



ISSN 
CN QK1955346

中国卫生检验杂志

ZHONGGUO WEISHENG JIANYAN ZAZHI

2019年12月 第29卷 第23期

Dec.2019 Vol.29 No.23

CHINESE
JOURNAL OF HEALTH
LABORATORY TECHNOLOGY

国家卫生健康委员会主管
中华预防医学会主办

CJ
HLT

RCCSE 中国核心学术期刊
中国生物医学源期刊
美国化学文摘(CA)源期刊
中国学术期刊综合评价数据库源期刊

23
2019

ISSN 1004-8685



9 771004 868194
万方数据

中华预防医学会系列杂志
SERIAL JOURNAL OF CHINESE PREVENTIVE MEDICINE ASSOCIATION

中国卫生检验杂志

ZHONGGUO WEISHENG JIANYAN ZAZHI

半月刊 1991 年创刊 第 29 卷 第 23 期 2019 年 12 月 10 日出版

主管

国家卫生健康委员会
100044, 北京市西城区西直门外南路 1 号

主办

中华预防医学会
100021, 北京市朝阳区华威里 25 号 5 层

名誉总编

丛玉隆

社长

张绍武

总编

徐英春

总编助理

张 辉

常务副社长

杨 师

副社长

张 甜 姜友珍

副总编 (排名按姓氏笔画排列)

沈立松 李永哲 李桂英 张克荣 张建营
应斌武 郁庆福 林丽开 姜晓峰 徐国宾
程 伟

编辑部主任

杨 锋

编 辑

中国卫生检验杂志编委会

出 版

中国卫生检验杂志社
450003 郑州市经一路 12 号 2288 信箱

编辑部电话

0371 - 65978342
0371 - 65968289 (传真)

广告部电话

0371 - 65998851
15538110112

发 行

国内发行: 自办发行
国外发行: 中国国际图书贸易总公司
(北京 399 信箱)
国外发行代号: M5752

中国标准连续出版物号

ISSN 1004 - 8685
CN 41 - 1192/R

2019 年版权归中国卫生检验杂志社所有

定 价

每期 38 元

目 次

论 著

参苓胃炎合剂的质量标准提升及应用 陈晓双,袁岸,李静,等 (2817)

甘肃省不同产地党参中党参炔苷的含量分析 王炯蓉,许小红,宁俊艳,等 (2821)

2017 年南宁市健康人群麻疹、风疹、流行性腮腺炎抗体水平监测及防控

对策 杨丞,裴建新,梁泊渝,等 (2825)

A₂₄R 敲除对新生小鼠 HIBD 细胞凋亡和凋亡诱导因子表达的影响.....

范海玲,周露丹,梁国安,等 (2828)

化学测定方法

探讨试剂瓶不同放置方法对酶法检测钠离子结果的影响 许新春,樊雪顶,曹欢,等 (2833)

本刊编委 (排名按姓氏笔画排列)

丁家华 于维森 仓公敖 方赤光
王旻 王哲 王大宁 王志玉
王京宇 王凯娟 王栩东 哺福海
冯晓燕 叶能权 毕永毅 刘玉龙
刘运德 刘秀梅 刘殿武 吕玉民
吕昌银 祁建城 任一平 孙长颢
孙成均 许春向 陈守建 何建国
何渐生 何晓青 李蓉 李磊
李明武 李晓虹 陆绍红 宋宏彬
吴清平 杨元 张蒙 张曦
张贺秋 邹学贤 姜庆五 赵阜
赵雁林 高永清 贾珍珍 栗文元
凌文华 栾燕 徐东群 曹佳
晁福寰 崔巍 常风启 黄国伟
康辉 康维钧 韩玉霞 韩学尧
曾现伟 窦志勇 滕萍 阚飙
廖百森 裴少军 裴晓方 谭晓东
熊英 潘慧 冀元棠 穆新林

Editorial Board Member (in Surname Stroke Order)

DING Jia - hua, YU Wei - sen, CANG Gong - ao,
FANG Chi - guang, WANG Min, WANG Zhe,
WANG Da - ning, WANG Zhi - yu, WANG Jing -
yu, WANG Kai - juan, WANG Xu - dong, WU
Fu - hai, FENG Xiao - yan, YE Neng - quan,
BI Yong - yi, LIU Yu - long, LIU Yun - de, LIU
Xiu - mei, LIU Dian - wu, LV Yu - min, LV
Chang - yin, QI Jian - cheng, REN Yi - ping,
SUN Chang - hao, SUN Cheng - jun, XU Chun -
xiang, CHEN Shou - jian, HE Jian - guo, HE
Zhe - sheng, HE Xiao - qing, LI Rong, LI Lei, LI
Ming - wu, LI Xiao - hong, LU Shao - hong,
SONG Hong - bin, WU Qing - ping, YANG
Yuan, ZHANG Meng, ZHANG Xi, ZHANG He -
qiu, ZOU Xue - xian, JIANG Qing - wu, ZHAO
Zhuo, ZHAO Yan - lin, GAO Yong - qing, JIA
Zhen - zhen, LI Wen - yuan, LING Wen - hua,
LUAN Yan, XU Dong - qun, CAO Jia, CHAO
Fu - huan, CUI Wei, CHANG Feng - qi, HUANG
Guo - wei, KANG Hui, KANG Wei - jun, HAN
Yu - xia, HAN Xue - yao, ZENG Xian - wei,
DOU Zhi - yong, PU Ping, KAN Biao, LIAO Bai -
sen, PEI Shao - jun, PEI Xiao - fang, TAN Xiao -
dong, XIONG Ying, PAN Hui, JI Yuan - tang,
MU Xin - lin

网 址

www.zgwsjy.cn

投稿电子信箱

wsjyzz@126.com

印 刷

河北鑫兆源印刷有限公司

实验研究

- 破壁灵芝孢子粉对小鼠免疫功能调节作用的实验研究 李立,王亚东,王海玉,等 (2835)

微生物检测方法

- B 亚型血清学鉴定及基因测序分析 胡思群,朱碎永,施顺秋,等 (2837)

- 食源性相关腹泻患者粪致泻性大肠埃希菌检测方法分析

- 李伟,李宏杰,陈志杭,等 (2840)

- 402 例剖宫产孕妇羊水细菌培养及药敏结果分析

- 谭晓霞,雷永良,吴三英 (2844)

- 2014 年 - 2017 年内蒙古自治区食品中沙门菌血清型分布与耐药性分析

- 王利平,乌兰,张冰冰,等 (2847)

- 输尿管结石并发泌尿系感染病原菌耐药性分析

- 李艳,赵明泽 (2851)

- 儿科重症监护病房患者细菌感染病原菌分布及耐药性分析

- 陈向阳 (2854)

- 南通市 2016 年 - 2017 年手足口病病毒学检测结果分析

- 蔡秀丽,苏婧,茅丽婷,等 (2857)

急诊科患者医院感染的易感因素、病原菌分布及耐药性分析 王鹤,陆文炜,陈雅芳,等 (2860)

临床检验

LncRNA - HEIH 和 LncRNA - HULC 与乙型肝炎相关性肝病的相关性 马庆,吕宗军 (2863)

高浓度纤维蛋白(原)降解产物稀释检测对结果溯源性的探讨 习静,李秀成,李宏科,等 (2867)

全自动免疫分析仪筛查新生儿先天性甲状腺功能低下症的性能验证及临界值的初步确定

..... 庄丹燕,潘婕文,王飞,等 (2870)

肌钙蛋白 I 和 D - 二聚体对肺动脉栓塞诊断分级的价值研究 吴艳妮,施翌,陈苏清 (2873)

肺表面活性蛋白 D、降钙素原及 C - 反应蛋白在慢性阻塞性肺疾病临床应用中的价值探讨

..... 李蓓,徐冬梅 (2876)

血清癌胚抗原、糖类抗原 72 - 4、糖类抗原 19 - 9 的表达与原发性肝癌早期诊断的相关性探讨 ... 耿彩玲 (2879)

抗环瓜氨酸肽抗体、类风湿因子、C - 反应蛋白、红细胞沉降率在类风湿性关节炎中的临床应用

..... 罗玲,李慧妍,林海雄 (2882)

四氢叶酸基因多态性与妊娠高血压患者母婴结局的关系 金海红,刘惠宁 (2885)

粪便钙卫蛋白预测缓解期溃疡性结肠炎早期复发的研究 吴道刻,陈伟训,陈先配,等 (2887)

抗突变型瓜氨酸波形蛋白抗体在类风湿关节炎诊疗中的应用 吴丽京,方莉萍,黄邦志 (2891)

血清中 ASO、类风湿因子、血细胞沉降率、C - 反应蛋白检测在猩红热患者中的临床意义

..... 夏科君,干冬梅,单淑琴 (2894)

肿瘤患者罕见 A 亚 B 亚血型的精确鉴定 董晓锋,王艳,邵树军,等 (2897)

调查 · 监测

浙江常山食源性疾病病原菌分布与耐药性研究 姚燕,陆英,张孟奇 (2900)

- 2015 年 - 2017 年杭州市大气 PM_{2.5} 对儿童医院呼吸系统疾病门诊量的影响 张文辉, 王旭初, 徐旭, 等 (2903)
- 慢性阻塞性肺疾病合并肺部真菌感染的相关危险因素与耐药性分析 陈丽敏, 孙荣强 (2906)
- 浙江省舟山市 0 岁 ~17 岁儿童末梢血中 5 种微量元素水平分析 王海燕, 洪开听, 斯淑婷, 等 (2910)
- 宁波市某医院 2018 年医务人员体检结果分析 邵洲杰, 周方满, 叶鸿雁, 等 (2915)
- 2017 年 - 2018 年吉水县农村集中性供水水质状况调查分析 袁文彬 (2918)
- 杭州某院呼吸机相关性肺炎的危险因素与病原菌分析 杨希, 樊莹莹, 许红妍 (2921)
- 2 型糖尿病并发感染患者危险因素、病原学检测及其预后分析 范陈良, 李小四, 龚黎 (2925)
- 糖皮质激素治疗期免疫性血小板减少性紫癜儿童发生医院感染的危险因素分析及预测指标评价 姜小云, 张丽珊 (2928)
- 丽水地区女性人乳头状瘤病毒感染基因亚型分布及现状分析 舒红云, 罗顺斌, 吴伟平, 等 (2931)

教学与实验室管理

- 卫生检验专业课教学目标设计与应用 杨金玲, 孙建楠, 公维磊, 等 (2936)
- 综 述
- 铜绿假单胞菌生物膜研究进展 徐荣, 胡小雄, 谭为 (2938)
- 结核菌显微图像全自动智能分析在临床的应用与展望 李爱华, 赵悦, 杨晶, 等 (2942)

责任编辑 张舒

责任校对 陈欣欣

英文编辑 张蒙 田辉

CHINESE JOURNAL OF HEALTH LABORATORY TECHNOLOGY

Semimonthly Established in 1991, Volume 29 Number 23 December 10, 2019

Managed by

National Health Commission of the People's Republic of China
No. 1, Xizhimen Wainan Road, Xicheng District, Beijing, 100044

Sponsored by

Chinese Preventive Medicine Association
Floor 5, No. 25 Huaweili, Chaoyang District, Beijing, 100021

Honorary Editor - in - chief

CONG Yu - long

President

ZHANG Shao - wu

Editor - in - chief

XU Ying - chun

Assistant of Chief Editor

ZHANG Hui

Executive Deputy President

YANG Shi

Deputy President

ZHANG Tian, JIANG You - zhen

Deputy Editor - in - chief (in Surname Stroke Order)

SHEN Li - song, LI Yong - zhe, LI Gui - ying,
ZHANG Ke - rong, ZHANG Jian - ying, YING
Bin - wu, YU Qing - fu, LIN Li - kai, JIANG
Xiao - feng, XU Guo - bin, CHENG Wei

Director of Editorial Department

YANG Feng

Edited by

Editorial Board of Chinese Journal of Health Laboratory Technology

Published by

Editorial Department of Chinese Journal of Health Laboratory Technology
Mailbox 2288, No. 12, Jingyi Road, Zhengzhou, 450003

Editorial office telephone

0371 - 65978342

0371 - 65968289 (Fax)

Advertising department telephone

0371 - 65998851

15538110112

Domestic Distributor

Self - publishing

Overseas Distributor

China International Book Trading Corporation
(P. O. Box 399, Beijing, China)
Code: M5752

Website

www.zgwsjy.cn

E - mail

wsjyzz@126.com

Standard Series Number

ISSN 1004 - 8685

CN 41 - 1192/R

Copyright 2019 by Editorial Department of
Chinese Journal of Health Laboratory Technology

Price

RMB ¥38

CONTENTS IN BRIEF

Original Articles

Improvement and application of quality standards for Shenling Weiyuan mixture

..... CHEN Xiao - shuang, YUAN An, LI Jing, et al (2817)

Analysis of lobetyolin content in Radix Codonopsis from different producing

areas in Gansu Province

..... WANG Jiong - rong, XU Xiao - hong, NING Jun - yan, et al (2821)

Surveillance and control strategies of measles and rubella mumps' antibody

level in healthy population in Nanning in 2017

..... YANG Cheng, PEI Jian - xin, LIANG Bo - yu, et al (2825)

Effect of $A_{2A}R$ knockout on expressions of nerve cell apoptosis and apoptosis

inducing factor in newborn mice with hypoxia - ischemia brain damage

..... FAN Hai - ling, ZHOU Lu - dan, LIANG Guo - an, et al (2828)

Chemical Detection Method

Discuss the effect of different placement methods of reagent bottles on the

detection of sodium ion by enzymatic method

..... XU Xin - chun, FAN Xue - ding, CAO Huan, et al (2833)

Experimental Study

Experimental study on effects of broken ganoderma lucidum spore powder on

immune function in mice

..... LI Li, WANG Ya - dong, WANG Hai - yu, et al (2835)

Microbe Detection Method

Serological identification and gene sequencing analysis of B subtype HU Si - qun, ZHU Sui - yong, SHI Shun - qiu, *et al* (2837)

Detection methods and analysis of fecal diarrhoea *Escherichia coli* in patients with foodborne diarrhea LI Wei, LI Hong - jie, CHEN Zhi - hang, *et al* (2840)

Analysis of bacterial culture and drug susceptibility results in amniotic fluid of 402 pregnant women undergoing cesarean section TAN Xiao - xia, LEI Yong - liang, WU San - ying (2844)

Analysis of serotype distribution and antimicrobial resistance of *Salmonella* strains from food in Inner Mongolia Autonomous Region within 2014 – 2017 WANG Li - ping, WU Lan, ZHANG Bing - bing, *et al* (2847)

Drug resistance analysis of pathogenic bacteria in ureteral calculi complicated with urinary tract infection LI Yan, ZHAO Ming - ze (2851)

Distribution and drug resistance of bacterial pathogen in PICU patients CHEN Xiang - yang (2854)

Results analysis of virological surveillance on hand - foot - mouth disease in Nantong City during 2016 – 2017 CAI Xiu - li, SU Jing, MAO Li - ting, *et al* (2857)

Analysis of susceptibility factors , pathogen distribution and drug resistance of nosocomial infection in emergency department patients WANG He, LU Wen - wei, CHEN Ya - fang, *et al* (2860)

Clinical Laboratory Test

Correlation of LncRNA – HEIH and LncRNA – HULC with hepatitis B – related liver disease MA Qing, LV Zong - jun (2863)

Research on results traceability of high concentrated FDP dilution test XI Jing, LI Xiu - cheng, LI Hong - ke, *et al* (2867)

Performance verification of GSP in screening neonatal hypothyroidism and preliminary determination of cut - off value ZHUANG Dan - yan, PAN Jie - wen, WANG Fei, *et al* (2870)

- The diagnostic value of troponin I and D - dimer in the classification of pulmonary embolism**
..... WU Yan - ni, SHI Yi, CHEN Su - qing (2873)
- Clinical value of pulmonary surfactant D, calcitonin and C - reactive protein in chronic obstructive pulmonary disease**
..... LI Bei, XU Dong - mei (2876)
- Correlation between serum CEA, CA72 - 4 and CA19 - 9 expression and early diagnosis of primary liver cancer**
..... GENG Cai - ling (2879)
- Clinical application of anti - cyclic citrullinated peptide antibodies , rheumatoid factor , C - reactive protein and erythrocyte sedimentation rate in rheumatoid arthritis** LUO Ling, LI Hui - yan, LIN Hai - xiong (2882)
- Relationship between polymorphism of folate gene and maternal and neonatal outcomes in patients with pregnancy induced hypertension** JIN Hai - hong, LIU Hui - ning (2885)
- Research of fecal calprotectin for prediction of early recurrence in patients with ulcerative colitis in remission phase**
..... WU Dao - ke, CHEN Wei - xun, CHEN Xian - pei, *et al* (2887)
- Application of anti - mutant citrullinated vimentin antibodies in the diagnosis and treatment of rheumatoid arthritis**
..... WU Li - jing, FANG Li - ping, HUANG Bang - zhi (2891)
- Detection and clinical significance of serum ASO, RF, ESR and CRP in scarlet fever**
..... XIA Ke - jun, GAN Dong - mei, SHAN Shu - qin (2894)
- Accurate identification of rare subtypes A and B in tumor patients**
..... DONG Xiao - feng, WANG Yan, SHAO Shu - jun, *et al* (2897)
- Investigation and Monitoring**
- Pathogen distribution and drug resistance analysis of foodborn diseases in Changshan County, Zhejiang Province**
..... YAO Yan, LU Ying, ZHANG Meng - qi (2900)
- Effects of PM2. 5 on outpatient volume of respiratory diseases in children's hospital from 2015 to 2017 in Hangzhou**
..... ZHANG Wen - hui, WANG Xu - chu, XU Xu, *et al* (2903)

- Risk factors and drug resistance analysis in patients with chronic obstructive pulmonary disease complicated with pulmonary fungal infection** CHEN Li - min, SUN Rong - qiang (2906)
- Analysis of 5 trace elements in peripheral blood of children aged 0 - 17 years old in Zhoushan City, Zhejiang Province**
..... WANG Hai - yan, HONG Kai - ting, SI Shu - ting, *et al* (2910)
- Analyzing medical personnel's physical examination results in a hospital in Ningbo in 2018**
..... SHAO Zhou - jie, ZHOU Fang - man, YE Hong - yan, *et al* (2915)
- Investigation and analysis on water quality of concentrated water supply in rural areas of Jishui County from 2017 to 2018**
..... YUAN Wen - bin (2918)
- Analysis of risk factors and pathogens of ventilator - associated pneumonia in a hospital in Hangzhou**
..... YANG Xi, FAN Ying - ying, XU Hong - yan (2921)
- Risk factors, etiological detection and prognosis analysis of patients with T2DM complicated with infection**
..... FAN Chen - liang, LI Xiao - si, GONG Li (2925)
- Risk factors analysis and predictive index evaluation of nosocomial infection in glucocorticoid treatment in children with immune thrombocytopenic purpura** JIANG Xiao - yun, ZHANG Li - shan (2928)
- Analysis of genotype distribution and current status of female human papillomavirus infection in Lishui**
..... SHU Hong - yun, LUO Shun - Bin, WU Wei - ping, *et al* (2931)

Editor in Charge ZHANG Shu

Proofreader CHEN Xin - xin

English Editor ZHANG Meng TIAN Hui

2019年世界艾滋病日主题

**社区动员同防艾
健康中国我行动**

Communities make the difference



国家卫生健康委员会
国务院防治艾滋病工作委员会办公室