



ISSN  
CN QK1938287



# 中国卫生检验杂志

ZHONGGUO WEISHENG JIANYAN ZAZHI

2019年8月 第29卷 第16期

Aug.2019 Vol.29 No.16

国家卫生健康委员会主管  
中华预防医学会主办

CHINESE  
JOURNAL OF HEALTH  
LABORATORY TECHNOLOGY

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

CJ  
HLT

16  
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 16 期 2019 年 8 月 25 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

CLSI EP12-A2 和 EP15-A2 在磁微粒化学发光法肺炎支原体 IgM 抗

体检试剂性能评估中的应用 ..... 崔宁华,杨俊梅,刘倩倩 (1921)

应用下一代测序技术进行 HLA-A、HLA-B 基因分型的模棱两可结果

情况分析 ..... 董丽娜,赵烁贤,王芳,等 (1924)

检测血清同型半胱氨酸、B 型脑钠肽及甲状腺激素水平在急性心肌梗死

患者中的临床价值 ..... 王伟,李静,王亚丽,等 (1928)

超高效液相色谱 - 串联质谱法测定大鼠血浆中辛夷脂素 .....

..... 孙文浩,鲍曦,林崇良 (1932)

### 化学测定方法

气相色谱 - 质谱测定黄酒中的敌敌畏 .....

..... 李进义,闵国平,方云波,等 (1935)

电感耦合等离子体质谱法测定黑果枸杞中 8 种微量元素及其溶出性

研究 ..... 李轶,蔡卫群,伍碧珍,等 (1938)

## 微生物检测方法

### 本刊编委 (排名按姓氏笔画排列)

丁家华 仓公敖 方赤光 王 晏  
王 哲 王大宁 王志玉 王京宇  
王凯娟 王栩东 �毋福海 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 何浙生  
何晓青 李 蓉 李 磊 李明武  
李晓虹 宋宏彬 吴清平 杨 元  
张 蒙 张 曦 张贺秋 邹学贤  
姜庆五 赵 卓 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  
常凤启 黄国伟 康 辉 康维钧  
韩玉霞 韩学尧 曾现伟 窦志勇  
溥 萍 阚 飘 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, 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, 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

北京市丰台区 2016 年 - 2017 年肠道病毒 A71 型基因特征分析 .....

..... 郑金梅, 尉秀霞, 王兆娥, 等 (1942)

综合医院儿童呼吸道感染流感嗜血杆菌的流行现状及耐药性分析 .....

..... 董叶青, 董春富, 陶兴和, 等 (1945)

双扩增法和 real - time RT - PCR 法检测手足口病的比较 .....

..... 马静, 马蓓蓓, 李清元, 等 (1948)

儿童呼吸道病原体的核酸多重检测方法评价 .....

..... 徐勇军, 高歌, 高利飞, 等 (1950)

阴沟肠杆菌头孢菌素酶耐药基因分析 .....

..... 宋银丹 (1953)

泌尿生殖道支原体感染患者的临床特征与耐药性分析 .....

..... 徐妍娜, 叶璐, 张彩霞 (1956)

## 临床检验

BRAF V600E 突变检测在甲状腺乳头状癌中的临床价值 .....

..... 毛达峰, 高国生, 刘芳 (1960)

1 例 B3 亚型的血清学和分子生物学分析 .....

..... 黄颖, 蔡学娇 (1964)

硝酸甘油与多巴胺联合治疗慢性心衰伴发肾功能不全疗效观察 .....

..... 姜红萍, 鄢春喜, 周燕燕 (1966)

可溶性致癌抑制因子、胱抑素 C 和脑钠肽在慢性心力衰竭患者中的表达

意义 .....

..... 赵文娟, 陈玉娜 (1968)

再生障碍性贫血患者外周血淋巴细胞亚群分布异常的临床研究 ..... 王一 (1971)

慢性肾衰竭合并感染患者早期联合检测血清降钙素原、超敏 C - 反应蛋白、血清淀粉样蛋白 A 和白细胞的临床价值

..... 莫寿勇, 傅丽敏, 张小薇, 等 (1974)

规范化健康管理与 POCT 血糖仪应用对糖耐量受损患者罹患糖尿病的影响 ..... 薛莹, 范明亮, 高玉琴, 等 (1977)

Westgard 西格玛理论在雅培化学发光检测项目室间质评的应用 ..... 徐冬梅, 李蓓, 陈奉晖, 等 (1980)

血清同型半胱氨酸、胱抑素 C 和尿足细胞检测在 II 型糖尿病肾病的早期诊断中的作用分析

..... 喻敏, 刘春雅, 罗林峰, 等 (1984)

脑血管病患者 5,10 - 亚甲基四氢叶酸还原酶基因 C677T 与同型半胱氨酸水平的相关性

..... 董娜, 胡黎明 (1987)

临床检验室内质控室间化管理的应用 ..... 闫绍荣, 钱定良, 何令伟 (1990)

## 调查 · 监测

品管圈在降低检验标本漏检率中的应用 ..... 夏雪飞, 周瑜, 叶鸿雁, 等 (1995)

杭州不同种类市售茶叶中 9,10 - 蒽醌含量调查及膳食暴露研究 ..... 何华丽, 樊继彩, 任韧, 等 (1998)

义乌市居民饮用水水碘含量变化分析 ..... 郑建珍, 楼颖伟, 商岚青 (2001)

十堰市创建国家卫生城市前后城区生活饮用水水质监测与分析 ..... 程时秀, 王顺恺, 江建勋, 等 (2003)

2017 年深圳市畜肉类兽药残留监测与分析 ..... 杨冬燕, 王舟, 雷伶刚, 等 (2006)

2016 年 - 2017 年北京市顺义区肺炎病例感染呼吸道病原体的流行特征分析

..... 李湛, 荆红波, 王彦波, 等 (2010)

2009 年 - 2017 年三门峡市手足口病实验室检测结果分析 ..... 武景福, 杨洁, 许苗苗, 等 (2013)

2017 年北海市食品中食源性致病菌监测与分析 ..... 陈昭禄, 蔡昭宁, 白海涛, 等 (2017)

- 2017 年 - 2018 年内蒙古市售鸡蛋和鸡肉中金刚烷胺和利巴韦林残留调查 ..... 程静, 刘志红, 张智, 等 (2020)
- 2016 年 - 2017 年阳泉市手足口病病原学特征分析 ..... 芦晶, 史晶晶, 商永超 (2022)
- 15 188 份血培养分离菌的分布和耐药性分析 ..... 吴淑燕, 谢红意, 王佳静, 等 (2025)
- 温岭市食品监测理化指标结果分析 ..... 陈宇鸿, 金春秋, 王益萍, 等 (2028)
- 2012 年 - 2017 年连云港市市售食品食源性致病菌监测结果分析 ..... 马会会, 傅瑶, 李莉, 等 (2031)
- 2 450 例妇女人乳头状瘤病毒感染情况及临床意义分析 ..... 彭晶, 卢北玲, 李丹, 等 (2035)
- 心房颤动患者血浆儿茶酚抑素水平及其对心力衰竭预后的影响 ..... 陈灵芝, 周浩, 孙灵跃, 等 (2039)
- 某市瓶装饮用天然矿泉水及部分公共场所饮用净水监测分析 ..... 杨丽华, 张永, 高斌, 等 (2042)

## 教学与实验室管理

- 医院体外诊断试剂的科学化管理 ..... 吕定丰, 孙定河, 翁跃颂, 等 (2045)

## 卫生健康事业发展 70 年巡礼

- 染色体畸变指标作为辐射生物剂量计在国内的发展与展望(续) ..... 王平, 吕玉民 (2047)

责任编辑 杨锋

责任校对 刘迪

英文编辑 张蒙 田辉

# CHINESE JOURNAL OF HEALTH LABORATORY TECHNOLOGY

Semimonthly Established in 1991, Volume 29 Number 16 August 25, 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 Huaweli, 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

#### Application of CLSI EP12 - A2 and EP15 - A2 in the performance evaluation

of *M. pneumoniae* IgM by CLIA microparticles .....

..... CUI Ning - hua, YANG Jun - mei, LIU Qian - qian (1921)

#### Analyze the ambiguous results of *HLA - A, - B* genotyping using next genera-

tion sequencing method .....

..... DONG Li - na, ZHAO Shuo - xian, WANG Fang, et al (1924)

#### Clinical value of monitoring serum Hcy, BNP and thyroid hormone levels in

patients with acute myocardial infarction .....

..... WANG Wei, LI Jing, WANG Ya - li, et al (1928)

#### Determination of fargesin in rat plasma by UPLC - MS/MS .....

..... SUN Wen - hao, BAO Xi, LIN Chong - liang (1932)

### Chemical Detection Method

#### Determination of dichlorvos in Chinese rice wine by GC - MS .....

..... LI Jin - yi, MIN Guo - ping, FANG Yun - bo, et al (1935)

#### Determination of 8 trace elements and their dissolution rates in *Lycium ruthenicum*

Murr. by ICP - MS ..... LI Yi, CAI Wei - qun, WU Bi - zhen, et al (1938)

## **Microbe Detection Method**

**Genetic characteristics and analysis of enterovirus group A type 71 during 2016 – 2017 in Fengtai District, Beijing .....**

..... ZHENG Jin - mei, WEI Xiu - xia, WANG Zhao - e, et al (1942)

**Study of the prevalence and antimicrobial resistance of haemophilus influenzae in children's respiratory tract infection in general hospital .....** DONG Ye - qing, DONG Chun - fu, TAO Xing - he, et al (1945)

**Comparative analysis of dual amplification and real - time RT - PCR for hand - foot - mouth disease .....**

..... MA Jing, MA Bei - bei, LI Qing - yuan, et al (1948)

**Evaluation of multiplex detection methods for nucleic acids in children's respiratory pathogens .....**

..... XU Yong - jun, GAO Ge, GAO Li - fei, et al (1950)

**Analysis of Ampcase resistance gene in *Enterobacter cloacae* .....** SONG Yin - dan (1953)

**Clinical characteristics and drug resistance analysis of urogenital tract mycoplasma infection .....**

..... XU Yan - na, YE Lu, ZHANG Cai - xia (1956)

## **Clinical Laboratory Test**

**Clinical value of BRAF V600E mutation detection in diagnosing papillary thyroid carcinoma .....**

..... MAO Da - feng, GAO Guo - sheng, LIU Fang (1960)

**Serological and molecular biological analysis of a B3 subtype .....** HUANG Ying, CAI Xue - jiao (1964)

**Combination of nitroglycerin and dopamine in the treatment of chronic heart failure with renal insufficiency .....**

..... JIANG Hong - ping, YAN Chun - xi, ZHOU Yan - yan (1966)

**Significance of sST2, CysC and BNP in patients with chronic heart failure .....** ZHAO Wen - juan, CHEN Yu - na (1968)

**Clinical study of peripheral blood lymphatic subgroup disturbance in patients with aplastic anemia .....** WANG Yi (1971)

**Clinical value of early combined detection of PCT, Hs - CRP, SAA and WBC in patients with chronic renal failure co - infection .....**

..... MO Shou - yong, FU Li - min, ZHANG Xiao - wei, et al (1974)

**Effect of standardized health management and POCT blood glucose meter on diabetes in patients with impaired glucose tolerance** ..... XUE Ying, FAN Ming - liang, GAO Yu - qin, *et al* (1977)

**Application of Westgard Sigma theory in Abbott chemical luminescence external quality assessment** .....

..... XU Dong - mei, LI Bei, CHEN Feng - hui, *et al* (1980)

**Role and analysis of serum Hey , Cys C and urinary podocyte detection in the early diagnosis of type II diabetic nephropathy**

..... YU Min, LIU Chun - ya, LUO Lin - feng, *et al* (1984)

**Relationship between MTHFR C677T and homocysteine level in cerebrovascular diseases population** .....

..... DONG Na, HU Li - ming (1987)

**Application of inter - laboratory management of internal quality control in clinical laboratory** .....

..... YAN Shao - rong, QIAN Ding - liang, HE Ling - wei (1990)

## **Investigation and Monitoring**

**Application of quality control circle in reducing the missing rate of test specimens** .....

..... XIA Xue - fei, ZHOU Yu, YE Hong - yan, *et al* (1995)

**Investigation on contamination of 9 , 10 – anthraquinone in different kinds of tea and assessment on dietary exposure in**

**Hangzhou** ..... HE Hua - li, FAN Ji - cai, REN Ren, *et al* (1998)

**Analysis of the change of iodine content in drinking water in Yiwu** .....

..... ZHENG Jian - zhen, LOU Ying - wei, SHANG Lan - qing (2001)

**Surveillance and analysis of drinking water quality before and after creating National Health City** .....

..... CHENG Shi - xiu, WANG Shun - kai, JIANG Jian - xun, *et al* (2003)

**Test and analysis of veterinary drug residue in livestock meat in Shenzhen , 2017** .....

..... YANG Dong - yan, WANG Zhou, LEI Ling - gang, *et al* (2006)

**Epidemiological characteristics analysis of respiratory tract infections in patients with pneumonia in Shunyi District, Beijing**

**from 2016 to 2017** ..... LI Zhan, JING Hong - bo, WANG Yan - bo, *et al* (2010)

- Analysis of hand – foot – mouth disease laboratory test results in Sanmenxia City from 2009 to 2017** .....  
..... WU Jing – fu, YANG Jie, XU Miao – miao, *et al* (2013)
- Monitoring and analysis of food – borne pathogenic bacteria in Beihai in 2017** .....  
..... CHEN Zhao – lu, CAI Zhao – ning, BAI Hai – tao, *et al* (2017)
- Detection of amantadine and ribavirin residues in eggs and chicken in Inner Mongolia during 2017 – 2018** .....  
..... CHENG Jing, LIU Zhi – hong, ZHANG Zhi, *et al* (2020)
- Analysis of pathogenic characteristics of hand, foot and mouth disease in Yangquan from 2016 to 2017** .....  
..... LU Jing, SHI Jing – jing, SHANG Yong – chao (2022)
- Distribution and drug resistance of 15 188 blood cultured isolates** .....  
..... WU Shu – yan, XIE Hong – yi, WANG Jia – jing, *et al* (2025)
- Analysis of physical and chemical indexes for food monitoring in Wenling** .....  
..... CHEN Yu – hong, JIN Chun – qiu, WANG Yi – ping, *et al* (2028)
- Surveillance on food – borne pathogens in food in Lianyungang, 2012 – 2017** ..... MA Hui – hui, FU Yao, LI Li, *et al* (2031)
- Infection status of human papilloma virus and its clinical significance among 2 450 women** .....  
..... PENG Jing, LU Bei – ling, LI Dan, *et al* (2035)
- Plasma levels of Catestatin in patients with atrial fibrillation and its influence on the prognosis of heart failure** .....  
..... CHEN Ling – zhi, ZHOU Hao, SUN Ling – yue, *et al* (2039)
- Monitoring and analysis of bottled drinking natural mineral water and drinking water in some public places in a city** .....  
..... YANG Li – hua, ZHANG Yong, GAO Bin, *et al* (2042)

**Editor in Charge** YANG Feng

**Responsibility of Proofreading** LIU Di

**English Editor** ZHANG Meng TIAN Hui

精準扶貧  
奔達小康

STRUGGLE HARD

不忘初心 一起前行

