

主 管

天津药物研究院 ([www.tjipr.com](http://www.tjipr.com))

主 办

天津药物研究院 ([www.tjipr.com](http://www.tjipr.com))

中国药学会 ([www.cpa.org.cn](http://www.cpa.org.cn))

编辑出版

《现代药物与临床》编辑部

地址: 天津市滨海高新区惠仁道 306 号

邮编: 300462

电话: 022-23006823

邮箱: dc@tiprpress.com

网址: [www.中草药杂志社.中国](http://www.中草药杂志社.中国)

[www.tiprpress.com](http://www.tiprpress.com)

主 编 杨宝峰

副主编 陈薇 韩雅玲 王军志

王锐 张英泽 李校堃

冯世庆 陈常青

国际标准连续出版物号

ISSN 1674-5515

国内统一连续出版物号

CN 12-1407/R

发行订阅

本刊编辑部

国内定价

每期 50.00 元

全年 600.00 元

印 刷

天津市恒远印刷有限公司

广告发布登记号

BH 2020-01

本期责任编辑

解学星

2022 年版权归现代药物与临床编辑部所有

# 目 次

## 早期药物临床试验实施技术专栏

- 1909 语音播报提醒功能对早期药物临床试验中采血时间的影响  
张艳平, 裴彤, 杜佳琳, 白楠, 曾金茹, 张兰, 胡朝英  
1914 试验用药品的冷链管理研究  
裴彤, 胡朝英, 张兰  
1919 药物临床试验必备文件的档案管理研究  
高琳艳, 胡朝英, 裴彤, 杜佳琳, 张兰, 王琎  
1923 早期药物临床试验中血样采集时间超窗的原因分析  
高琳艳, 裴彤, 胡朝英, 董瑶, 梁蓓蓓, 王琎,  
张兰, 杜佳琳  
1927 华法林钠片在健康受试者生物等效性试验中的安全性分析  
王琎, 高琳艳, 张兰, 胡朝英

## 实验研究

- 1932 基于 IKK $\beta$ /NF- $\kappa$ B 通路探究香菇多糖联合顺铂对乳腺癌的  
干预作用  
张晶, 苏畅, 孔凡铭, 张丽丽, 陈立伟, 李小江  
1938 丹参酮ⅡA 通过抑制 PI3K/Akt 通路逆转人喉癌细胞顺铂耐  
药的机制研究  
吴庭艳, 戴景芳, 张强, 胡芳欣, 孔凡英,  
孔德胜, 王海叶  
1945 香菇多糖 - 番荔枝纳米粒的性能考察及其对小鼠黑色素  
瘤肺转移癌的抑制作用  
高广宇, 李春梅  
1953 咖啡酸对 UVB 损伤人角质形成细胞的保护作用机制研究  
赵英良, 张玲, 韦克毅, 蔡国栋, 周国福, 田迪,  
卢娟, 徐俊驹  
1959 马鞭草苷对口腔扁平苔藓免疫反应的抑制作用及机制  
王芳, 闫卉, 尚婷婷, 杨磊  
1965 基于网络药理学和分子对接技术探讨桂枝茯苓丸治疗子  
宫肌瘤的分子作用机制  
贾菲菲, 郭苏兰, 梁国琼, 贾俊  
1975 基于网络药理学结合 GEO 数据库多芯片分析法探讨糖痹  
外洗方治疗糖尿病足的作用机制  
宁遵锡, 刘鹏宇, 杨宇, 魏秀岩, 高慧媛  
1987 HPLC 法测定羌活胶囊中马钱苷酸、山梔苷甲酯、6'-O- $\beta$ -D-  
葡萄糖基龙胆苦苷、獐牙菜苦苷、龙胆苦苷、獐牙菜苷、  
异荭草苷和异牡荆黄素  
翟欣, 田云, 肖会敏, 王四旺, 常瑛  
1992 HPLC 法测定氢氯噻嗪原料药中有关物质  
房思萌, 隋玉荣, 韩晓捷  
1997 HPLC-DAD 法测定益脑胶囊中 3,6'-二芥子酰基蔗糖、五味  
子醇甲和人参皂苷 Rb<sub>1</sub>  
王怀斌, 刘春, 李明杰

## 临床研究

- 2001 注射用七叶皂苷钠联合替罗非班治疗急性脑梗死的临床  
研究  
李坤, 崔涛, 张坤  
2007 脑安滴丸联合氯吡格雷治疗急性脑梗死的临床研究  
魏营, 姚庆萍, 郭姝丽  
2012 枣仁安神颗粒联合右佐匹克隆治疗老年原发性失眠症的  
临床研究  
徐金梅, 周晓香  
2017 地奥心血康胶囊联合氯吡格雷治疗急性心肌梗死的临床研究  
陈珺, 燕飞, 黄泰博  
2021 瓜蒌皮注射液联合磷酸肌酸治疗冠心病稳定型心绞痛的临床  
研究  
景贤, 赵映璇  
2026 舒血宁注射液联合替罗非班治疗急性心肌梗死行急诊经皮冠  
状动脉介入术患者的临床研究  
何友权, 王永, 史铭, 张艳青  
2031 咖啡酸片联合艾曲泊帕乙醇胺治疗血小板减少症的临床  
研究  
颜丽华, 王羽

- 2035 羧甲司坦口服溶液联合莫西沙星治疗慢性支气管炎急性发作的临床研究 杨庆玺, 倪庆, 娅光东, 贾意图  
2040 丙卡特罗联合地塞米松磷酸钠治疗儿童支气管哮喘急性发作的临床研究 袁叶梅, 黄赛花, 屈春燕  
2044 香连化滞丸联合美沙拉嗪治疗溃疡性结肠炎的临床研究 杨晓庆, 张俊, 黄振, 李道宽  
2049 鼻康片联合色甘萘甲那敏治疗过敏性鼻炎的临床研究 李玲, 李伟, 罗会林, 程庆  
2054 阿法骨化醇联合复方α酮酸片治疗肾性继发性甲状旁腺功能亢进症的临床研究 滕玲, 朱长松, 范昊, 李婷婷  
2059 己酮可可碱联合胰激肽原酶治疗糖尿病足的临床研究 侯新凤, 李文芳, 沈亚非, 辛婧, 邓飞  
2064 消渴康颗粒联合洛塞那肽治疗2型糖尿病的临床研究 马静, 李福旺, 邵爽, 范振迁, 原全利  
2069 消渴丸联合达格列净治疗2型糖尿病的临床研究 张军, 邵蔚, 韩瑞  
2075 纳武利尤单抗联合安罗替尼治疗晚期非小细胞肺癌的临床研究 韩永丽, 赵惠临, 樊华斌, 王素芳  
2081 接骨七厘片联合注射用复方骨肽治疗骨质疏松性骨折的临床研究 张兵, 吴阳, 焦龙兵, 王佰亮  
2087 壮骨止痛胶囊联合特立帕肽治疗绝经后骨质疏松症的临床研究 杨贤玉, 董胜利, 刘帅, 李来好, 李凤希  
2093 止痛化癥胶囊联合左炔诺孕酮宫内节育系统治疗子宫腺肌病的临床研究 刘红玲, 张保萍  
2098 妇科养血颗粒联合屈螺酮炔雌醇治疗功能性子宫出血的临床研究 殷汝昌, 耿爱芝, 张春燕  
2103 七叶洋地黄双苷滴眼液联合雷珠单抗治疗渗出型老年性黄斑变性的临床研究 谢红, 田昌隆, 吴玉玲, 魏波

## 医院药学

- 2109 达格列净临床应用合理性和安全性分析 罗柳金, 谢宗泰, 曾彩芳  
2114 PD-1/PD-L1抑制剂在非黑色素瘤治疗中致白癜风的文献病例分析 尹岳松, 吴玉佩, 周晔, 李阳, 邓新娜, 李庆霞  
2122 替雷利珠单抗致不良反应的文献分析 刘俊, 刘晓丹, 朱立勤  
2128 美罗培南致血小板计数异常的文献分析 潘娟, 李足意, 周玲芝, 叶超

## 药事管理

- 2135 无菌工艺模拟试验中常见问题和检查要点分析研究 颜若曦

## 综 述

- 2142 中药多糖调控肿瘤微环境的研究进展 安香霖, 鲁金月, 董辉, 孟鑫  
2148 槲皮素及其衍生物治疗慢性肾脏病的作用机制研究进展 相学梅, 李宜航, 牟曾熠, 李志明  
2155 二甲双胍治疗骨关节炎的作用机制研究进展 邢亨特, 邱波  
2160 靶向CD155及其受体的药物研究进展 郑学敏, 李桂霞, 郝瑞家, 刘艳菊, 韩进, 王根辈, 李剑  
2167 γ-氨基丁酸的生物活性研究进展 刘莺驹, 张东星, 晏仁义, 王磊, 苏子孟, 王鑫, 於洪建

## 数据库等收录情况

中国科技核心期刊  
RCCSE 中国核心学术期刊  
中国学术期刊(网络版)  
科学引文数据库(SCD)  
中文生物医学期刊文献数据库  
中国生物医学期刊引文数据库  
  
荷兰 Elsevier Scopus 数据库  
美国《化学文摘》(CA)  
美国《国际药学文摘》(IPA)  
美国《剑桥科学文摘》(CSA)  
美国《乌利希期刊指南》(UPD)  
英国《公共卫生数据库》(GH)  
英国《农业与生物科学研究中心文摘》(CAB)  
波兰《哥白尼索引》(IC)  
WHO 西太平洋地区医学索引(WPRIM)

天津市卫生局医药卫生期刊目录  
河南省卫生系列高级职称评审学术期刊参考目录(2021年10月)(二类)  
上海市卫生系列2021年核心期刊参考目录  
广东省卫生系列高级职称评审论文期刊参考目录

## 期刊指标

2021年10月9日中国科学文献计量评价研究中心发布了《中国学术期刊影响因子年报》(自然科学与工程技术2021版):《现代药物与临床》影响力指数567.360, 70种药学期刊排第11位;复合总被引3751;复合影响因子0.992, 70种药学期刊排第28位;期刊综合影响因子0.880, 70种药学期刊排第21位;分区为药学类Q1区。基金论文比0.50, WEB即年下载率110, 总下载量19.95万次。

2021年12月27日中国科学技术信息研究所发布:《现代药物与临床》入选中国科技核心期刊(中国科技论文统计源期刊)。2021年版中国科技期刊引证报告(扩刊版):《现代药物与临床》扩展影响因子2.803, 名列68种药学类期刊第1位;扩展总被引频次8319。

**Directed by**

Tianjin Institute of Pharmaceutical Research  
([www.tjipr.com](http://www.tjipr.com))

**Sponsored by**

Tianjin Institute of Pharmaceutical Research  
([www.tjipr.com](http://www.tjipr.com))

Chinese Pharmaceutical Association  
([www.cpa.org.cn](http://www.cpa.org.cn))

**Edited and Published by**

Editorial Office of Drugs & Clinic  
(306# Huiren Road, Tianjin Binhai High-Tech Industry Park, Tianjin 300462, China)  
Tel: 86-22-23006823  
<http://www.tiprpress.com>  
E-mail: dc@tiprpress.com

**Editor-in-chief**

YANG Bao-feng

**Associate Editor-in-chief**

CHEN Wei, HAN Ya-ling,  
WANG Jun-zhi, WANG Rui,  
ZHANG Ying-ze, LI Xiao-kun,  
FENG Shi-qing, CHEN Chang-qing

**Managing Director**

XIE Xue-xing

**Printed by**

Tianjin Hengyuan Printing Co., Ltd.

**Distribution**

Self-Distribution

**Standard Number**

ISSN 1674-5515

CN 12-1407/R

CODEN XYLYAW

**Publication Date**

September 28, 2022

**Editor in Charge of This Issue**

XIE Xue-xing

## Contents

### Early Drug Clinical Trial Technology

- 1909 Influence of voice broadcast reminder on blood collection time in early phase clinical trial ZHANG Yan-ping, PEI Tong, DU Jia-lin, BAI Nan, ZENG Jin-ru, ZHANG Lan, HU Chao-ying  
1914 Cold chain management for investigational drugs PEI Tong, HU Chao-ying, ZHANG Lan  
1919 Management of essential documents for drug clinical trial GAO Lin-yan, HU Chao-ying, PEI Tong, DU Jia-lin, ZHANG Lan, WANG Jin  
1923 Analysis of reasons of blood sample collection time beyond the specified time range in early phase clinical trial GAO Lin-yan, PEI Tong, HU Chao-ying, DONG Yao, LIANG Bei-bei, WANG Jin, ZHANG Lan, DU Jia-lin  
1927 Safety analysis on bioequivalence studies of Warfarin Sodium Tablets in healthy subjects WANG Jin, GAO Lin-yan, ZHANG Lan, HU Chao-ying

### Research Paper

- 1932 Explore the intervention effect of lentinan combined with cisplatin on breast cancer based on IKK $\beta$ /NF- $\kappa$ B pathway ZHANG Jing, SU Chang, KONG Fan-ming, ZHANG Li-li, CHEN Li-wei, LI Xiao-jiang  
1938 Mechanism of tanshinone II $A$  reversing cisplatin resistance in human laryngeal cancer cells by inhibiting PI3K/Akt pathway WU Ting-yan, DAI Jing-fang, ZHANG Qiang, HU Fang-xin, KONG Fan-ying, KONG De-sheng, WANG Hai-ye  
1945 Properties of lentinan - annonaceous acetogenins nanoparticles and its inhibitory effect on lung metastasis of melanoma in mice GAO Guang-yu, LI Chun-mei  
1953 Protective mechanism of caffeic acid on HaCaT cells injured by UVB ZHAO Ying-liang, ZHANG Ling, WEI Ke-Yi, CAI Guo-dong, ZHOU Guo-fu, TIAN Di, LU Juan, XU Jun-ju  
1959 Inhibitory effect and its mechanism of verbenalin on the immune response of oral lichen planus WANG Fang, YAN Hui, SHANG Ting-ting, YANG Lei  
1965 Molecular mechanism of Guizhi Fuling Pills in treatment of hysteromyoma based on network pharmacology and molecular docking JIA Fei-fei, GUO Su-lan, LIANG Guo-qiong, JIA Jun  
1975 Mechanism of Tangbi Waixi Prescription in treatment of diabetic foot based on network pharmacology combined with GEO database multi-chip analysis NING Zun-xi, LIU Peng-yu, YANG Yu, WEI Xiu-Yan, GAO Hui-Yuan  
1987 Determination of loganic acid, shanzhiside methyl ester, 6'-O- $\beta$ -D-glucosylgentiopicroside, swertiamarin, gentiopicroside, sweroside, isoorientin, and isovitexin in Jiaolong Capsules by HPLC ZHAI Xin, TIAN Yun, XIAO Hui-min, WANG Si-wang, CHANG Ying  
1992 Determination of related substances in hydrochlorothiazide active pharmaceutical ingredients by HPLC FANG Si-meng, SUI Yu-rong, HAN Xiao-jie  
1997 Determination of 3,6'-dimustard acyl sucrose, schisandrin A, and ginsenoside Rb<sub>1</sub> in Yinao Capsules by HPLC-DAD WANG Huai-bin, LIU Chun, LI Ming-jie

### Clinical Research

- 2001 Clinical study of Sodium Aescinate for injection combined with tirofiban in treatment of acute cerebral infarction LI Kun, CUI Tao, ZHANG Kun  
2007 Clinical study on Naoan Dropping Pills combined with clopidogrel in treatment of acute cerebral infarction WEI Ying, YAO Qing-ping, GUO Shu-li  
2012 Clinical study on Zaoren Anshen Granules combined with dexzopiclone in treatment of senile primary insomnia XU Jin-mei, ZHOU Xiao-xiang  
2017 Clinical study on Di'ao Xinxuekang Capsules combined with clopidogrel in treatment of acute myocardial infarction CHEN Jun, YAN Fei, HUANG Tai-bo  
2021 Clinical study on Gualoupi Injection combined with phosphocreatine in treatment of stable angina pectoris of coronary heart disease JING Xian, ZHAO Ying-xuan  
2026 Clinical study on Shuxuening Injection combined with tirofiban in treatment of acute myocardial infarction patients undergoing emergency percutaneous coronary intervention HE You-quan, WANG Yong, SHI Ming, ZHANG Yan-qing  
2031 Clinical study on Caffeic acid Tablets combined with eltrombopag olamine in treatment of thrombocytopenia YAN Li-hua, WANG Yu  
2035 Clinical study of Carbocysteine Oral Solution combined with moxifloxacin in treatment of acute attack of chronic bronchitis YANG Qing-xi, NI Qing, JI Guang-dong, JIA Yi-guo

- 2040** Clinical study on procaterol hydrochloride combined with dexamethasone sodium phosphate in treatment of acute exacerbation of bronchial asthma in children  
YUAN Ye-mei, HUANG Sai-hua, QU Chun-yan
- 2044** Clinical study on Xianglian Huazhi Pills combined with mesalazine in treatment of ulcerative colitis  
YANG Xiao-qing, ZHANG Jun, HUANG Zhen, LI Dao-kuan
- 2049** Clinical study on Bikang Tablets combined with sodium cromoglicate, naphazoline hydrochloride and chlorphenamine maleate in treatment of allergic sinusitis  
LI Ling, LI Wei, LUO Hui-lin, CHENG Qing
- 2054** Clinical study on alfacalcidol combined with Compound  $\alpha$ -Ketoacid Tablets in treatment of renal secondary hyperparathyroidism  
TENG Ling, ZHU Chang-song, FAN Hao, LI Ting-ting
- 2059** Clinical study on pentoxifylline combined with pancreatic kininogenase in treatment of diabetes foot  
HOU Xin-feng, LI Wen-fang, SHEN Ya-fei, XIN Jing, DENG Fei
- 2064** Clinical study on Xiaokekang Granules combined with loxenatide in treatment of type 2 diabetes mellitus  
MA Jing, LI Fu-wang, SHAO Shuang, FAN Zhen-qian, YUAN Quan-li
- 2069** Clinical study of Xiaoke Pills combined with dapagliflozin in treatment of type 2 diabetes  
ZHANG Jun, SHAO Wei, HAN Rui
- 2075** Clinical study on nivolumab combined with anlotinib in treatment of advanced non-small cell lung cancer  
HAN Yong-li, ZHAO Hui-lin, FAN Hua-bin, WANG Su-fang
- 2081** Clinical study of Jiegou Qili Tablets combined with Compound Ossotide for injection in treatment of osteoporotic fracture  
ZHANG Bing, WU Yang, JIAO Long-bing, WANG Bai-liang
- 2087** Clinical study of Zhuanggu Zhitong Capsules combined with teriparatide in treatment of postmenopausal osteoporosis  
YANG Xian-yu, DONG Sheng-li, LIU Shuai, LI Lai-hao, LI Feng-xi
- 2093** Clinical study on Zhitong Huazheng Capsules combined with Levonorgestrel Intrauterine System in treatment of adenomyosis  
LIU Hong-ling, ZHANG Bao-ping
- 2098** Clinical study on Fuke Yangxue Granules combined with drospirenone and ethynodiol in treatment of functional uterine bleeding  
YIN Ru-chang, GENG Ai-zhi, ZHANG Chun-yan
- 2103** Clinical study of Esculin and Digitalisglycosides Eye Drops combined with ranibizumab in treatment of exudative age-related macular degeneration  
XIE Hong, TIAN Chang-long, WU Yu-ling, WEI Bo

### Hospital Pharmacy

- 2109** Rationality and safety evaluation on clinical application of dapagliflozin  
LUO Liu-jin, XIE Zong-tai, ZENG Cai-fang
- 2114** Literature case analysis of vitiligo caused by PD-1/PD-L1 inhibitors in non-melanoma patients  
YIN Yue-song, WU Yu-pei, ZHOU Ye, LI Yang, DENG Xin-na, LI Qing-xia
- 2122** Literature analysis of adverse drug reactions induced by tislelizumab  
LIU Jun, LIU Xiao-dan, ZHU Li-qin
- 2128** Literature analysis of platelet count abnormality induced by meropenem  
PAN Juan, LI Zu-yi, ZHOU Ling-zhi, YE Chao

### Pharmaceutical Administration

- 2135** Typical observations and key points of inspection in aseptic processing simulation  
YAN Ruo-xi

### Review

- 2142** Research progress on traditional Chinese medicine polysaccharides in regulating tumor microenvironment  
AN Xiang-lin, LU Jin-yue, DONG Hui, MENG Xin
- 2148** Research progress on mechanism of quercetin in treatment of chronic kidney disease  
XIANG Xue-mei, LI Yi-hang, MOU Zeng-yi, LI Zhi-ming
- 2155** Research progress on mechanism of metformin in treatment of osteoarthritis  
XING Heng-te, QIU Bo
- 2160** Research progress on drugs targeting CD155 and its receptor  
ZHENG Xue-min, LI Gui-xia, HAO Rui-jia, LIU Yan-ju, HAN Jin, WANG Gen-bei, LI Jian
- 2167** Research progress on biological activities of  $\gamma$ -aminobutyric acid  
LIU Zhi-ju, ZHANG Dong-xing, YAN Ren-ji, WANG Lei, SU Zi-meng, WANG Xing, YU Hong-jian

### Indexed in:

Science and Technology Core Journal of China (Source Journals of Scientific Papers of China)  
RCCSE China Core Academic Journals (A)  
www.CNKI.com China Academic Journals Integrated Online Database  
First-class Journal in Tianjin Core Journal of Dictionary of Tianjin Medical Journal (2012)

Elsevier Scopus  
Chemical Abstracts (CA) in USA  
International Pharmaceutical Abstracts (IPA) in USA  
Ulrich's Periodicals Directory (UPD) in USA  
Cambridge Scientific Abstracts (CSA) in USA  
Global Health (GH) in United Kingdom  
Centre for Agriculture and Bioscience International Abstracts (CAB) in United Kingdom  
Index of Copernicus (IC) in Poland  
The Western Pacific Region Index Medicus (WPRIM)