

This Month's Highlights

UP FRONT MATTERS

Editorials

- 1667 **K-alcification Protection in Dialysis Patients: The Underestimated Phenomenon of Vitamin K Deficiency**

Markus Ketteler and Vincent Matthias Brandenburg

- See related article by Nigwekar et al. (pp. 1717–1722).

- 1669 **Vancomycin in the Kidney—A Novel Cast Nephropathy**

M. Barry Stokes

- See related article by Luque et al. (pp. 1723–1728).

- 1670 **Neutrophil Extracellular Traps Orchestrate Necroinflammation**

Nicolas Pallet

- See related articles by Nakazawa et al. (pp. 1753–1768).

- 1672 **Acidosis and Kidney Allograft Survival**

Kalani L. Raphael and Fuad S. Shihab

- See related article by Park et al. (pp. 1886–1897).

Perspective

- 1675 **Should Statins Be Banned from Dialysis?**

An S. De Vriese

Brief Reviews

- 1677 **Perspective on Clinical Application of Biomarkers in AKI**

Chirag R. Parikh and Sherry G. Mansour

- 1686 **MicroRNAs as Master Regulators of Glomerular Function in Health and Disease**

Piera Trionfini and Ariela Benigni

- 1697 **The ESRD Quality Incentive Program—Can We Bridge the Chasm?**

Daniel Weiner and Suzanne Watnick

Special Article

- 1707 **New Insights into Podocyte Biology in Glomerular Health and Disease**

Suheir Assady, Nicola Wanner, Karl L. Skorecki, and Tobias B. Huber

BRIEF COMMUNICATIONS

- 1717 **Vitamin K–Dependent Carboxylation of Matrix Gla Protein Influences the Risk of Calciphylaxis**

Sagar U. Nigwekar, Donald B. Bloch, Rosalynn M. Nazarian, Cees Vermeer, Sarah L. Booth, Dihua Xu, Ravi I. Thadhani, and Rajeev Malhotra

- See related editorial by Ketteler and Brandenburg (pp. 1667–1668).

- 1723 **Vancomycin-Associated Cast Nephropathy**

Yosu Luque, Kevin Louis, Chantal Jouanneau, Sandrine Placier, Emmanuel Esteve, Dominique Bazin, Eric Rondeau, Emmanuel Letavernier, Alice Wolfromm, Clément Gosset, Anna Boueilh, Maren Burbach, Perrine Frère, Marie-Christine Verpont, Sophie Vandermeersch, Dominique Langui, Michel Daudon, Vincent Frochot, and Laurent Mesnard

- See related editorial by Stokes (pp. 1669–1670).

BASIC RESEARCH

- 1729 ★ **Unique Transcriptional Programs Identify Subtypes of AKI**

Katherine Xu, Paul Rosenstiel, Neal Paragas, Christian Hinze, Xiaobo Gao, Tian Huai Shen, Max Werth, Catherine Forster, Rong Deng, Efrat Bruck, Roger W. Boles, Alexandra Tomato, Tejashree Gopal, Madison Jones, Justin König, Jacob Stauber, Vivette D'Agati, Hediye Erdjument-Bromage, Subodh Saggi, Gebhard Wagener, Kai M. Schmidt-Ott, Nicholas Tatonetti, Paul Tempst, Juan A. Oliver, Paolo Guarnieri, and Jonathan Barasch

- 1741 **Inhibition of $\alpha v \beta 5$ Integrin Attenuates Vascular Permeability and Protects against Renal Ischemia-Reperfusion Injury**

Amy McCurley, Stella Alimperti, Silvia B. Campos-Bilderback, Ruben M. Sandoval, Jenna E. Calvino, Taylor L. Reynolds, Catherine Quigley, Joshua W.

Mugford, William J. Polacheck, Ivan G. Gomez, Jennifer Dovey, Graham Marsh, Angela Huang, Fang Qian, Paul H. Weinreb, Brian M. Dolinski, Shaun Moore, Jeremy S. Duffield, Christopher S. Chen, Bruce A. Molitoris, Shelia M. Violette, and Michael A. Crackower

1753 Histones and Neutrophil Extracellular Traps Enhance Tubular Necrosis and Remote Organ Injury in Ischemic AKI

Daigo Nakazawa, Santhosh V. Kumar, Julian Marschner, Jyaysi Desai, Alexander Holderied, Lukas Rath, Franziska Kraft, Yutian Lei, Yuichiro Fukasawa, Gilbert W. Moeckel, Maria Lucia Angelotti, Helen Liapis, and Hans-Joachim Anders

- See related editorial by Pallet (pp. 1670–1672).

1769 ★Connective Tissue Growth Factor Domain 4 Amplifies Fibrotic Kidney Disease through Activation of LDL Receptor–Related Protein 6

Bryce G. Johnson, Shuyu Ren, Gamze Karaca, Ivan G. Gomez, Cécile Fligny, Benjamin Smith, Ayla Ergun, George Locke, Benbo Gao, Sebastian Hayes, Scott MacDonnell, and Jeremy S. Duffield

1783 Megalin Blockade with Cilastatin Suppresses Drug-Induced Nephrotoxicity

Yoshihisa Hori, Nobumasa Aoki, Shoji Kuwahara, Michihiro Hosojima, Ryohei Kaseda, Sawako Goto, Tomomichi Iida, Shankhajit De, Hideyuki Kabasawa, Reika Kaneko, Hiroyuki Aoki, Yoshinari Tanabe, Hiroshi Kagamu, Ichiei Narita, Toshiaki Kikuchi, and Akihiko Saito

1792 Diversification of Cell Lineages in Ureter Development

Tobias Bohnenpoll, Sarah Feraric, Marvin Nattkemper, Anna-Carina Weiss, Carsten Rudat, Max Meuser, Mark-Oliver Trowe, and Andreas Kispert

1802 ★Osmotic Stress–Induced Defective Glial Proteostasis Contributes to Brain Demyelination after Hyponatremia Treatment

Fabrice Gankam-Kengne, Bruno S. Couturier, Alain Soupart, Jean Pierre Brion, and Guy Decaux

1814 Potassium Sensing by Renal Distal Tubules Requires Kir4.1

Catherina A. Cuevas, Xiao-Tong Su, Ming-Xiao Wang, Andrew S. Terker, Dao-Hong Lin, James A. McCormick, Chao-Ling Yang, David H. Ellison, and Wen-Hui Wang

1826 Renal Collectrin Protects against Salt-Sensitive Hypertension and Is Downregulated by Angiotensin II

Pei-Lun Chu, Joseph C. Gigliotti, Sylvia Cechova, Gabor Bodonyi-Kovacs, Fang Chan, Donna Lee Ralph, Nancy Howell, Kambiz Kalantari, Alexander L. Klibanov, Robert M. Carey, Alicia A. McDonough, and Thu H. Le

CLINICAL EPIDEMIOLOGY

1839 ★Complications of the Arteriovenous Fistula: A Systematic Review

Ahmed A. Al-Jaishi, Aiden R. Liu, Charmaine E. Lok, Joyce C. Zhang, and Louise M. Moist

CLINICAL RESEARCH

1851 Effects of Ferric Citrate in Patients with Nondialysis-Dependent CKD and Iron Deficiency Anemia

Steven Fishbane, Geoffrey A. Block, Lisa Loram, John Neylan, Pablo E. Pergola, Katrin Uhlig, and Glenn M. Chertow

1859 Association between Soluble Klotho and Change in Kidney Function: The Health Aging and Body Composition Study

David A. Drew, Ronit Katz, Stephen Kritchevsky, Joachim Ix, Michael Shlipak, Orlando M. Gutiérrez, Anne Newman, Andy Hoofnagle, Linda Fried, Richard D. Semba, and Mark Sarnak

1867 Skin Sodium Concentration Correlates with Left Ventricular Hypertrophy in CKD

Markus P. Schneider, Ulrike Raff, Christoph Kopp, Johannes B. Scheppach, Sebastian Toncar, Christoph Wanner, Georg Schlieper, Turgay Saritas, Jürgen Floege, Matthias Schmid, Anna Birukov, Anke Dahlmann, Peter Linz, Rolf Janka, Michael Uder, Roland E. Schmieder, Jens M. Titze, and Kai-Uwe Eckardt

1877 ★Fibroblast Growth Factor 23 Levels Associate with AKI and Death in Critical Illness

David E. Leaf, Kirolos A. Jacob, Anand Srivastava, Margaret E. Chen, Marta Christov, Harald Jüppner, Venkata S. Sabbiseti, Aline Martin, Myles Wolf, and Sushrut S. Waikar

1886 Metabolic Acidosis and Long-Term Clinical Outcomes in Kidney Transplant Recipients

Seokwoo Park, Eunjeong Kang, Sehoon Park, Yong Chul Kim, Seung Seok Han, Jongwon Ha, Dong Ki Kim, Sejoong Kim, Su-Kil Park, Duck Jong

Han, Chun Soo Lim, Yon Su Kim, Jung Pyo Lee, and Young Hoon Kim

- See related editorial by Raphael and Shihab (pp. 1672–1674).

1898 A Trial of Extending Hemodialysis Hours and Quality of Life

Meg J. Jardine, Li Zuo, Nicholas A. Gray, Janak R. de Zoysa, Christopher T. Chan, Martin P. Gallagher, Helen Monaghan, Stuart M. Grieve, Rajesh Puranik, Hongli Lin, Josette M. Eris, Ling Zhang, Jinsheng Xu, Kirsten Howard, Serigne Lo, Alan Cass, and Vlado Perkovic, on behalf of the ACTIVE Dialysis Steering Committee

1912 Antibody-Mediated Rejection Due to Preexisting versus De Novo Donor-Specific Antibodies in Kidney Allograft Recipients

Olivier Aubert, Alexandre Loupy, Luis Hidalgo, Jean-Paul Duong van Huyen, Sarah Higgins, Denis Viglietti, Xavier Jouven, Denis Glotz, Christophe Legendre, Carmen Lefaucheur, and Philip F. Halloran

1924 A Variant of Peptide Transporter 2 Predicts the Severity of Porphyrin-Associated Kidney Disease

Dimitri Tchernitchko, Quentin Tavernier, Jérôme Lamoril, Caroline Schmitt, Neila Talbi, Said Lyoumi, Anne-Marie Robreau, Zoubida Karim, Laurent Gouya, Eric Thervet, Alexandre Karras, Hervé Puy, and Nicolas Pallet

1933 ★Effect of Tenapanor on Serum Phosphate in Patients Receiving Hemodialysis

Geoffrey A. Block, David P. Rosenbaum, Maria Leonsson-Zachrisson, Magnus Åstrand, Susanne Johansson, Mikael Knutsson, Anna Maria Langkilde, and Glenn M. Chertow

1943 Prognostic Value of Serum Biomarkers of Autoimmunity for Recurrence of IgA

Nephropathy after Kidney Transplantation
Francois Berthoux, Hitoshi Suzuki, Hesham Mohey, Nicolas Maillard, Christophe Mariat, Jan Novak, and Bruce A. Julian