Original Investigations

182 Diagnostic Utility of Serial Microscopic Examination of the Urinary Sediment in Acute Kidney Injury
Vipin Varghese, Maria Soledad Rivera, Ali A. Alalwan, Ayman M. Alghamdi, Manuel E. Gonzalez, and Juan Carlos Q. Velez

192 Regional Citrate Anticoagulation Protocol for Patients with Presumed Absent Citrate Metabolism
Balazs Szamosfalvi, Vidhit Puri, Ryann Sohaney, Benjamin Wagner, Amy Riddle, Sharon Dickinson, Lena Napolitano, Michael Heung, David Humes, and Lenar Yessayan

205 Comparison of Equations To Estimate Glomerular Filtration Rate and Their Impact on Frequency of Cisplatin-associated Acute Kidney Injury

215 Development and Validation of a Web-Based Prediction Model for AKI after Surgery
Sang H. Woo, Jillian Zavodnick, Lily Ackermann, Omar H. Maarouf, Jingjing Zhang, and Scott W. Cowan

Chronic Kidney Disease

224 A Phase 1 Randomized Dose-Escalation Study of a Human Monoclonal Antibody to IL-6 in CKD
Kristen L. Nowak, Rahul Kakkar, Matt Devalaraja, Larry Lo, Wansu Park, Joga Gobburu, Douglas Kling, Michael Davidson, and Michel Chonchol

236 The Impact of CKD on Perioperative Risk and Mortality after Bariatric Surgery
Flavia Carvalho Silveira, William P. Martin, Gabrielle Maranga, Carel W. le Roux, and Christine J. Ren-Fielding

Clinical Nephrology

245 Sedentary Behavior and Change in Kidney Function: The Hispanic Community Health Study/Study of Latinos (HCHS/SOL)
Mary Hannan, Ana C. Ricardo, Jianwen Cai, Nora Franceschini, Robert Kaplan, David X. Marquez, Sylvia E. Rosas, Neil Schneiderman, Daniela Sotres-Alvarez, Gregory A. Talavera, Martha L. Daviglus, and James P. Lash

Diabetes and the Kidney

254 Clinical Outcomes by Albuminuria Status with Dulaglutide versus Insulin Glargine in Participants with Diabetes and CKD: AWARD-7 Exploratory Analysis
Katherine R. Tuttle, Brian Rayner, Mark C. Lakshmanan, Anita Y.M. Kwan, Manige Konig, Linda Shurzinske, and Fady T. Botros

Dialysis

263 COVID-19 Antibodies and Outcomes among Outpatient Maintenance Hemodialysis Patients

270 Inhibition of Lysyl Oxidase with β-aminopropionitrile Improves Venous Adaptation after Arteriovenous Fistula Creation
Diana R. Hernandez, Brandon Applewhite, Laisel Martinez, Tyler Laurito, Marwan Tabbara, Miguel G. Rojas, Yuntao Wei, Guillermo Selman, Marina Knyseva, Omaida C. Velazquez, Loay H. Salman, Fotios M. Andreopoulos, Yan-Ting Shiu, and Roberto I. Vazquez-Padron
Mineral Metabolism

Identification of Novel Biomarkers and Pathways for Coronary Artery Calcification in Nondiabetic Patients on Hemodialysis Using Metabolomic Profiling
Wei Chen, Jessica Fitzpatrick, Stephen M. Sozio, Bernard G. Jaar, Michelle M. Estrella, Dario F. Riascos-Bernal, Tong Tong Wu, Yunping Qiu, Irwin J. Kurland, Ruth F. Dubin, Yabing Chen, Rulan S. Parekh, David A. Bushinsky, and Nicholas E.S. Sibinga

Multidisciplinary Team versus a “Phosphate-Counting” App for Serum Phosphate Control: A Randomized Controlled Trial
Ana Cecilia Farfan-Ruiz, Daniel Czikk, Julie Leidecker, Tim Ramsay, Brendan McCormick, Kumanan Wilson, and Deborah Zimmerman

Nephrolithiasis

In Vivo Entombment of Bacteria and Fungi during Calcium Oxalate, Brushite, and Struvite Urolithiasis
Jessica J. Saw, Mayandi Sivaguru, Elena M. Wilson, Yiran Dong, Robert A. Sanford, Chris J. Fields, Melissa A. Cregger, Annette C. Merkel, William J. Bruce, Joseph R. Weber, John C. Lieske, Amy E. Krambeck, Marcelino E. Rivera, Timothy Large, Dirk Lange, Ananda S. Bhattacharjee, Michael F. Romero, Nicholas Chia, and Bruce W. Fouke

Transplantation

Long-Term Outcomes and Prognostic Factors in Kidney Transplant Recipients with Polycystic Kidney Disease
Gauri Bhutani, Brad C. Astor, Didier A. Mandelbrot, Lori Mankowski-Gettle, Timothy Ziemlewicz, Shane A. Wells, Leah Frater-Rubsam, Vanessa Horner, Courtney Boyer, Jennifer Laffin, and Arjang Djamali

Brief Communications

Cystic Kidney Disease

Mayo Imaging Classification May Be Useful in Determining the Need for Nephrectomy in ADPKD
Stephanie Rosenberg, Sarthak Virmani, Sharon Klaman, Samantha Santovasi, Feng Dai, and Neera K. Dahl

Glomerular and Tubulointerstitial Diseases

Low-dose Rituximab Monotherapy or in Combination with Tacrolimus Is Effective in Primary Membranous Nephropathy
Vivek Pathak, Madhav Venkatesan, and Renu Regunathan-Shenk

Innovative Technology and Methodology

Dialysis

Novel Use of Premixed Dialysate Bags during Water Supply Interruption in Acute Hospital Setting
Orly F. Kohn, Miguel Plascencia, Yolanda Taylor, and Jay L. Koyner

Global Perspectives

Global Dialysis Perspective: Spain
Ramon Roca-Tey, Jose Ibeas, and J. Emilio Sanchez Alvarez

Meeting the Demand for Renal Replacement Therapy during the COVID-19 Pandemic: A Manufacturer’s Perspective
Michael S. Anger, Claudy Mullon, Linda H. Ficociello, David Thompson, Michael A. Kraus, Pete Newcomb, and Robert J. Kossmann
Human kidney stones entomb microbes in vivo during their formation. These high resolution microscopy images are taken from 25 mm-thick doubly-polished petrographic thin sections of struvite and brushite stones and provide first direct evidence of this process. Background Image: Brushite kidney stone thin section under plane polarized transmitted light exhibiting tabular and acicular radiating low-birefringence gray crystals of brushite. Images within circles: Struvite kidney stone thin section showing brightfield images overlaid on superresolution autofluorescence (merge of blue, green and red channel images) taken at 140 nm resolution (Zeiss LSM 880 Airyscan Superresolution microscope). Entombed rod- and coccoid-shaped bacteria with bright red autofluorescence (AF) entombed in radiating acicular struvite crystals (uppermost left circle) and spherules of calcium phosphate (middle circle). The lowermost right circle shows dumbbell-shaped brushite crystals with dark blue AF and rod-shaped bacteria with light blue AF entombed at the center (nidus). Adapted from figures presented in “In Vivo Entombment of Bacteria and Fungi during Calcium Oxalate, Brushite and Struvite Urolithiasis” by Jessica J. Saw*, Mayandi Sivaguru*, Elena M. Wilson, Yiran Dong, Robert A. Sanford, Chris J. Fields, Melissa A. Cregger, Annette C. Merkel, William J. Bruce, Joseph R. Weber, John C. Lieske, Amy E. Krambeck, Marcelino E. Rivera, Timothy Large, Dirk Lange, Ananda S. Bhattacharjee, Michael F. Romero, Nicholas Chia, and Bruce W. Fouke. KIDNEY360 2: 298–311, 2021. doi: 10.34067/KID.0006942020.

*Joint first authors.