



## EDITORIALS

**Repeat Laboratory Testing on Inpatients ..... 137**  
*Kent Lewandrowski (See article on page 143)*


**Can Rapid Molecular *Streptococcus pyogenes* Testing Lead to Better Antimicrobial Stewardship for Acute Pharyngitis? ..... 140**  
*Erin H. Graf (See article on page 164)*

## ARTICLES


### EVIDENCE-BASED LABORATORY MEDICINE AND TEST UTILIZATION


**Laboratory Test Utilization and Repeat Testing for Inpatients of Age 80 and Over in Australia: A Retrospective Observational Study ..... 143**  
*Gorkem Sezgin, Ling Li, Roger Wilson, Johanna I. Westbrook, Robert Lindeman, Elia Vecellio, and Andrew Georgiou (See editorial on page 137)*

### CLINICAL IMMUNOLOGY


**Microfluidic Immunoaffinity Basophil Activation Test for Point-of-Care Allergy Diagnosis ..... 152**  
*Zenib Aljadi, Frida Kalm, Harisha Ramachandraiah, Anna Nopp, Joachim Lundahl, and Aman Russom*

### INFECTIOUS DISEASE



**Comparison of 3 Nucleic Acid Amplification Tests and a Rapid Antigen Test with Culture for the Detection of Group A Streptococci from Throat Swabs ..... 164**  
*Kyle G. Parker, Sumanth Gandra, Scott Matushek, Kathleen G. Beavis, Vera Tesic, and Angella Charnot-Katsikas (See editorial on page 140)*

### CARDIAC MARKERS




**A Multicenter Assessment of the Sensitivity and Specificity for a Single High-Sensitivity Cardiac Troponin Test at Emergency Department Presentation for Hospital Admission ..... 170**  
*Peter A. Kavsak, Andrew McRae, Shabnam Vatanpour, Ola Z. Ismail, and Andrew Worster*


### POINT-OF-CARE TESTING


**Clinical Evaluation of a New Point-of-Care System for Chemistry Panel Testing ..... 180**  
*Sara A. Love, Karen Schulz, Penney Stack, Sharifa Abdirizak, Maniphone Souriyayong, Ruchika Malhotra, Clarke Xu, and Prasad V.A. Pamidi*

### LIPIDS, LIPOPROTEINS, AND CARDIOVASCULAR RISK FACTORS


**Evaluating Tiered Hemolysis Thresholds to Facilitate Rapid Reporting of High-Sensitivity Cardiac Troponin ..... 193**  
*Katherine A. Turner, Erin J. Kaleta, Tanya L. Harnish, Zahra Madani, and Christine L.H. Snozek*


## GENERAL LABORATORY MEDICINE

-  **Accuracy Evaluation of a Tetrabromophenolphthalein Ethyl Ester Colorimetric Assay for Urinary Albumin** .....201  
*Alyse D. Krausz, Rajan Dewar, and Mark A. Burns*
- Kinetic Approach Extends the Analytical Measurement Range and Corrects Antigen Excess in Homogeneous Turbidimetric Immunoassays** .....214  
*Mark A. Zaydman, Jonathan R. Brestoff, Nicole Logsdon, and Ann M. Gronowski*


## FOCUSED REPORTS

- Lack of Additional Diagnostic Yield of 16s rRNA Gene PCR for Prosthetic Joint Infections** .....224  
*Michael A. Lane, Neeraja Ganeshraj, Alice Gu, David K. Warren, and Carey-Ann D. Burnham*
-  **“Rainbow Draws” in the Emergency Department: Clinical Utility and Staff Perceptions** .....229  
*Christine L.H. Snozek, James S. Hernandez, and Stephen J. Traub*
- The Effect of In Vitro Hemolysis on Measurement of Cell-Free DNA** .....235  
*Fumitaka Nishimura, Naoki Uno, Ping-Chia Chiang, Norihito Kaku, Yoshitomo Morinaga, Hiroo Hasegawa, and Katsunori Yanagihara*
- Feasibility of Immunosuppressant Drug Monitoring by a Microsampling Device** .....241  
*Valentinas Gruzdzys, Stephen D. Merrigan, and Kamisha L. Johnson-Davis*
- Evaluation of a New Generation Automated Assay for 25-Hydroxy Vitamin D Based on Competitive Protein Binding** .....247  
*Maryam Asif, Sarah E. Groboske, Edward K.Y. Leung, Kiang-Teck J. Yeo, and Xander M.R. van Wijk*


## MINI-REVIEW

-  **“On Vivo” and Wearable Clinical Laboratory Testing Devices for Emergency and Critical Care Laboratory Testing** .....254  
*Alan H.B. Wu*


## CASE REPORTS

- Normocalcemia in the Face of Marked Hypervitaminosis D: The Utility of Vitamin D Metabolite Profiling** .....264  
*Tomás P. Griffin, Hannah Murray, Liam Blake, Damian G. Griffin, Marcia Bell, Eamon Mulkerrin, and Paula M. O'Shea*
-  **What Is Really in This Weight Loss Supplement?** .....270  
*Michelle L. Parker, Cristiana Stefan, Heather N. Reich, and Vathany Kulasingam*
- Multorgan Failure in Immunocompetent Young Adult** .....274  
*Ali Hasaba, Cara Marie Ciminello, and Laura Listro*

## OPINION



-  **Schools of Public Health Should be Accredited for, and Teach the Principles and Practice of Point-of-Care Testing** .....278  
*Gerald J. Kost and Amanullah Zadran*

## LETTER TO THE EDITOR

-  **Continuous Improvement of Blood Redraw Rates in the Emergency Department: A 5-Year Journey** .....284  
*Darci R. Block, Laurie D. Griesmann, Twyla Rickard, Linda Backus, Janet Finley, Deepi Goyal, and Brad S. Karon*

## LABORATORY REFLECTIONS

### PROFESSIONAL INSIGHTS

- Professional Insights from a Pioneer in Autoimmune Disease Testing: The Future of Antinuclear/Anticellular Antibody Testing** .....287  
*Marvin J. Fritzler*
-  **One More Hurricane, One More Lesson Not Learned** .....290  
*Peggy A. Mann*
-  **Challenges of Point-of-Care Testing in Ambulances** .....293  
*Anna K. Füzéry, Jason Bobyak, Eddie Chang, Robert Sharman, and Allison A. Venner*
- Current State of Drones in Healthcare: Challenges and Opportunities** .....296  
*Timothy Amukele*

## COVER IMAGE




The cover of this September 2019 edition of *The Journal of Applied Laboratory Medicine* commemorates a special collection of manuscripts dedicated to the use of point-of-care testing in emergency and disaster management. Point-of-care testing is laboratory testing conducted outside a formal laboratory generally by clinical staff with the benefit of providing faster turnaround time for results and medical decisions. The cover shows an emergency room patient receiving a fingerstick point-of-care test. Reproduced with permission from Burger/Phanie/Science Photo Library.

 JALM TALK podcast coming soon to <http://www.jalm.org>.

## SOCIAL MEDIA

 Follow us on Twitter  
[http://twitter.com/JALM\\_AACC](http://twitter.com/JALM_AACC)

 Like us on Facebook  
<http://www.facebook.com/JournalAppliedLaboratoryMedicine>



### AACC Officers

Carmen L. Wiley, *President*  
David G. Grenache, *President-Elect*  
Dennis J. Dietzen, *Past President*  
Anthony A. Killeen, *Secretary*  
Steven Kazmierczak, *Treasurer*

### AACC Board of Directors

Lorin Bachmann  
Roger L. Bertholf  
Shannon Haymond  
Mark Marzinke  
Stephen R. Master  
Octavia M. Peck Palmer  
David B. Sacks  
Steven J. Zibrat

