

## This Month's Highlights

### UP FRONT MATTERS

#### Editorials

1755 **Gut Feeling in AKI: The Long Arm of Short-Chain Fatty Acids**

Ian R. Barrows, Ali Ramezani, and Dominic S. Raj

- See related article by Andrade-Oliveira et al. (pp. 1877–1888).

1757 **From Patient to Dish and Back Again: Are We There Yet?**

Uta Kunter and Marcus J. Moeller

- See related article by Lazzeri et al. (pp. 1961–1974).

1760 **Can the Urinary Peptidome Outperform Creatinine and Albumin to Predict Renal Function Decline?**

Michael L. Merchant

- See related article by Schanstra et al. (pp. 1999–2010)

1762 **The Furosemide Stress Test and Predicting AKI Outcomes**

T. Clark Powell and David G. Warnock

- See related article by Koyner et al. (pp. 2023–2031)

#### Brief Review

1765 **Failed Tubule Recovery, AKI-CKD Transition, and Kidney Disease Progression**

Manjeri A. Venkatachalam, Joel M. Weinberg, Wilhelm Kriz, and Anil K. Bidani

#### Pathophysiology of the Renal Biopsy

1777 **Direct Reversible Kidney Injury in Familial Hemophagocytic Lymphohistiocytosis Type 3**

Laura Malaga-Diequez, Wu Ming, and Howard Trachtman

### BRIEF COMMUNICATIONS

1781 **The Effect of WNK4 on the Na<sup>+</sup>-Cl<sup>-</sup> Cotransporter Is Modulated by Intracellular Chloride**

Silvana Bazúa-Valenti, María Chávez-Canales, Lorena Rojas-Vega, Xochiquetzal González-Rodríguez,

Norma Vázquez, Alejandro Rodríguez-Gama, Eduardo R. Argai, Zesergio Melo, Consuelo Plata, David H. Ellison, Jesús García-Valdés, Juliette Hadchouel, and Gerardo Gamba

1787 **Alteration of the Intestinal Environment by Lubiprostone Is Associated with Amelioration of Adenine-Induced CKD**

Eikan Mishima, Shinji Fukuda, Hisato Shima, Akiyoshi Hirayama, Yasutoshi Akiyama, Yoichi Takeuchi, Noriko N. Fukuda, Takehiro Suzuki, Chitose Suzuki, Akinori Yuri, Koichi Kikuchi, Yoshihisa Tomioka, Sadayoshi Ito, Tomoyoshi Soga, and Takaaki Abe

### BASIC RESEARCH

1795 **Central Role of CD45RA<sup>-</sup> Foxp3<sup>hi</sup> Memory Regulatory T Cells in Clinical Kidney Transplantation Tolerance**

Faouzi Braza, Emilie Dugast, Ivo Panov, Chloé Paul, Katrin Vogt, Annaick Pallier, Mélanie Chesneau, Daniel Baron, Pierrick Guerif, Hong Lei, David-Axel Laplaud, Hans-Dieter Volk, Nicolas Degauque, Magali Giral, Jean-Paul Soulillou, Birgit Sawitzki, and Sophie Brouard

1806 **Midkine Regulates BP through Cytochrome P450-Derived Eicosanoids**

Yuka Sato, Waichi Sato, Shoichi Maruyama, Christopher S. Wilcox, John R. Falck, Tomohiro Masuda, Tomoki Kosugi, Hiroshi Kojima, Kayaho Maeda, Kazuhiro Furuhashi, Masahiko Ando, Enyu Imai, Seiichi Matsuo, and Kenji Kadomatsu

1816 **Molecular Mechanism for Hypertensive Renal Disease: Differential Regulation of Chromogranin A Expression at 3'-Untranslated Region Polymorphism C+87T by MicroRNA-107**

Kuixing Zhang, Saiful A. Mir, C. Makena Hightower, Jose Pablo Miramontes-Gonzalez, Adam X. Maihofer, Yuqing Chen, Sushil K. Mahata, Caroline M. Nievergelt, Nicholas J. Schork, Barry I. Freedman, Sucheta M. Vaingankar, and Daniel T. O'Connor

- 1827 GQ5 Hinders Renal Fibrosis in Obstructive Nephropathy by Selectively Inhibiting TGF- $\beta$ -Induced Smad3 Phosphorylation**  
Jun Ai, Jing Nie, Jiangbo He, Qin Guo, Mei Li, Ying Lei, Youhua Liu, Zhanmei Zhou, Fengxin Zhu, Min Liang, Yongxian Cheng, and Fan Fan Hou
- 1839 ★SREBP-1 Mediates Angiotensin II-Induced TGF- $\beta$ 1 Upregulation and Glomerular Fibrosis**  
Tony N. Wang, Xing Chen, Renzhong Li, Bo Gao, Zahraa Mohammed-Ali, Chao Lu, Victoria Yum, Jeffrey G. Dickhout, and Joan C. Krepinsky
- 1855 ★Evidence of a Role for Fibroblast Transient Receptor Potential Canonical 3 Ca<sup>2+</sup> Channel in Renal Fibrosis**  
Youakim Saliba, Ralph Karam, Viviane Smayra, Georges Aftimos, Joel Abramowitz, Lutz Birnbaumer, and Nassim Farès
- 1877 Gut Bacteria Products Prevent AKI Induced by Ischemia-Reperfusion**  
Vinicius Andrade-Oliveira, Mariane T. Amano, Matheus Correa-Costa, Angela Castoldi, Raphael J.F. Felizardo, Danilo C. de Almeida, Enio J. Bassi, Pedro M. Moraes-Vieira, Meire I. Hiyane, Andrea C.D. Rodas, Jean P.S. Peron, Cristhiane F. Aguiar, Marlene A. Reis, William R. Ribeiro, Claudete J. Valduga, Rui Curi, Marco Aurelio Ramirez Vinolo, Caroline M. Ferreira, and Niels Olsen Saraiva Câmara  
• See related editorial by Barrows et al. (pp. 1755–1757).
- 1889 ★Vascular Endothelial Growth Factor-A<sub>165b</sub> Is Protective and Restores Endothelial Glycocalyx in Diabetic Nephropathy**  
Sebastian Oltean, Yan Qiu, Joanne K. Ferguson, Megan Stevens, Chris Neal, Amy Russell, Amit Kaura, Kenton P. Arkill, Kirstie Harris, Clare Symonds, Katja Lacey, Lihini Wijeyaratne, Melissa Gammons, Emma Wylie, Richard P. Hulse, Chloe Alsop, George Cope, Gopinath Damodaran, Kai B. Betteridge, Raina Ramnath, Simon C. Satchell, Rebecca R. Foster, Kurt Ballmer-Hofer, Lucy F. Donaldson, Jonathan Barratt, Hans J. Baelde, Steven J. Harper, David O. Bates, and Andrew H.J. Salmon
- 1905 Glomerular Autoimmune Multicomponents of Human Lupus Nephritis *In Vivo* (2): Planted Antigens**  
Maurizio Bruschi, Maricla Galetti, Renato Alberto Sinico, Gabriella Moroni, Alice Bonanni, Antonella Radice, Angela Tincani, Federico Pratesi, Paola Migliorini, Corrado Murtas, Franco Franceschini, Barbara Trezzi, Francesca Brunini, Rita Gatti, Regina Tardanico, Giancarlo Barbano, Giorgio Piaggio, Piergiorgio Messa, Pietro Ravani, Francesco Scolari, Giovanni Candiano, Alberto Martini, Landino Allegri, and Gian Marco Ghiggeri
- 1925 Inhibition of Thrombin-Activated Fibrinolysis Inhibitor Increases Survival in Experimental Kidney Fibrosis**  
John M. Atkinson, Nick Pullen, Michelle Da Silva-Lodge, Lynne Williams, and Tim S. Johnson
- 1939 Sirtuin1 Maintains Actin Cytoskeleton by Deacetylation of Cortactin in Injured Podocytes**  
Shuta Motonishi, Masaomi Nangaku, Takehiko Wada, Yu Ishimoto, Takamoto Ohse, Taiji Matsusaka, Naoto Kubota, Akira Shimizu, Takashi Kadowaki, Kazuyuki Tobe, and Reiko Inagi
- 1961 Human Urine-Derived Renal Progenitors for Personalized Modeling of Genetic Kidney Disorders**  
Elena Lazzeri, Elisa Ronconi, Maria Lucia Angelotti, Anna Peired, Benedetta Mazzinghi, Francesca Becherucci, Sara Conti, Giulia Sansavini, Alessandro Sisti, Fiammetta Ravaglia, Duccio Lombardi, Aldesia Provenzano, Anna Manonelles, Josep M. Cruzado, Sabrina Giglio, Rosa Maria Roperto, Marco Materassi, Laura Lasagni, and Paola Romagnani  
• See related editorial by Kunter and Moeller (pp. 1757–1759).
- ## CLINICAL EPIDEMIOLOGY
- 1975 Trends in the Timing and Clinical Context of Maintenance Dialysis Initiation**  
Ann M. O'Hare, Susan P. Wong, Margaret K. Yu, Bruce Wynar, Mark Perkins, Chuan-Fen Liu, Jaclyn M. Lemon, and Paul L. Hebert
- 1982 Comparing GFR Estimating Equations Using Cystatin C and Creatinine in Elderly Individuals**  
Li Fan, Andrew S. Levey, Vilmundur Gudnason, Gudny Eiriksdottir, Margret B. Andresdottir, Hrefna Gudmundsdottir, Olafur S. Indridason, Runolfur Palsson, Gary Mitchell, and Lesley A. Inker
- 1990 ★Provider Visits and Early Vascular Access Placement in Maintenance Hemodialysis**  
Kevin F. Erickson, Matthew Mell, Wolfgang C. Winkelmayr, Glenn M. Chertow, and Jay Bhattacharya
- ## CLINICAL RESEARCH
- 1999 Diagnosis and Prediction of CKD Progression by Assessment of Urinary Peptides**  
Joost P. Schanstra, Petra Zürgbig, Alaa Alkhalaf, Angel Argiles, Stephan J.L. Bakker, Joachim Beige, Henk J.G. Bilo, Christos Chatzikyrou, Mohammed

Dakna, Jesse Dawson, Christian Delles, Hermann Haller, Marion Haubitz, Holger Husi, Joachim Jankowski, George Jerums, Nanne Kleefstra, Tatiana Kuznetsova, David M. Maahs, Jan Menne, William Mullen, Alberto Ortiz, Frederik Persson, Peter Rossing, Piero Ruggenenti, Ivan Rychlik, Andreas L. Serra, Justyna Siwy, Janet Snell-Bergeon, Goce Spasovski, Jan A. Staessen, Antonia Vlahou, Harald Mischak, and Raymond Vanholder

- See related editorial by Merchant (pp. 1760–1761).

**2011 Risk of Adverse Pregnancy Outcomes in Women with CKD**

Giorgina Barbara Piccoli, Gianfranca Cabiddu, Rossella Attini, Federica Neve Vigotti, Stefania Maxia, Nicola Lepori, Milena Tuveri, Marco Massidda, Cecilia Marchi, Silvia Mura, Alessandra Coscia, Marilisa Biolcati, Pietro Gaglioti, Michele Nichelatti, Luciana Pibiri, Giuseppe Chessa, Antonello Pani, and Tullia Todros

**2023 Furosemide Stress Test and Biomarkers for the Prediction of AKI Severity**

Jay L. Koyner, Danielle L. Davison, Ermira Brasha-Mitchell, Divya M. Chalikonda, John M. Arthur, Andrew D. Shaw, James A. Tumlin, Sharon A. Trevino, Michael R.

Bennett, Paul L. Kimmel, Michael G. Seneff, and Lakhmir S. Chawla

- See related editorial by Powell and Warnock (pp. 1762–1764).

**2032 Urinary Angiotensinogen Level Predicts AKI in Acute Decompensated Heart Failure: A Prospective, Two-Stage Study**

Xiaobing Yang, Chunbo Chen, Jianwei Tian, Yan Zha, Yuqin Xiong, Zhaolin Sun, Pingyan Chen, Jun Li, Tiecheng Yang, Changsheng Ma, Huafeng Liu, Xiaobin Wang, and Fan Fan Hou

**2042 ★ A Three-Gene Assay for Monitoring Immune Quiescence in Kidney Transplantation**

Silke Roedder, Li Li, Michael N. Alonso, Szu-Chuan Hsieh, Minh Thien Vu, Hong Dai, Tara K. Sigdel, Ian Bostock, Camila Macedo, Diana Metes, Adrianna Zeevi, Ron Shapiro, Oscar Salvatierra, John Scandling, Josefina Alberu, Edgar Engleman, and Minnie M. Sarwal

**META-ANALYSIS**

**2055 ★ Drug-Induced Reduction in Albuminuria Is Associated with Subsequent Renoprotection: A Meta-Analysis**

Hiddo J. Lambers Heerspink, Tobias F. Kröppelin, Jarno Hoekman, and Dick de Zeeuw, on behalf of the Reducing Albuminuria as Surrogate Endpoint (REASSURE) Consortium