

This Month's Highlights

UP FRONT MATTERS

Editorials

- 349 **Insights into the Regulation of Collecting Duct Homeostasis by Small Noncoding RNAs**
Yu Leng Phua and Jacqueline Ho
• See related article by Hajarnis et al. (pp. 518–531).
- 350 **Any Progress in the Treatment of Antibody-Mediated Rejection?**
Klemens Budde and Michael Dürr
• See related articles by Eskandary et al. (pp. 591–605); and Viglietti et al. (pp. 606–619).
- 352 **Making the Right Decision: Do Clinical Decision Support Systems for AKI Improve Patient Outcomes?**
Nicholas M. Selby and Richard J. Fluck
• See related article by Al-Jaghbeer et al. (pp. 654–660).
- 354 **Banff Classification of Polyomavirus Nephropathy: A New Tool for Research and Clinical Practice**
Jeffrey B. Kopp
• See related article by Nickleit et al. (pp. 680–693).
- 355 **Editorial Note: From Both Sides Now**
Josephine P. Briggs and Thomas H. Hostetter
• See related perspectives by Baigent et al. (pp. 357–359); and Toto (pp. 360–361).
- Perspectives**
- 357 **Should We Increase GFR with Bardoxolone in Alport Syndrome?**
Colin Baigent and Rachel Lennon
• See related editorial by Briggs et al. (pp. 355–356); and related perspective by Toto (pp. 360–361).
- 360 **Bardoxolone—the Phoenix?**
Robert D. Toto
• See related editorial by Briggs et al. (pp. 355–356); and related perspective by Baigent et al. (pp. 357–359).

Brief Reviews

- 362 **Clinical Translation of Mesenchymal Stromal Cell Therapies in Nephrology**
Norberto Perico, Federica Casiraghi, and Giuseppe Remuzzi
- 376 **Metabolic Acidosis and Subclinical Metabolic Acidosis in CKD**
Kalani L. Raphael
- 383 **BP Measurement in Clinical Practice: Time to SPRINT to Guideline-Recommended Protocols**
Paul E. Drawz and Joachim H. Ix
- 389 **Tissue-Resident Lymphocytes in the Kidney**
Jan-Eric Turner, Martina Becker, Hans-Willi Mittrücker, and Ulf Panzer

BRIEF COMMUNICATIONS

- 401 **Phospholipase A2 Receptor 1 Epitope Spreading at Baseline Predicts Reduced Likelihood of Remission of Membranous Nephropathy**
Barbara Seitz-Polski, Hanna Debiec, Alexandra Rousseau, Karine Dahan, Christelle Zaghrini, Christine Payré, Vincent L.M. Esnault, Gérard Lambeau, and Pierre Ronco
- 409 **TRPC5 Does Not Cause or Aggravate Glomerular Disease**
Xuexiang Wang, Ranadheer R. Dande, Hao Yu, Beata Samelko, Rachel E. Miller, Mehmet M. Altintas, and Jochen Reiser
- 416 **Serum Response Factor Is Essential for Maintenance of Podocyte Structure and Function**
Bing Guo, Qing Lyu, Orazio J. Slivano, Ronald Dirks, Christine K. Christie, Jan Czyzyk, Aram F. Hezel, Ali G. Gharavi, Eric M. Small, and Joseph M. Miano

BASIC RESEARCH

- 423 **Intragraft Molecular Pathways Associated with Tolerance Induction in Renal Transplantation**
Lorenzo Gallon, James M. Mathew, Sai Vineela Bontha, Catherine I. Dumur, Pranav Dalal, Lakshmi Nadimpalli,

Daniel G. Maluf, Aneesha A. Shetty, Suzanne T. Ildstad, Joseph R. Leventhal, and Valeria R. Mas

434 Modulation of Renal GLUT2 by the Cannabinoid-1 Receptor: Implications for the Treatment of Diabetic Nephropathy

Liad Hinden, Shiran Udi, Adi Drori, Asaad Gammal, Alina Nemirovski, Rivka Hadar, Saja Baraghithy, Anna Permyakova, Matan Geron, Merav Cohen, Sabina Tsytkin-Kirschenschweig, Yael Riahi, Gil Leibowitz, Yaakov Nahmias, Avi Priel, and Joseph Tam

449 MicroRNA-709 Mediates Acute Tubular Injury through Effects on Mitochondrial Function

Yan Guo, Jiajia Ni, Shuang Chen, Mi Bai, Jiajuan Lin, Guixia Ding, Yue Zhang, Pingping Sun, Zhanjun Jia, Songming Huang, Li Yang, and Aihua Zhang

462 ★Chromatin Conformation Links Distal Target Genes to CKD Loci

Maarten M. Brandt, Claartje A. Meddens, Laura Louzao-Martinez, Noortje A.M. van den Dungen, Nico R. Lansu, Edward E.S. Nieuwenhuis, Dirk J. Duncker, Marianne C. Verhaar, Jaap A. Joles, Michal Mokry, and Caroline Cheng

477 Progressive Renal Disease Established by Renin-Coding Adeno-Associated Virus-Driven Hypertension in Diverse Diabetic Models

Shannon M. Harlan, Kathleen M. Heinz-Taheny, John M. Sullivan, Tao Wei, Hana E. Baker, Dianna L. Jaqua, Zhonghua Qi, Martin S. Cramer, Tatiyana L. Shiyanova, Matthew D. Breyer, and Josef G. Heuer

492 Tonicity-Responsive Enhancer-Binding Protein Mediates Hyperglycemia-Induced Inflammation and Vascular and Renal Injury

Soo Youn Choi, Sun Woo Lim, Shabnam Salimi, Eun Jin Yoo, Whaseon Lee-Kwon, Hwan Hee Lee, Jun Ho Lee, Braxton D. Mitchell, Satoru Sanada, Afshin Parsa, and Hyug Moo Kwon

505 Reduced Expression of Glutathione S-Transferase $\alpha 4$ Promotes Vascular Neointimal Hyperplasia in CKD

Jinlong Luo, Guang Chen, Ming Liang, Aini Xie, Qingtian Li, Qunying Guo, Rajendra Sharma, and Jizhong Cheng

518 ★Suppression of microRNA Activity in Kidney Collecting Ducts Induces Partial Loss of Epithelial Phenotype and Renal Fibrosis

Sachin Hajarnis, Matanel Yheskel, Darren Williams, Thomas Brefort, Bob Glaudemans, Huguette Debaix, Michel Baum, Olivier Devuyst, and Vishal Patel

- See related editorial by Phua and Ho (pp. 349–350).

532 Activated Hedgehog-Gli Signaling Causes Congenital Ureteropelvic Junction Obstruction
Sepideh Sheybani-Deloui, Lijun Chi, Marian V. Staite, Jason E. Cain, Brian J. Nieman, R. Mark Henkelman, Brandon J. Wainwright, S. Steven Potter, Darius J. Bagli, Armando J. Lorenzo, and Norman D. Rosenblum

545 ★Extracellular Adenosine Stimulates Vacuolar ATPase-Dependent Proton Secretion in Medullary Intercalated Cells

Maria A. Battistone, Anil V. Nair, Claire R. Barton, Rachel N. Liberman, Maria A. Peralta, Diane E. Capen, Dennis Brown, and Sylvie Breton

557 Redirecting TGF- β Signaling through the β -Catenin/Foxo Complex Prevents Kidney Fibrosis

Xi Qiao, Padmashree Rao, Yun Zhang, Lixin Liu, Min Pang, Hailong Wang, Min Hu, Xinrui Tian, Jianlin Zhang, Ye Zhao, Xin Maggie Wang, Chengshi Wang, Hong Yu, Fei Guo, Qi Cao, Yiping Wang, Yuan Min Wang, Geoff Yu Zhang, Vincent W. Lee, Stephen I. Alexander, Guoping Zheng, and David C.H. Harris

CLINICAL EPIDEMIOLOGY

571 Overweight and Obesity Are Predictors of Progression in Early Autosomal Dominant Polycystic Kidney Disease

Kristen L. Nowak, Zhiying You, Berenice Gitomer, Godela Brosnahan, Vicente E. Torres, Arlene B. Chapman, Ronald D. Perrone, Theodore I. Steinman, Kaleab Z. Abebe, Frederic F. Rahbari-Oskoui, Alan S.L. Yu, Peter C. Harris, Kyongtae T. Bae, Marie Hogan, Dana Miskulin, and Michel Chonchol

579 Longitudinal FGF23 Trajectories and Mortality in Patients with CKD

Tamara Isakova, Xuan Cai, Jungwha Lee, Dawei Xie, Xue Wang, Rupal Mehta, Norrina B. Allen, Julia J. Scialla, Michael J. Pencina, Amanda H. Anderson, John Talierco, Jing Chen, Michael J. Fischer, Susan P. Steigerwalt, Mary B. Leonard, Chi-yuan Hsu, Ian H. de Boer, John W. Kusek, Harold I. Feldman, and Myles Wolf, on behalf of Chronic Renal Insufficiency Cohort (CRIC)

CLINICAL RESEARCH

591 ★A Randomized Trial of Bortezomib in Late Antibody-Mediated Kidney Transplant Rejection
Farsad Eskandary, Heinz Regele, Lukas Baumann, Gregor Bond, Nicolas Kozakowski, Markus Wahrmann, Luis G. Hidalgo, Helmuth Haslacher, Christopher C. Kaltenecker,

- Marie-Bernadette Aretin, Rainer Oberbauer, Martin Posch, Anton Staudenherz, Ammon Handisurya, Jeff Reeve, Philip F. Halloran, and Georg A. Böhmig
- See related editorial by Budde and Dürr (pp. 350–352).
- 606** **Dynamic Prognostic Score to Predict Kidney Allograft Survival in Patients with Antibody-Mediated Rejection**
Denis Viglietti, Alexandre Loupy, Olivier Aubert, Oriol Bestard, Jean-Paul Duong Van Huyen, Jean-Luc Taupin, Denis Glotz, Christophe Legendre, Xavier Jouven, Michel Delahousse, Nassim Kamar, and Carmen Lefaucheur
- See related editorial by Budde and Dürr (pp. 350–352).
- 620** **Complement-Activating Anti-HLA Antibodies in Kidney Transplantation: Allograft Gene Expression Profiling and Response to Treatment**
Carmen Lefaucheur, Denis Viglietti, Luis G. Hidalgo, Lloyd E. Ratner, Serena M. Bagnasco, Ibrahim Batal, Olivier Aubert, Babak J. Orandi, Federico Oppenheimer, Oriol Bestard, Paolo Rigotti, Anna V. Reisaeter, Nassim Kamar, Yvon Lebranchu, Jean-Paul Duong Van Huyen, Patrick Bruneval, Denis Glotz, Christophe Legendre, Jean-Philippe Empana, Xavier Jouven, Dorry L. Segev, Robert A. Montgomery, Adriana Zeevi, Philip F. Halloran, and Alexandre Loupy
- 636** **Renal Dysfunction Influences the Diagnostic and Prognostic Performance of High-Sensitivity Cardiac Troponin I**
Ian Günsolus, Yader Sandoval, Stephen W. Smith, Anne Sexter, Karen Schulz, Charles A. Herzog, and Fred S. Apple
- 644** **LDL Receptor-Related Protein 2 (Megalin) as a Target Antigen in Human Kidney Anti-Brush Border Antibody Disease**
Christopher P. Larsen, Claire Trivin-Avillach, Paige Coles, A. Bernard Collins, Michael Merchant, Hong Ma, Daniel W. Wilkey, Josephine M. Ambruzs, Nidia C. Messias, L. Nicholas Cossey, Ivy A. Rosales, Thomas Wooldridge, Patrick D. Walker, Robert B. Colvin, Jon Klein, David J. Salant, and Laurence H. Beck, Jr.
- 654** ★ **Clinical Decision Support for In-Hospital AKI**
Mohammed Al-Jaghbeer, Dilhari Dealmeida, Andrew Bilderback, Richard Ambrosino, and John A. Kellum
- See related editorial by Selby and Fluck (pp. 352–354).
- 661** **Deletion Variants of *CFHR1* and *CFHR3* Associate with Mesangial Immune Deposits but Not with Progression of IgA Nephropathy**
Perrine Jullien, Blandine Laurent, Guillaume Claisse, Ingrid Masson, Miriana Dinic, Damien Thibaudin, Francois Berthoux, Eric Alamartine, Christophe Mariat, and Nicolas Maillard
- 670** **Perioperative THR-184 and AKI after Cardiac Surgery**
Jonathan Himmelfarb, Glenn M. Chertow, Peter A. McCullough, Thierry Mesana, Andrew D. Shaw, Thoralf M. Sundt, Craig Brown, David Cortville, François Dagenais, Benoit de Varennes, Manuel Fontes, Jerome Rossert, and Jean-Claude Tardif
- 680** ★ **The Banff Working Group Classification of Definitive Polyomavirus Nephropathy: Morphologic Definitions and Clinical Correlations**
Volker Nickleit, Harsharan K. Singh, Parmjeet Randhawa, Cinthia B. Drachenberg, Ramneesh Bhatnagar, Erika Bracamonte, Anthony Chang, W. James Chon, Darshana Dadhania, Vicki G. Davis, Helmut Hopfer, Michael J. Mihatsch, John C. Papadimitriou, Stefan Schaub, Michael B. Stokes, Mohammad F. Tungekar, and Surya V. Seshan, on behalf of the Banff Working Group on Polyomavirus Nephropathy
- See related editorial by Kopp (pp. 354–355).
- 694** **Segmental Sclerosis and Extracapillary Hypercellularity Predict Diabetic ESRD**
Amy K. Mottl, Adil Gasim, Fernanda Payan Schober, Yichun Hu, Askia K. Dunnon, Susan L. Hogan, and J. Charles Jennette
- 704** **ERRATUM**