao Essential Oil on Rat Model of Thromboangiitis Obliterans

LIU Jing, TIAN Shuo, MIAO Ming-san ..... ( 18 )

### Effect of Ginger Paste on Hemorrhoids Model in Rats and Mice

LOU Xin, BAI Ming, TIAN Shuo, WEI Xiang-ping, MIAO Ming-san ..... ( 23 )

### Mechanisms and Components Identification of Naoxintong

#### Intestinal Absorption Liquid Protecting Cardiac

#### Injury Induced by H<sub>2</sub>O<sub>2</sub>

HE Zi-long, ZHAO Ye, ZHANG Yi, LI De-feng, ZHANG Fang-bo, YANG Hong-jun ..... ( 29 )

### Effect of Shenling Baizhu San on Expressions of NLPR3,

#### NLPR6 Protein and Related Inflammatory

#### Factors in Mice with Ulcerative Colitis

ZHANG Jia-jun, SHI Jia-xi, HUANG Juan, SHI Xu-guang, LIU Cui-ying, WANG Qi ..... ( 36 )

### Protective Effect of Dihuang Yinzi on Cerebral Ischemia-

#### reperfusion Injury in Rats and Its Mechanism

WANG Jun-jie, LOU Qi, TANG Juan-juan, BAI Ya-ping, LI Qian, ZHANG Pei-lu, DU Yue-guang ..... ( 42 )

<b>Mechanism of Modified Maimendong Tang Combined with Cisplatin in Enhancing Chemosensitivity on Human Lung Adenocarcinoma A549 Cells</b>	( 49 )
FANG Fang, XIE Ling-li, NING Xue-jian, FAN Xian-ji, WU Wan-yin .....	
<b>Analysis of Molecular Mechanism of Huanglian tang in Treatment of Gastritis Based on Integrated Pharmacology Platform of Traditional Chinese Medicine</b>	( 57 )
WU Zhi-chun, YU Hua-yun, ZHANG Cheng-bo, MA Ting, ZONG Xin, JI Xu-ming .....	
<b>Clinical Efficacy of Duhuo Xuduan Tang in Treatment of Lumbar Disc Herniation</b>	( 63 )
WANG Zhi-guang, SHANG Yan-hui, TAN Tao, RONG Bing .....	
<b>Clinical Efficacy of Modified Xiaofengsan and Its Effect on Cytokines in Persistent Asthma Patients with Wind-asthma Pattern</b>	( 70 )
JIA Lin, WU Lei, LI Bo-lin, WEI Li-ying .....	
<b>Clinical Effect of Modified Tongqiao Huoxuetang Combined with ‘Huiyang Jiuzhen’ in Treating Post-stroke Cognitive Impairment</b>	( 75 )
LI Jun, HU Xiao-jun, WANG Qing, ZI Lu, CHEN Yao .....	
<b>Extracts from Ginseng Radix et Rhizoma, Notoginseng Radix et Rhizoma and Chuanxiong Rhizoma in Delaying High Glucose-induced Vascular Senescence in Mice</b>	( 81 )
FANG Jing-yi, WANG Xue, LEI Yan, YANG Jing, XIU Cheng-kui, TIAN wei .....	
<b>Preparation of Juglone-loaded PLGA Nanoparticles and Its Anti-tumor Effect on Melanoma A375 Cells <i>in Vitro</i></b>	( 87 )
YUE Wu-heng, MEI Rui, CAI Juan, QIAN Han-qing, LIU Bao-rui, ZOU Zheng-yun .....	
<b>Licochalcone A in Inhibiting Bleomycin-induced Pulmonary Fibrosis Through TGF-<math>\beta</math>/Smad Pathway</b>	( 94 )
FU Yu, WU Xia, CHEN Sui-qing .....	
<b>Screening and Verification of RNA-seq-based PBCRS for Treating Key Genes of Breast Cancer</b>	( 101 )
ZHAO Li-nan, ZHAO Yi, SUN You-zhi .....	
<b>Effect of Chaijie Yiganxian on Hepatic Fibrosis Induced by Thioacetamide in Rats</b>	( 109 )
GUO Hui-jun, CAI Yue-qing, WEI Wei, YU Xiao-ling, ZHANG Zhi-bi, JIANG Li-yun .....	
<b>Effect of Huayu Qutan Recipe in Regulating Aortic MAPK Pathway-related Gene Expression in Atherosclerosis Mice</b>	( 116 )
LENG Xue, LI Yang, SONG Nan, WANG Ying .....	
<b>Effect of Modified Guifu Dihuang Wan on Quality of Life of Patients with Coronary Heart Disease After PCI and Evaluation on Medication Safety</b>	( 122 )
HE Wen-jin, YANG Shi, LIU Fan, LI Ying, YUAN Jia .....	
<b>Effect of Dazhu Hongjingtian Capsule on Unstable Carotid Plaque with Qi Deficiency and Blood Stasis Syndrome</b>	( 128 )
LIU Ying, HAN Ji-xiang, ZUO Xiao-qin, XU Hui-ning, LIU Jie, ZHAO Cheng-yu .....	
<b>Feasibility Analysis of Removal of Alkaloids from Processing Wastewater of Aconiti Radix by Flocculation</b>	( 134 )
YI Jian-ping, CHI Yu-ming, LI Dong-ying, ZHANG Hong-yu, CUI You-wei .....	

<b>Analysis on Changes of Chemical Components in Enzymolysis Process of Raphani Semen Pieces Based on HPLC-DAD Characteristic Spectra</b>	
ZHU Li-qiao, YU Shao-hua, ZHANG Xi, ZHOU Hong-lei, SHENG Hua-gang .....	(140)
<b>Optimization of Formulation of Erhuangsan Bletillae Rhizoma Gelatin Sustained Release Double-layer Membrane by Central Composite Design-response Surface Methodology</b>	
WANG Yan-hong, YANG Liu, WANG Chao, GUAN Feng, HAN Feng-juan .....	(146)
<b>Comparative Analysis of Volatile Organic Compounds in <i>Viola yedoensis</i> by Needle Trap, Static Headspace and Hydrodistillation Methods Coupled with GC-MS</b>	
QIN Yan, WENG Jing-yan, PANG Ying-ming, CHENG Zhi-hong .....	(153)
<b>Analysis of HPLC Fingerprint and Their Multicomponent Chemical Pattern Recognition of Puerariae Lobatae Radix from Different Habitats and Puerariae Thomsonii Radix</b>	
YANG Yuan-zhen, WANG Ya-qi, HU Lian-qi, JIAO Jiao-jiao, YANG Ming .....	(162)
<b>Globally Ecological Suitability Analysis of <i>Phellodendron chinense</i> and <i>Phellodendron amurense</i></b>	
YANG Li, MENG Xiang-xiao, LI Hong-yun, DING Dan-dan, SUN Cheng-zhong, YE Meng, XIANG Li .....	(167)
<b>Angiogenesis Activity of Morinda Officinalis Radix from Different Origins Based on Zebrafish Model</b>	
RAN Zhi-fang, YANG Xiao-tong, XU Zi-xin, HAO Qing-xiu, ZHOU Jie, GUO Lan-ping, YU Yi .....	(175)
<b>Spectrum-effect Relationship of Anti-inflammatory Active Components from Nonvolatile Fraction of <i>Blumea balsamifera</i> Based on Gray Correlation Analysis</b>	
WANG Yang, PENG Xiao, HE Yan-ling, SUN Xu, MA Xue, WANG Guang-cheng, LAN Yan-yu, LI Yong-jun .....	(180)
<b>Chemical Compositions and Antioxidant Activity of Volatile Oils from <i>Doellingeria scaber</i></b>	
ZHANG Bin, ZHANG Lei, TAN Fen, ZHANG Hong-quan, WU Tian .....	(187)
<b>Determination of Content of Index Components and HPLC Fingerprint of <i>Gardenia jasminoides</i> Pericarp, Seeds and Whiskers</b>	
LIANG Xian-kui, WANG Yan-hui, LEI Jing-wei, GONG Hai-yan, TANG Wei-wei, XIE Cai-xia, YANG Chun-jing .....	(193)
<b>Determination of Sugar, Fructose, Mannose and Glucose in Shenxiong Glucose Injection by UPLC-MS/MS</b>	
LUO Jun, ZHAO Lin-jun, ZHU Di, BAO Jiang-ping, TAN Jia-hua, HUANG Jian .....	(201)
<b>Traditional Application of <i>Citri Sarcodactylis</i> Fructus</b>	
YUE Ling, CHENG Xuan-xuan, TANG Xiao-min, YANG Quan, .....	(206)
<b>Analysis of Application of Puerariae Lobatae Radix in Health Food</b>	
GUAN Yong-mei, JIANG E, ZHU Wei-feng, JIN Chen, DONG Huan-huan, ZHU Yi-min .....	(212)
<b>Effect of Traditional Chinese Medicine in Regulating Apoptosis and Autophagy Through mTOR Pathway</b>	
GAO Ran-ran, ZHOU Hui, WU Ye-ke, HE Yu, WU Ke-ming .....	(218)
<b>Chemical Constituents and Pharmacological Effect of <i>Lonicerae Japonicae</i> Flos</b>	
WU Jiao, WANG Cong, YU Hai-chuan .....	(225)

Responsible editor: ZHOU Bing-bing

# 咽喉消炎 止痛治溃疡 请喷 三金牌 桂林西瓜霜



## 喷一喷，直达患处

口腔溃疡 咽喉肿痛 干痒发炎

三金牌桂林西瓜霜喷剂，以传统去火中药西瓜霜为主药，配以黄连、冰片、薄荷脑、山豆根、黄柏等14味中药，主治因上火引起的口腔溃疡，适合于咽喉肿痛、干痒、口舌生疮、牙龈肿痛出血等症状。

三金牌桂林西瓜霜喷剂，喷一喷，清火消肿，止痛利咽，咽喉口腔健康清新。



桂林三金药业股份有限公司

请按药品说明书或在药师指导下购买和使用 不良反应：尚不明确。 禁忌：尚不明确。 桂药广审(文)第2018100313号 产品批号：国药准字Z45021599 北京市药监局2018年10月准予备案

广告