

***This Month's Highlights***

**UP FRONT MATTERS**

***Editorials***

- 647** **Rituximab: A Boot to Protect the Foot**  
Jochen Reiser and Alessia Fornoni  
• See related article by Tasaki et al. (pp. 737–744).
- 648** **Notch Ties a Knot on Fistula Maturation**  
Laura M. Dember and Katalin Susztak  
• See related article by Wang et al. (pp. 773–783).
- 650** **Blood Pressure Variability and Dialysis: Variability May Not Always Be the Spice of Life**  
Jennifer E. Flythe and Steven M. Brunelli  
• See related article by Shafi et al. (pp. 799–809).
- 653** **Fabry Disease: Dose Matters**  
David G. Warnock and Michael Mauer  
• See related article by Weidemann et al. (pp. 837–849).

***Brief Review***

- 657** **The Gut Microbiome, Kidney Disease, and Targeted Interventions**  
Ali Ramezani and Dominic S. Raj

***Pathophysiology of the Renal Biopsy***

- 671** **Adenine Phosphoribosyltransferase Deficiency as a Rare Cause of Renal Allograft Dysfunction**  
Kati Kaartinen, Ulla Hemmilä, Kaija Salmela, Anne Räisänen-Sokolowski, Timo Kouri, and Satu Mäkelä

**BRIEF COMMUNICATIONS**

- 675** **Allo-Immune Membranous Nephropathy and Recombinant Aryl Sulfatase Replacement Therapy: A Need for Tolerance Induction Therapy**  
Hanna Debiec, Vassili Valayannopoulos, Olivia Boyer, Laure-Hélène Noël, Patrice Callard, Hélène Sarda, Pascale de Lonlay, Patrick Niaudet, and Pierre Ronco

- 681** **Two-Photon Microscopy Reveals Stationary Podocytes in Living Zebrafish Larvae**  
Nicole Endlich, Ole Simon, Achim Göpferich, Henny Wegner, Marcus J. Moeller, Elisabeth Rumpel, Ahmed M. Kotb, and Karlhans Endlich

- 687** **Feasibility of Repairing Glomerular Basement Membrane Defects in Alport Syndrome**  
Xiaobo Lin, Jung Hee Suh, Gloriosa Go, and Jeffrey H. Miner

**BASIC RESEARCH**

- 693** ★ **The Regenerative Potential of Parietal Epithelial Cells in Adult Mice**  
Katja Berger, Kevin Schulte, Peter Boor, Christoph Kuppe, Toin H. van Kuppevelt, Jürgen Floege, Bart Smeets, and Marcus J. Moeller

- 707** ★ **Unraveling the Role of Podocyte Turnover in Glomerular Aging and Injury**  
Nicola Wanner, Björn Hartleben, Nadja Herbach, Markus Goedel, Natalie Stickel, Robert Zeiser, Gerd Walz, Marcus J. Moeller, Florian Grahammer, and Tobias B. Huber

- 717** **Hydrogen Sulfide Attenuates sFlt1-Induced Hypertension and Renal Damage by Upregulating Vascular Endothelial Growth Factor**  
Kim M. Holwerda, Suzanne D. Burke, Marijke M. Faas, Zsuzsanna Zsengeller, Isaac E. Stillman, Peter M. Kang, Harry van Goor, Amy McCurley, Iris Z. Jaffe, S. Ananth Karumanchi, and A. Titia Lely

- 726** **Na<sup>+</sup>/H<sup>+</sup> Exchanger Regulatory Factor 3 Is Critical for Multidrug Resistance Protein 4–Mediated Drug Efflux in the Kidney**  
Joonhee Park, Jin-Oh Kwak, Brigitte Riederer, Ursula Seidler, Susan P.C. Cole, Hwa Jeong Lee, and Min Goo Lee

- 737** **Rituximab Treatment Prevents the Early Development of Proteinuria following Pig-to-Baboon Xeno-Kidney Transplantation**  
Masayuki Tasaki, Akira Shimizu, Isabel Hanekamp, Radbeh Torabi, Vincenzo Villani, and Kazuhiko Yamada  
• See related editorial by Reiser and Fornoni (pp. 647–648).

**745 Claudin-14 Underlies Ca<sup>++</sup>-Sensing Receptor-Mediated Ca<sup>++</sup> Metabolism via NFAT-microRNA-Based Mechanisms**  
Yongfeng Gong and Jianghui Hou

**761 Hepatectomy-Related Hypophosphatemia: A Novel Phosphaturic Factor in the Liver-Kidney Axis**  
Kengo Nomura, Sawako Tatsumi, Atsumi Miyagawa, Yuji Shiozaki, Shohei Sasaki, Ichiro Kaneko, Mikiko Ito, Shinsuke Kido, Hiroko Segawa, Mitsue Sano, Tsutomu Fukuwatari, Katsumi Shibata, and Ken-ichi Miyamoto

**773 Blocking Notch in Endothelial Cells Prevents Arteriovenous Fistula Failure Despite CKD**  
Yun Wang, Anlin Liang, Jinlong Luo, Ming Liang, Guofeng Han, William E. Mitch, and Jizhong Cheng

- See related editorial by Dember and Susztak (pp. 648–650).

**784 ★Nephropathy and Elevated BP in Mice with Podocyte-Specific NADPH Oxidase 5 Expression**  
Chet E. Holterman, Jean-François Thibodeau, Chelsea Towajj, Alex Gutsol, Augusto C. Montezano, Robin J. Parks, Mark E. Cooper, Rhian M. Touyz, and Christopher R.J. Kennedy

### CLINICAL EPIDEMIOLOGY

**799 Predialysis Systolic BP Variability and Outcomes in Hemodialysis Patients**  
Tariq Shafi, Stephen M. Sozio, Karen J. Bandeen-Roche, Patti L. Ephraim, Jason R. Luly, Wendy L. St. Peter, Aidan McDermott, Julia J. Scialla, Deidra C. Crews, Navdeep Tangri, Dana C. Miskulin, Wieneke M. Michels, Bernard G. Jaar, Charles A. Herzog, Philip G. Zager, Klemens B. Meyer, Albert W. Wu, and L. Ebony Boulware for the DEClDE Network Patient Outcomes in End Stage Renal Disease Study Investigators

- See related editorial by Flythe and Brunelli (pp. 650–653).

**810 Longitudinal Changes in Estimated and Measured GFR in Type 1 Diabetes**  
Ian H. de Boer, Wanjie Sun, Patricia A. Cleary, John M. Lachin, Mark E. Molitch, Bernard Zinman, and

Michael W. Steffes, for the Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications Study Research Group

**819 ★Sickle Trait in African-American Hemodialysis Patients and Higher Erythropoiesis-Stimulating Agent Dose**  
Vimal K. Derebail, Eduardo K. Lacson Jr., Abhijit V. Kshirsagar, Nigel S. Key, Susan L. Hogan, Raymond M. Hakim, Ann Mooney, Chinu M. Jani, Curtis Johnson, Yichun Hu, Ronald J. Falk, and J. Michael Lazarus

**827 ★Geographic Determinants of Access to Pediatric Deceased Donor Kidney Transplantation**  
Peter P. Reese, Hojun Hwang, Vishnu Potluri, Peter L. Abt, Justine Shults, and Sandra Amaral

### CLINICAL RESEARCH

**837 Patients with Fabry Disease after Enzyme Replacement Therapy Dose Reduction Versus Treatment Switch**  
Frank Weidemann, Johannes Krämer, Thomas Duning, Malte Lenders, Sima Canaan-Kühl, Alice Krebs, Hans Guerrero González, Claudia Sommer, Nurcan Üçeyler, Markus Niemann, Stefan Störk, Michael Schelleckes, Stefanie Reiermann, Jörg Stypmann, Stefan-Martin Brand, Christoph Wanner, and Eva Brand

- See related editorial by Warnock and Mauer (pp. 653–655).

**850 ★Rituximab in Steroid-Dependent or Frequently Relapsing Idiopathic Nephrotic Syndrome**  
Piero Ruggenenti, Barbara Ruggiero, Paolo Cravedi, Marina Vivarelli, Laura Massella, Maddalena Marasà, Antonietta Chianca, Nadia Rubis, Bogdan Ene-Iordache, Michael Rudnicki, Rosa Maria Pollastro, Giovambattista Capasso, Antonio Pisani, Marco Pennesi, Francesco Emma, and Giuseppe Remuzzi, for the Rituximab in Nephrotic Syndrome of Steroid-Dependent or Frequently Relapsing Minimal Change Disease Or Focal Segmental Glomerulosclerosis (NEMO) Study Group