

This Month's Highlights

**UP FRONT MATTERS**

**Editorials**

- 1597 **The EP4 Receptor for Prostaglandin E<sub>2</sub> in Glomerular Disease: A Good Receptor Turned Bad?**

Matthew A. Sparks and Thomas M. Coffman

- See related article by Stitt-Cavanagh et al. (pp. 1678–1690).

- 1599 **VEGF Receptors and Glomerular Function**

Samir M. Parikh and Martin R. Pollak

- See related article by Sison et al. (pp. 1691–1701).

- 1600 **HO-1 in Control of a Self-Eating Kidney**

Pinelopi P. Kapitsinou and Volker H. Haase

- See related article by Bolisetty et al. (pp. 1702–1712).

- 1602 **Quantifying Severity of Chronic Kidney Disease as a Risk Factor for Acute Kidney Injury**

Kerry Cho and Chi-yuan Hsu

- See related article by Grams et al. (pp. 1757–1764).

- 1604 **Combined Immunosuppression in High-Risk Patients with IgA Nephropathy?**

Jürgen Floege and Frank Eitner

- See related article by Pozzi et al. (pp. 1783–1790).

**Occasional Observation**

- 1607 **Where Is the Epidemic in Kidney Disease?**

Chi-yuan Hsu

**Brief Reviews**

- 1612 **Glomerular Epithelial Stem Cells: The Good, The Bad, and The Ugly**

Laura Lasagni and Paola Romagnani

- 1620 **Sirtuins and Their Relevance to the Kidney**

Chuan-Ming Hao and Volker H. Haase

**Special Article**

- 1628 **Histopathologic Classification of ANCA-Associated Glomerulonephritis**

Annelies E. Berden, Franco Ferrario, E. Christiaan Hagen, David R. Jayne, J. Charles Jennette, Kensuke Joh, Irmgard Neumann, Laure-Hélène Noël, Charles D. Pusey, Rüdiger Waldherr, Jan A. Bruijn, and Ingeborg M. Bajema

**Science in Renal Medicine**

- 1637 **Matrix Remodeling in Vascular Calcification Associated with Chronic Kidney Disease**

Ashwini S. Pai and Cecilia M. Giachelli

**BRIEF COMMUNICATION**

- 1641 **Kidney Stones Associate with Increased Risk for Myocardial Infarction**

Andrew D. Rule, Veronique L. Roger, L. Joseph Melton, III, Eric J. Bergstralh, Xujian Li, Patricia A. Peyser, Amy E. Krambeck, and John C. Lieske

**BASIC RESEARCH**

- 1645 **Reciprocal Regulation of Aquaporin-2 Abundance and Degradation by Protein Kinase A and p38-MAP Kinase**

Pavel I. Nedvetsky, Vedrana Tabor, Grazia Tamma, Sven Beulshausen, Philipp Skroblin, Aline Kirschner, Kerim Mutig, Mareike Boltzen, Oscar Petrucci, Anna Vossenkämper, Burkhard Wiesner, Sebastian Bachmann, Walter Rosenthal, and Enno Klusmann

- 1657 **Activation of NFAT Signaling in Podocytes Causes Glomerulosclerosis**

Yinqiu Wang, George Jarad, Piyush Tripathi, Minggui Pan, Jeanette Cunningham, Daniel R. Martin, Helen Liapis, Jeffrey H. Miner, and Feng Chen

**1667 High Potassium Intake Enhances the Inhibitory Effect of 11,12-EET on ENaC**

Peng Sun, Dao-Hong Lin, Peng Yue, Houli Jiang, Katherine H. Gotlinger, Michal L. Schwartzman, John R. Falck, Mohan Goli, and Wen-Hui Wang

**1678 ★ A Maladaptive Role for EP4 Receptors in Podocytes**

Erin M. Stitt-Cavanagh, Wissam H. Faour, Kaede Takami, Anthony Carter, Barbara Vanderhyden, Youfei Guan, Andre Schneider, Matthew D. Breyer, and Christopher R.J. Kennedy

- See related editorial by Sparks and Coffman (pp. 1597–1599).

**1691 ★ Glomerular Structure and Function Require Paracrine, Not Autocrine, VEGF–VEGFR-2 Signaling**

Karen Sison, Vera Eremina, Hans Baelde, Wang Min, Masanori Hirashima, I. George Fantus, and Susan E. Quaggin

- See related editorial by Parikh and Pollak (pp. 1599–1600).

**1702 Heme Oxygenase-1 Inhibits Renal Tubular Macroautophagy in Acute Kidney Injury**

Subhashini Bolisetty, Amie M. Traylor, Junghyun Kim, Reny Joseph, Karina Ricart, Aimee Landar, and Anupam Agarwal

- See related editorial by Kapitsinou and Haase (pp. 1600–1602).

**1713 Comparison of Active Vitamin D Compounds and a Calcimimetic in Mineral Homeostasis**

Loan Nguyen-Yamamoto, Isabel Bolivar, Stephen A. Strugnell, and David Goltzman

**1724 ★ Regulation of WNK1 Expression by miR-192 and Aldosterone**

Emilie Elvira-Matelot, Xiao-ou Zhou, Nicolette Farman, Geneviève Beaurain, Alexandra Henrion-Caude, Juliette Hadchouel, and Xavier Jeunemaitre

**1732 The NLRP3 Inflammasome Promotes Renal Inflammation and Contributes to CKD**

Akosua Vilaysane, Justin Chun, Mark E. Seamone, Wenjie Wang, Rick Chin, Simon Hirota, Yan Li, Sharon A. Clark, Jurg Tschopp, Kiril Trpkov, Brenda R. Hemmelgarn, Paul L. Beck, and Daniel A. Muruve

**1745 Deletion of the pH Sensor GPR4 Decreases Renal Acid Excretion**

Xuming Sun, Li V. Yang, Brian C. Tiegs, Lois J. Arend, Dennis W. McGraw, Raymond B. Penn, and Snezana Petrovic

## CLINICAL EPIDEMIOLOGY

**1757 ★ Albuminuria and Estimated Glomerular Filtration Rate Independently Associate with Acute Kidney Injury**

Morgan E. Grams, Brad C. Astor, Lori D. Bash, Kunihiro Matsushita, Yaping Wang, and Josef Coresh

- See related editorial by Cho and Hsu (pp. 1602–1604).

**1765 Hemoglobin Variability Does Not Predict Mortality in European Hemodialysis Patients**

Kai-Uwe Eckardt, Joseph Kim, Florian Kronenberg, Pedro Aljama, Stefan D. Anker, Bernard Canaud, Bart Molemans, Peter Stenvinkel, Guntram Schernthaner, Elizabeth Ireland, Bruno Fouqueray, and Iain C. Macdougall

**1776 Geographic Concentration of Poverty and Arteriovenous Fistula Use among ESRD Patients**

William M. McClellan, Haimanot Wasse, Ann C. McClellan, James Holt, Jenna Krisher, and Lance A. Waller

## CLINICAL RESEARCH

**1783 ★ Addition of Azathioprine to Corticosteroids Does Not Benefit Patients with IgA Nephropathy**

Claudio Pozzi, Simeone Andrulli, Antonello Pani, Patrizia Scaini, Lucia Del Vecchio, Giambattista Fogazzi, Bruno Vogt, Vincenzo De Cristofaro, Landino Allegri, Lino Cirami, Aldo Deni Procaccini, and Francesco Locatelli

- See related editorial by Floege and Eitner (pp. 1604–1606).

**1791 HLA Has Strongest Association with IgA Nephropathy in Genome-Wide Analysis**

John Feehally, Martin Farrall, Anne Boland, Daniel P. Gale, Ivo Gut, Simon Heath, Ashish Kumar, John F. Peden, Patrick H. Maxwell, David L. Morris, Sandosh Padmanabhan, Timothy J. Vyse, Anna Zawadzka, Andrew J. Rees, Mark Lathrop, and Peter J. Ratcliffe

**1798 ★ Hemofiltration and Hemodiafiltration Reduce Intradialytic Hypotension in ESRD**

Francesco Locatelli, Paolo Altieri, Simeone Andrulli, Piergiorgio Bolasco, Giovanna Sau, Luciano A. Pedrini, Carlo Basile, Salvatore David, Mariano Feriani, Giovanni Montagna, Biagio Raffaele Di Iorio, Bruno Memoli, Raffaella Cravero, Giovanni Battaglia, and Carmine Zoccali