

## This Month's Highlights

### UP FRONT MATTERS

#### Editorials

**1921** **Could a Pragmatic Detection Strategy Be the Gateway for Effective Population Health for CKD?**

Andrew S. Narva and Jenna M. Norton

- See related review by Tonelli and Dickinson (pp.1931–1940).

**1922** **Molecular Mismatch—the Renaissance of HLA in Kidney Transplantation**

Chris Wiebe and Peter W. Nickerson

- See related article by Senev et al. (pp. 2193–2204).

#### Perspectives

**1926** **Rationing Scarce Resources: The Potential Impact of COVID-19 on Patients with Chronic Kidney Disease**

Jeffrey Silberzweig, T. Alp Ikizler, Holly Kramer, Paul M. Palevsky, Joseph Vassalotti, and Alan S. Kliger

**1928** **Increasing Peritoneal Dialysis Use in Response to the COVID-19 Pandemic: Will It Go Viral?**

Edwina A. Brown and Jeffrey Perl

#### Review

**1931** **Early Detection of CKD: Implications for Low-Income, Middle-Income, and High-Income Countries**

Marcello Tonelli and James A. Dickinson

- See related editorial by Narva and Norton (pp.1921–1922).

### RESEARCH LETTERS

**1941** **Kidney and Lung ACE2 Expression after an ACE Inhibitor or an Ang II Receptor Blocker: Implications for COVID-19**

Jan Wysocki, Enrique Lores, Minghao Ye, Maria Jose Soler, and Daniel Batlle

**1944** **Histopathologic and Ultrastructural Findings in Postmortem Kidney Biopsy Material in 12 Patients with AKI and COVID-19**

Pouneh Golmai, Christopher P. Larsen, Maria V. DeVita, Samuel J. Wahl, Astrid Weins, Helmut G. Rennke, Vanesa Bijol, and Jordan L. Rosenstock

### RAPID COMMUNICATION

**1948** **COVID-19–Associated Kidney Injury: A Case Series of Kidney Biopsy Findings**

Purva Sharma, Nupur N. Uppal, Rimda Wanchoo, Hitesh H. Shah, Yihe Yang, Rushang Parikh, Yuriy Khanin, Varun Madireddy, Christopher P. Larsen, Kenar D. Jhaveri, and Vanesa Bijol, on behalf of Northwell Nephrology COVID-19 Research Consortium

**1959** **Kidney Biopsy Findings in Patients with COVID-19**

Satoru Kudose, Ibrahim Batal, Dominick Santoriello, Katherine Xu, Jonathan Barasch, Yonatan Peleg, Pietro Canetta, Lloyd E. Ratner, Maddalena Marasa, Ali G. Gharavi, M. Barry Stokes, Glen S. Markowitz, and Vivette D. D'Agati

**1969** **High Prevalence of Asymptomatic COVID-19 Infection in Hemodialysis Patients Detected Using Serologic Screening**

Candice Clarke, Maria Prendecki, Amrita Dhutia, Mahrukh A. Ali, Hira Sajjad, Oshini Shivakumar, Liz Lightstone, Peter Kelleher, Matthew C. Pickering, David Thomas, Rawya Charif, Megan Griffith, Stephen P. McAdoo, and Michelle Willicombe

### BASIC RESEARCH

**1977** **Harnessing Expressed Single Nucleotide Variation and Single Cell RNA Sequencing To Define Immune Cell Chimerism in the Rejecting Kidney Transplant**

Andrew F. Malone, Haojia Wu, Catrina Fronick, Robert Fulton, Joseph P. Gaut, and Benjamin D. Humphreys

**1987** **Enteric Oxalate Secretion Mediated by Slc26a6 Defends against Hyperoxalemia in Murine Models of Chronic Kidney Disease**

Laura I. Neumeier, Robert B. Thomson, Martin Reichel, Kai-Uwe Eckardt, Peter S. Aronson, and Felix Knauf

**1996** **Amphiregulin Aggravates Glomerulonephritis via Recruitment and Activation of Myeloid Cells**

Simon Melderis, Julia Hagenstein, Matthias Tobias Warkotsch, Julien Dang, Georg Rudolf Herrstadt, Christoph Benjamin Niehus, Katrin Neumann, Ulf Panzer, Carmen Berasain, Matias A. Avila, Pierre-Louis Tharaux, Gisa Tiegs, and Oliver M. Steinmetz

**2013** **Crucial Role of AIM/CD5L in the Development of Glomerular Inflammation in IgA Nephropathy**  
Akiko Takahata, Satoko Arai, Emiri Hiramoto, Kento Kitada, Rina Kato, Yuko Makita, Hitoshi Suzuki, Junichiro Nakata, Kimi Araki, Toru Miyazaki, and Yusuke Suzuki

**2026** **TRAF3 Modulation: Novel Mechanism for the Anti-inflammatory Effects of the Vitamin D Receptor Agonist Paricalcitol in Renal Disease**  
Sandra Rayego-Mateos, Jose Luis Morgado-Pascual, José Manuel Valdivielso, Ana Belén Sanz, Enrique Bosch-Panadero, Raúl R. Rodrigues-Díez, Jesús Egido, Alberto Ortiz, Emilio González-Parra, and Marta Ruiz-Ortega

**2044** **★Apolipoprotein L1-Specific Antibodies Detect Endogenous APOL1 inside the Endoplasmic Reticulum and on the Plasma Membrane of Podocytes**  
Suzie J. Scales, Nidhi Gupta, Ann M. De Mazière, George Posthuma, Cecilia P. Chiu, Andrew A. Pierce, Kathy Hötzel, Jianhua Tao, Oded Foreman, Georgios Koukos, Francesca Oltrabella, Judith Klumperman, WeiYu Lin, and Andrew S. Peterson

**2065** **★Domain-Specific Antibodies Reveal Differences in the Membrane Topologies of Apolipoprotein L1 in Serum and Podocytes**  
Nidhi Gupta, Xinhua Wang, Xiaohui Wen, Paul Moran, Maciej Paluch, Philip E. Hass, Amy Heidersbach, Benjamin Haley, Daniel Kirchhofer, Randall J. Brezski, Andrew S. Peterson, and Suzie J. Scales

**2083** **Kidney Disease-Associated APOL1 Variants Have Dose-Dependent, Dominant Toxic Gain-of-Function**  
Somenath Datta, Rama Kataria, Jia-Yue Zhang, Savannah Moore, Kaitlyn Petitpas, Adam Mohamed, Nathan Zahler, Martin R. Pollak, and Opeyemi A. Olabisi

**2097** **Gentamicin-Induced AKI in an Animal Model Involves Programmed Necrosis of the Collecting Duct**  
Huihui Huang, William W. Jin, Ming Huang, Heyu Ji, Diane E. Capen, Yin Xia, Junying Yuan, Teodor G. Pănescu, and Hua A. Jenny Lu

### CLINICAL EPIDEMIOLOGY

**2117** **★Racial and Ethnic Disparities in Seasonal Influenza Vaccination among Dialysis Facilities in the United States**  
John Danziger, Eric Weinhandl, David Friedman, and Kenneth J. Mukamal

**2122** **★Kidney Disease, Intensive Hypertension Treatment, and Risk for Dementia and Mild Cognitive Impairment: The Systolic Blood Pressure Intervention Trial**  
Manjula Kurella Tamura, Sarah A. Gaussoin, Nicholas M. Pajewski, Gordon J. Chelune, Barry I. Freedman, Tanya R. Gure, William E. Haley, Anthony A. Killeen, Suzanne Oparil, Stephen R. Rapp, Dena E. Rifkin, Mark Supiano, Jeff D. Williamson, and Daniel E. Weiner, for the SPRINT Research Group

**2133** **Association of Longitudinal Trajectories of Systolic BP with Risk of Incident CKD: Results from the Korean Genome and Epidemiology Study**  
Young Su Joo, Changhyun Lee, Hyung Woo Kim, Jonghyun Jhee, Hae-Ryong Yun, Jung Tak Park, Tae Ik Chang, Tae-Hyun Yoo, Shin-Wook Kang, and Seung Hyeok Han

### CLINICAL RESEARCH

**2145** **★AKI in Hospitalized Patients with and without COVID-19: A Comparison Study**  
Molly Fisher, Joel Neugarten, Eran Bellin, Milagros Yunes, Lindsay Stahl, Tanya S. Johns, Matthew K. Abramowitz, Rebecca Levy, Neelja Kumar, Michele H. Mokrzycki, Maria Coco, Mary Dominguez, Kalyan Prudhvi, and Ladan Golestaneh

**2158** **★Postmortem Kidney Pathology Findings in Patients with COVID-19**  
Dominick Santoriello, Pascale Khairallah, Andrew S. Bomback, Katherine Xu, Satoru Kudose, Ibrahim Batal, Jonathan Barasch, Jai Radhakrishnan, Vivette D'Agati, and Glen Markowitz

**2168** **Transcriptional Changes in Kidney Allografts with Histology of Antibody-Mediated Rejection without Anti-HLA Donor-Specific Antibodies**  
Jasper Callemeyn, Evelyne Lerut, Henriette de Loor, Ingrid Arijis, Olivier Thaunat, Alice Koenig, Vannary Meas-Yedid, Jean-Christophe Olivo-Marin, Philip Halloran, Jessica Chang, Lieven Thorrez, Dirk Kuypers, Ben Sprangers, Leentje Van Lommel, Frans Schuit, Marie Essig, Wilfried Gwinner, Dany Anglicheau, Pierre Marquet, and Maarten Naesens

**2184** **Nephropathic Cystinosis: A Distinct Form of CKD-Mineral and Bone Disorder that Provides Novel Insights into the Regulation of FGF23**  
Pablo Florenzano, Macarena Jimenez, Carlos R. Ferreira, Galina Nesterova, Mary Scott Roberts, Sri Harsha Tella, Luis Fernandez de Castro, Rachel I. Gafni, Myles Wolf, Harald Jüppner, Barbara Gales, Katherine Wesseling-Perry, Daniela Markovich, William A. Gahl, Isidro B. Salusky, and Michael T. Collins

- 2193 Eplet Mismatch Load and *De Novo* Occurrence of Donor-Specific Anti-HLA Antibodies, Rejection, and Graft Failure after Kidney Transplantation: An Observational Cohort Study**  
Aleksandar Senev, Maarten Coemans, Evelyne Lerut, Vicky Van Sandt, Johan Kerkhofs, Liesbeth Daniëls, Marleen Vanden Driessche, Veerle Compennolle, Ben Sprangers, Elisabet Van Loon, Jasper Callemeyn, Frans Claas, Anat R. Tambur, Geert Verbeke, Dirk Kuypers, Marie-Paule Emonds, and Maarten Naesens
- See related Editorial by Wiebe and Nickerson (pp.1922–1925).

- 2205 Clinicopathological Features and Outcomes of Acute Kidney Injury in Critically Ill COVID-19 with Prolonged Disease Course: A Retrospective Cohort**  
Peng Xia, Yubing Wen, Yaqi Duan, Hua Su, Wei Cao, Meng Xiao, Jie Ma, Yangzhong Zhou, Gang Chen, Wei Jiang, Huanwen Wu, Yan Hu, Sanpeng Xu, Hanghang Cai, Zhengyin Liu, Xiang Zhou, Bin Du, Jinglan Wang, Taisheng Li, Xiaowei Yan, Limeng Chen, Zhiyong Liang, Shuyang Zhang, Chun Zhang, Yan Qin, Guoping Wang, and Xuemei Li

## LETTERS TO THE EDITOR

- 2223 Caution in Identifying Coronaviruses by Electron Microscopy**  
Sarah E. Miller and Cynthia S. Goldsmith
- 2224 Kidney Involvement in COVID-19: Need for Better Definitions**  
Marco Delsante, Giovanni M. Rossi, Ilaria Gandolfini, Serena M. Bagnasco, and Avi Z. Rosenberg
- 2225 Authors' Reply**  
Evan A. Farkash, Allecia M. Wilson, and Jeffrey M. Jentzen
- 2226 Early Predictors of Arteriovenous Fistula Maturation: Preoperative Arterial Diameter Alone Is Not Enough**  
Pasquale Zamboli, Massimo Punzi, Umberto Marcello Bracale, and Antonio Pisani
- 2228 Authors' Reply**  
Crystal Farrington and Michael Allon
- 2230 ERRATUM**