

This Month's Highlights

UP FRONT MATTERS

Editorials

- 1 **Thoughts on Turning 29**
Josephine P. Briggs
- 2 **Glomerular Disease Pathology in the Era of Proteomics: From Pattern to Pathogenesis**
Mark Haas
• See related articles by Dasari et al. (pp. 51–56); and Andeen et al. (pp. 231–239).
- 4 **Renal Dendritic Cells: The Long and Winding Road**
A. Richard Kitching and Joshua D. Ooi
• See related article by Brähler et al. (pp. 138–154).
- 7 **Mesenchymal Stromal Cells for AKI after Cardiac Surgery**
Norberto Perico, Federica Casiraghi, and Giuseppe Remuzzi
• See related article by Swaminathan et al. (pp. 260–267).
- 9 **Clusters Not Classifications: Making Sense of Complement-Mediated Kidney Injury**
H. Terence Cook and Matthew C. Pickering
• See related article by Iatropoulos et al. (pp. 283–294).
- Brief Reviews**
- 13 **Genetic Complexity of Autosomal Dominant Polycystic Kidney and Liver Diseases**
Emilie Cornec-Le Gall, Vicente E. Torres, and Peter C. Harris
- 24 **Precision Transplant Medicine: Biomarkers to the Rescue**
Maarten Naesens and Dany Anglicheau
- 36 **Novel Insights into the Pathogenesis of Monogenic Congenital Anomalies of the Kidney and Urinary Tract**
Amelie T. van der Ven, Asaf Vivante, and Friedhelm Hildebrandt

BRIEF COMMUNICATION

- 51 ★ **DnaJ Heat Shock Protein Family B Member 9 Is a Novel Biomarker for Fibrillary GN**
Surendra Dasari, Mariam P. Alexander, Julie A. Vrana, Jason D. Theis, John R. Mills, Vivian Negron, Sanjeev Sethi, Angela Dispenzieri, W. Edward Highsmith Jr., Samih H. Nasr, and Paul J. Kurtin
• See related editorial by Haas (pp. 2–4).

BASIC RESEARCH

- 57 **Aldosterone Is Essential for Angiotensin II-Induced Upregulation of Pendrin**
Daigoro Hirohama, Nobuhiro Ayuzawa, Kohei Ueda, Mitsuhiro Nishimoto, Wakako Kawarazaki, Atsushi Watanabe, Tatsuo Shimosawa, Takeshi Marumo, Shigeru Shibata, and Toshiro Fujita
- 69 **Cardiovascular Effects of Renal Distal Tubule Deletion of the FGF Receptor 1 Gene**
Xiaobin Han, Jed Ross, Ganesh Kolumam, Min Pi, Junichiro Sonoda, Gwendalyn King, and L. Darryl Quarles
- 81 **Kidney Proximal Tubule Lipoapoptosis Is Regulated by Fatty Acid Transporter-2 (FATP2)**
Shenaz Khan, Pablo D. Cabral, William P. Schilling, Zachary W. Schmidt, Asif N. Uddin, Amelia Gingras, Sethu M. Madhavan, Jeffrey L. Garvin, and Jeffrey R. Schelling
- 92 **ShcA Adaptor Protein Promotes Nephron Endocytosis and Is Upregulated in Proteinuric Nephropathies**
Claire E. Martin, Kelly A. Petersen, Lamine Aoudjit, Manali Tilak, Vera Eremina, W. Rod Hardy, Susan E. Quaggin, Tomoko Takano, and Nina Jones
- 104 **Endotoxin Preconditioning Reprograms S1 Tubules and Macrophages to Protect the Kidney**
Takashi Hato, Amy Zollman, Zoya Plotkin, Tarek M. El-Achkar, Bernhard F. Maier, S. Louise Pay, Shataakshi Dube, Pablo Cabral, Momoko Yoshimoto, Jeanette McClintick, and Pierre C. Dagher

- 118 FXR/TGR5 Dual Agonist Prevents Progression of Nephropathy in Diabetes and Obesity**
Xiaoxin X. Wang, Dong Wang, Yuhuan Luo, Komuraiah Myakala, Evgenia Dobrinskikh, Avi Z. Rosenberg, Jonathan Levi, Jeffrey B. Kopp, Amanda Field, Ashley Hill, Scott Lucia, Liru Qiu, Tao Jiang, Yingqiong Peng, David Orlicky, Gabriel Garcia, Michal Herman-Edelstein, Vivette D'Agati, Kammi Henriksen, Luciano Adorini, Mark Pruzanski, Cen Xie, Kristopher W. Krausz, Frank J. Gonzalez, Suman Ranjit, Alexander Dvornikov, Enrico Gratton, and Moshe Levi
- 138 ★Opposing Roles of Dendritic Cell Subsets in Experimental GN**
Sebastian Brähler, Bernd H. Zinselmeyer, Saravanan Raju, Maximilian Nitschke, Hani Suleiman, Brian T. Saunders, Michael W. Johnson, Alexander M.C. Böhner, Susanne F. Viehmann, Derek J. Theisen, Nicole M. Kretzer, Carlos G. Briseño, Konstantin Zaitsev, Olga Ornatsky, Qing Chang, Javier A. Carrero, Jeffrey B. Kopp, Maxim N. Artyomov, Christian Kurts, Kenneth M. Murphy, Jeffrey H. Miner, and Andrey S. Shaw
• See related editorial by Kitching and Ooi (pp. 4–7).
- 155 MYH9 E1841K Mutation Augments Proteinuria and Podocyte Injury and Migration**
Sylvia Cechova, Fan Dong, Fang Chan, Michael J. Kelley, Phillip Ruiz, and Thu H. Le
- 168 Collectin-11 Promotes the Development of Renal Tubulointerstitial Fibrosis**
Weiju Wu, Chengfei Liu, Conrad A. Farrar, Liang Ma, Xia Dong, Steven H. Sacks, Ke Li, and Wuding Zhou
- 182 Wnt/ β -Catenin–Promoted Macrophage Alternative Activation Contributes to Kidney Fibrosis**
Ye Feng, Jiapa Ren, Yuan Gui, Wei Wei, Bingyan Shu, Qingmiao Lu, Xian Xue, Xiaoli Sun, Weichun He, Junwei Yang, and Chunsun Dai
- 194 Dynamin-Related Protein 1 Deficiency Promotes Recovery from AKI**
Heather M. Perry, Liping Huang, Rebecca J. Wilson, Amandeep Bajwa, Hiromi Sesaki, Zhen Yan, Diane L. Rosin, David F. Kashatus, and Mark D. Okusa
- 218 ★Particulate Matter Air Pollution and the Risk of Incident CKD and Progression to ESRD**
Benjamin Bowe, Yan Xie, Tingting Li, Yan Yan, Hong Xian, and Ziyad Al-Aly
- CLINICAL RESEARCH**
- 231 ★DnaJ Homolog Subfamily B Member 9 Is a Putative Autoantigen in Fibrillary GN**
Nicole K. Andeen, Han-Yin Yang, Dao-Fu Dai, Michael J. MacCoss, and Kelly D. Smith
• See related editorial by Haas (pp. 2–4).
- 240 Factor H Competitor Generated by Gene Conversion Events Associates with Atypical Hemolytic Uremic Syndrome**
Elena Goicoechea de Jorge, Agustín Tortajada, Sheila Pinto García, Sara Gastoldi, Héctor Martín Merinero, Jesús García-Fernández, Emilia Arjona, Mercedes Cao, Giuseppe Remuzzi, Marina Noris, and Santiago Rodríguez de Córdoba
- 250 Metabolic Effects of Diet and Exercise in Patients with Moderate to Severe CKD: A Randomized Clinical Trial**
T. Alp Ikizler, Cassianne Robinson-Cohen, Charles Ellis, Samuel A.E. Headley, Katherine Tuttle, Richard J. Wood, Elizabeth Elspeth Evans, Charles M. Milch, Kelsey Anne Moody, Michael Germain, Chutatip Limkunakul, Aihua Bian, Thomas G. Stewart, and Jonathan Himmelfarb
- 260 ★Allogeneic Mesenchymal Stem Cells for Treatment of AKI after Cardiac Surgery**
Madhav Swaminathan, Mark Stafford-Smith, Glenn M. Chertow, David G. Warnock, Viken Paragamian, Robert M. Brenner, François Lellouche, Alison Fox-Robichaud, Mohamed G. Atta, Spencer Melby, Ravindra L. Mehta, Ron Wald, Subodh Verma, and C. David Mazer, for the ACT-AKI investigators
• See related editorial by Perico et al. (pp. 7–9).
- 268 Complement Activation in Peritoneal Dialysis–Induced Arteriopathy**
Maria Bartosova, Betti Schaefer, Justo Lorenzo Bermejo, Silvia Tarantino, Felix Lasitschka, Stephan Macher-Goeppinger, Peter Sinn, Bradley A. Warady, Ariane Zaloszcyc, Katja Parapatics, Peter Májek, Keiryn L. Bennett, Jun Oh, Christoph Aufricht, Franz Schaefer, Klaus Kratochwill, and Claus Peter Schmitt
- 283 Cluster Analysis Identifies Distinct Pathogenetic Patterns in C3 Glomerulopathies/Immune Complex–Mediated Membranoproliferative GN**
Paraskevas Iatropoulos, Erica Daina, Manuela Curreri, Rossella Piras, Elisabetta Valoti, Caterina Mele, Elena
- CLINICAL EPIDEMIOLOGY**
- 207 Incident CKD after Radical or Partial Nephrectomy**
John T. Leppert, Remy W. Lamberts, I-Chun Thomas, Benjamin I. Chung, Geoffrey A. Sonn, Eila C. Skinner, Todd H. Wagner, Glenn M. Chertow, and James D. Brooks

Bresin, Sara Gamba, Marta Alberti, Matteo Breno, Annalisa Perna, Serena Bettoni, Ettore Sabadini, Luisa Murer, Marina Vivarelli, Marina Noris, and Giuseppe Remuzzi, for the Registry of Membranoproliferative Glomerulonephritis/C3 Glomerulopathy

- See related editorial by Cook and Pickering (pp. 9–12).

295 Impaired β -Oxidation and Altered Complex Lipid Fatty Acid Partitioning with Advancing CKD

Farsad Afshinnia, Thekkelnaycke M. Rajendiran, Tanu Soni, Jaeman Byun, Stefanie Wemisch, Kelli M. Sas, Jennifer Hawkins, Keith Bellovich, Debbie Gipson, George Michailidis, and Subramaniam Pennathur, and the Michigan Kidney Translational Core CPROBE Investigator Group

307 ★BP in Dialysis: Results of a Pilot Study

Dana C. Miskulin, Jennifer Gassman, Ronald Schrader, Ambreen Gul, Manisha Jhamb, David W. Ploth, Lavinia Negrea, Raymond Y. Kwong, Andrew S. Levey, Ajay K. Singh, Antonia Harford, Susan Paine, Cynthia Kendrick, Mahboob Rahman, and Philip Zager

317 Effects of Two Immunosuppressive Treatment Protocols for IgA Nephropathy

Thomas Rauen, Christina Fitzner, Frank Eitner, Claudia Sommerer, Martin Zeier, Britta Otte, Ulf Panzer, Harm Peters, Urs Benck, Peter R. Mertens, Uwe Kuhlmann, Oliver Witzke, Oliver Gross, Volker Vielhauer, Johannes F.E. Mann, Ralf-Dieter Hilgers, and Jürgen Floege

326 Neutralizing Antibody–Mediated Response and Risk of BK Virus–Associated Nephropathy

Morgane Solis, Aurélie Velay, Raphaél Porcher, Pilar Domingo-Calap, Eric Soulier, Mélanie Joly, Mariam Meddeb, Wallys Kack-Kack, Bruno Moulin, Siamak Bahram, Françoise Stoll-Keller, Heidi Barth, Sophie Caillard, and Samira Fafi-Kremer

META-ANALYSIS

335 ★Genome-Wide Meta-Analysis Unravels Interactions between Magnesium Homeostasis and Metabolic Phenotypes

Tanguy Corre, Francisco J. Arjona, Caroline Hayward, Sonia Youhanna, Jeroen H.F. de Baaij, Hendrica Belge, Nadine Nägele, Huguette Debaix, Maxime G. Blanchard, Michela Traglia, Sarah E. Harris, Sheila Ulivi, Rico Rueedi, David Lamparter, Aurélien Macé, Cinzia Sala, Stefania Lenarduzzi, Belen Ponte, Menno Pruijm, Daniel Ackermann, Georg Ehret, Daniela Baptista, Ozren Polasek, Igor Rudan, Toby W. Hurd, Nicholas D. Hastie, Veronique Vitart, Geràrd Waeber, Zoltán Kutalik, Sven Bergmann, Rosa Vargas-Poussou, Martin Konrad, Paolo Gasparini, Ian J. Deary, John M. Starr, Daniela Toniolo, Peter Vollenweider, Joost G.J. Hoenderop, René J.M. Bindels, Murielle Bochud, and Olivier Devuyst