

## This Month's Highlights

### UP FRONT MATTERS

#### Editorials

- 963 **Podocyte Expression of B7-1/CD80: Is it a Reliable Biomarker for the Treatment of Proteinuric Kidney Diseases with Abatacept?**

David J. Salant

• See related article by Gagliardini et al. (pp. 999–1005).

- 965 **Nephrin Trafficking beyond the Kidney—Role in Glucose–Stimulated Insulin Secretion in  $\beta$  Cells**

Sanna Lehtonen and Hannu Jalanko

• See related article by Villarreal et al. (pp. 1029–1041).

- 968 **The Dawning of a New Day in CKD Anemia Care?**

Colin R. Lenihan and Wolfgang C. Winkelmayer

• See related articles by Besarab et al. (pp. 1225–1233); and Holdstock et al. (pp. 1234–1244)

- 970 **Dialysis Vascular Access Intervention and the Search for Biomarkers**

Karl A. Nath

• See related article by Wu et al. (pp. 1254–1264).

#### Brief Reviews

- 973 **New Solutions to Reduce Discard of Kidneys Donated for Transplantation**

Peter P. Reese, Meera N. Harhay, Peter L. Abt, Matthew H. Levine, and Scott D. Halpern

- 981 **Potassium and Its Discontents: New Insight, New Treatments**

David H. Ellison, Andrew S. Terker, and Gerardo Gamba

#### Special Article

- 990 **Targeting Endogenous Repair Pathways after AKI**

Benjamin D. Humphreys, Vincenzo Cantaluppi, Didier Portilla, Kai Singbartl, Li Yang, Mitchell H. Rosner, John A. Kellum, and Claudio Ronco, for the Acute Dialysis Quality Initiative (ADQI) XIII Work Group

### BRIEF COMMUNICATIONS

- 999 **B7–1 Is Not Induced in Podocytes of Human and Experimental Diabetic Nephropathy**

Elena Gagliardini, Rubina Novelli, Daniela Corna, Carlamaria Zoja, Barbara Ruggiero, Ariela Benigni, and Giuseppe Remuzzi

• See related editorial by Salant (pp. 963–965).

- 1006 **Comparison of Glomerular and Podocyte mRNA Profiles in Streptozotocin-Induced Diabetes**

Jia Fu, Chengguo Wei, Kyung Lee, Weijia Zhang, Wu He, Peter Chuang, Zhihong Liu, and John Cijiang He

### BASIC RESEARCH

- 1015 **★A Quantitative Approach to Screen for Nephrotoxic Compounds *In Vitro***

Melanie Adler, Susanne Ramm, Marc Hafner, Jeremy L. Muhlich, Esther Maria Gottwald, Elijah Weber, Alenka Jaklic, Amrendra Kumar Ajay, Daniel Svoboda, Scott Auerbach, Edward J. Kelly, Jonathan Himmelfarb, and Vishal S. Vaidya

- 1029 **Nephrin Contributes to Insulin Secretion and Affects Mammalian Target of Rapamycin Signaling Independently of Insulin Receptor**

Rodrigo Villarreal, Alla Mitrofanova, Dony Maignel, Ximena Morales, Jongmin Jeon, Florian Grahmmer, Ingo B. Leibiger, Johanna Guzman, Alberto Fachado, Tae H. Yoo, Anja Busher Katin, Jutta Gellermann, Sandra Merscher, George W. Burke, Per-Olof Berggren, Jun Oh, Tobias B. Huber, and Alessia Fornoni

• See related editorial by Lehtonen and Jalanko (pp. 965–968).

- 1042 **HANAC Syndrome *Col4a1* Mutation Causes Neonate Glomerular Hyperpermeability and Adult Glomerulocystic Kidney Disease**

Zhiyong Chen, Tiffany Migeon, Marie-Christine Verpont, Mohamad Zaidan, Yoshikazu Sado, Donscho Kerjaschki, Pierre Ronco, and Emmanuelle Plaisier

- 1055 Essential Role of X-Box Binding Protein-1 during Endoplasmic Reticulum Stress in Podocytes**  
Hossam Hassan, Xuefei Tian, Kazunori Inoue, Nathan Chai, Chang Liu, Keita Soda, Gilbert Moeckel, Alda Tufro, Ann-Hwee Lee, Stefan Somlo, Sorin Fedeles, and Shuta Ishibe
- 1066 Loss of Epithelial Membrane Protein 2 Aggravates Podocyte Injury via Upregulation of Caveolin-1**  
Xiaoyang Wan, Zhaohong Chen, Won-Il Choi, Heon Yung Gee, Friedhelm Hildebrandt, and Weibin Zhou
- 1076 Sphingosine 1-Phosphate Receptor 3–Deficient Dendritic Cells Modulate Splenic Responses to Ischemia-Reperfusion Injury**  
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- 1091 Phosphorylation of Ribosomal Protein S6 Mediates Mammalian Target of Rapamycin Complex 1–Induced Parathyroid Cell Proliferation in Secondary Hyperparathyroidism**  
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- 1102 Three-Dimensional Morphology by Multiphoton Microscopy with Clearing in a Model of Cisplatin-Induced CKD**  
Richard Torres, Heino Velazquez, John J. Chang, Michael J. Levene, Gilbert Moeckel, Gary V. Desir, and Robert Safirstein
- 1113 ★Double-Negative  $\alpha\beta$  T Cells Are Early Responders to AKI and Are Found in Human Kidney**  
Maria N. Martina, Sanjeev Noel, Ankit Saxena, Samatha Bandapalle, Richa Majithia, Chunfa Jie, Lois J. Arend, Mohamad E. Allaf, Hamid Rabb, and Abdel Rahim A. Hamad
- 1124 Phosphodiesterase Isoform Regulation of Cell Proliferation and Fluid Secretion in Autosomal Dominant Polycystic Kidney Disease**  
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- 1135 Phosphoinositide 3-Kinase-C2 $\alpha$  Regulates Polycystin-2 Ciliary Entry and Protects against Kidney Cyst Formation**  
Irene Franco, Jean Piero Margaria, Maria Chiara De Santis, Andrea Ranghino, Daniel Monteyne, Marco Chiaravalli, Monika Pema, Carlo Cosimo Campa, Edoardo Ratto, Federico Gulluni, David Perez-Morga, Stefan Somlo, Giorgio R. Merlo, Alessandra Boletta, and Emilio Hirsch
- 1145 Blocking rpS6 Phosphorylation Exacerbates *Tsc1* Deletion–Induced Kidney Growth**  
Huijuan Wu, Jianchun Chen, Jinxian Xu, Zheng Dong, Oded Meyuhas, and Jian-Kang Chen
- 1159 ★The Polycystin-1, Lipoxygenase, and  $\alpha$ -Toxin Domain Regulates Polycystin-1 Trafficking**  
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- CLINICAL EPIDEMIOLOGY**
- 1175 A Metabolome-Wide Association Study of Kidney Function and Disease in the General Population**  
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- 1190 Predictors of Recurrent AKI**  
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- 1202 ★Urinary Sodium and Potassium Excretion and CKD Progression**  
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## CLINICAL RESEARCH

### 1213 ★Spectrum and Prognosis of Noninfectious Renal Mixed Cryoglobulinemic GN

Mohamad Zaidan, Benjamin Terrier, Agnieszka Pozdzik, Thierry Frouget, Nathalie Rioux-Leclercq, Christian Combe, Sébastien Lepreux, Aurélie Hummel, Laure-Hélène Noël, Isabelle Marie, Bruno Legallicier, Arnaud François, Antoine Huart, David Launay, Gilles Kaplanski, Frank Bridoux, Philippe Vanhille, Raifah Makdassi, Jean-François Augusto, Philippe Rouvier, Alexandre Karras, Chantal Jouanneau, Marie-Christine Verpont, Patrice Callard, Fabrice Carrat, Olivier Hermine, Jean-Marc Léger, Xavier Mariette, Patricia Senet, David Saadoun, Pierre Ronco, Isabelle Brochériou, Patrice Cacoub, Emmanuelle Plaisier, and the CryoVas study group

### 1225 Roxadustat (FG-4592): Correction of Anemia in Incident Dialysis Patients

Anatole Besarab, Elena Chernyavskaya, Igor Motylev, Evgeny Shutov, Lalathaksha M. Kumbar, Konstantin Gurevich, Daniel Tak Mao Chan, Robert Leong, Lona Poole, Ming Zhong, Khalil G. Saikali, Marietta Franco, Stefan Hemmerich, Kin-Hung Peony Yu, and Thomas B. Neff

- See related editorial by Lenihan and Winkelmayr (pp. 968–970).

### 1234 Four-Week Studies of Oral Hypoxia-Inducible Factor–Prolyl Hydroxylase Inhibitor GSK1278863 for Treatment of Anemia

Louis Holdstock, Amy M. Meadowcroft, Rayma Maier, Brendan M. Johnson, Delyth Jones, Anjay Rastogi, Steven Zeig, John J. Lepore, and Alexander R. Cobitz

- See related editorial by Lenihan and Winkelmayr (pp. 968–970).

### 1245 ★High-Throughput Genetic Testing for Thrombotic Microangiopathies and C3 Glomerulopathies

Fengxiao Bu, Nicolo Ghiringhelli Borsa, Michael B. Jones, Erika Takanami, Carla Nishimura, Jill J. Hauer, Hela Azaiez, Elizabeth A. Black-Ziegelbein, Nicole C. Meyer, Diana L. Kolbe, Yingyue Li, Kathy Frees, Michael J. Schnieders, Christie Thomas, Carla Nester, and Richard J.H. Smith

### 1254 Serum Indoxyl Sulfate Associates with Postangioplasty Thrombosis of Dialysis Grafts

Chih-Cheng Wu, Mu-Yang Hsieh, Szu-Chun Hung, Ko-Lin Kuo, Tung-Hu Tsai, Chao-Lun Lai, Jaw-Wen Chen, Shing-Jong Lin, Po-Hsun Huang, and Der-Cherng Tarng

- See related editorial by Nath (pp. 970–972).