

This Month's Highlights

UP FRONT MATTERS

Obituary

- 2029 **Donald Seldin: A Transformative Leader in Medicine and Nephrology**
Robert Alpern and Gerhard Giebisch

Editorials

- 2031 **AI: What Have You Done for Us Lately?**
Richard Torres and Eben Olson
• See related article by Bukowy et al. (pp. 2081–2088).
- 2032 **Novel Approaches to Control of the Alternative Complement Pathway for the Treatment of C3 Glomerulopathies**
Mohamed R. Daha and Marc Seelen
• See related article by Wang et al. (pp. 2053–2059).
- 2033 **Now or Later? Understanding Timing of Dialysis Initiation beyond IDEAL**
Dena E. Rifkin
• See related article by Kurella Tamura et al. (pp. 2169–2177).

Perspective

- 2036 ★ **Single-Cell Sequencing the Glomerulus, Unraveling the Molecular Programs of Glomerular Filtration, One Cell at a Time**
Matthias Kretzler and Rajasree Menon
• See related articles by Karaïskos et al. (pp. 2060–2068); and Wu et al. (pp. 2069–2080).

Review

- 2039 **Nephrotoxicity of Cancer Immunotherapies: Past, Present and Future**
Mark A. Perazella and Anushree C. Shirali

RAPID COMMUNICATIONS

- 2053 **Prevention of Fatal C3 Glomerulopathy by Recombinant Complement Receptor of the Ig Superfamily**
Xiaoxu Wang, Menno Van Lookeren Campagne, Kenneth J. Katschke Jr., Damodar Gullipalli, Takashi Miwa, Yoshiyasu Ueda, Yuan Wang, Matthew Palmer, Guolan Xing, and Wen-Chao Song
• See related editorial by Daha and Seelen (pp. 2032–2033).

- 2060 ★ **A Single-Cell Transcriptome Atlas of the Mouse Glomerulus**
Nikos Karaïskos, Mahdieh Rahmatollahi, Anastasiya Boltengagen, Haiyue Liu, Martin Hoehne, Markus Rinschen, Bernhard Schermer, Thomas Benzing, Nikolaus Rajewsky, Christine Kocks, Martin Kann, and Roman-Ulrich Müller
• See related perspective by Kretzler and Menon (pp. 2036–2038).

BASIC RESEARCH

- 2069 ★ **Single-Cell Transcriptomics of a Human Kidney Allograft Biopsy Specimen Defines a Diverse Inflammatory Response**
Haojia Wu, Andrew F. Malone, Erinn L. Donnelly, Yuhei Kirita, Kohei Uchimura, Sai M. Ramakrishnan, Joseph P. Gaut, and Benjamin D. Humphreys
• See related perspective by Kretzler and Menon (pp. 2036–2038).

- 2081 ★ **Region-Based Convolutional Neural Nets for Localization of Glomeruli in Trichrome-Stained Whole Kidney Sections**
John D. Bukowy, Alex Dayton, Dustin Cloutier, Anna D. Manis, Alexander Staruschenko, Julian H. Lombard, Leah C. Solberg Woods, Daniel A. Beard, and Allen W. Cowley Jr.
• See related editorial by Torres and Olson (pp. 2031–2032).

2089 ★ **A Controlled Increase in Dietary Phosphate Elevates BP in Healthy Human Subjects**
Jaber Mohammad, Roberto Scanni, Lukas Bestmann, Henry N. Hulter, and Reto Krapf

2099 **The Calcium-Dependent Protease Calpain-1 Links TRPC6 Activity to Podocyte Injury**
Kim A.T. Verheijden, Ramon Sonneveld, Marinka Bakker-van Bebbber, Jack F.M. Wetzels, Johan van der Vlag, and Tom Nijenhuis

2110 **The Human FSGS-Causing ANLN R431C Mutation Induces Dysregulated PI3K/AKT/mTOR/Rac1 Signaling in Podocytes**
Gentzon Hall, Brandon M. Lane, Kamal Khan, Igor Padiaditakis, Jianqiu Xiao, Guanghong Wu, Liming Wang, Maria E. Kovalik, Megan Chryst-Stangl, Erica E. Davis, Robert F. Spurney, and Rasheed A. Gbadegesin

2123 **GAPVD1 and ANKFY1 Mutations Implicate RAB5 Regulation in Nephrotic Syndrome**
Tobias Hermle, Ronen Schneider, David Schapiro, Daniela A. Braun, Amelie T. van der Ven, Jillian K. Warejko, Ankana Daga, Eugen Widmeier, Makiko Nakayama, Tilman Jobst-Schwan, Amar J. Majmundar, Shazia Ashraf, Jia Rao, Laura S. Finn, Velibor Tasic, Joel D. Hernandez, Arvind Bagga, Sawsan M. Jalalah, Sherif El Desoky, Jameela A. Kari, Kristen M. Laricchia, Monkol Lek, Heidi L. Rehm, Daniel G. MacArthur, Shrikant Mane, Richard P. Lifton, Shirlee Shril, and Friedhelm Hildebrandt

2139 **Somatic Mutations in Renal Cyst Epithelium in Autosomal Dominant Polycystic Kidney Disease**
Adrian Y. Tan, Tuo Zhang, Alber Michael, Jon Blumenfeld, Genyan Liu, Wanying Zhang, Zhengmao Zhang, Yi Zhu, Lior Rennert, Che Martin, Jenny Xiang, Steven P. Salvatore, Brian D. Robinson, Sandip Kapur, Stephanie Donahue, Warren O. Bobb, and Hanna Rennert

2157 **Mechanisms Underlying Increased TIMP2 and IGFBP7 Urinary Excretion in Experimental AKI**
Ali C.M. Johnson and Richard A. Zager

CLINICAL EPIDEMIOLOGY

2169 ★ **Dialysis versus Medical Management at Different Ages and Levels of Kidney Function in Veterans with Advanced CKD**
Manjula Kurella Tamura, Manisha Desai, Kristopher I. Kapphahn, I-Chun Thomas, Steven M. Asch, and Glenn M. Chertow
• See related editorial by Rifkin (pp. 2033–2035).

2178 **Failed Target Weight Achievement Associates with Short-Term Hospital Encounters among Individuals Receiving Maintenance Hemodialysis**
Magdalene M. Assimon, Lily Wang, and Jennifer E. Flythe

2189 **Strong Association of the HLA-DR/DQ Locus with Childhood Steroid-Sensitive Nephrotic Syndrome in the Japanese Population**
Xiaoyuan Jia, Tomoko Horinouchi, Yuki Hitomi, Akemi Shono, Seik-Soon Khor, Yosuke Omae, Kaname Kojima, Yosuke Kawai, Masao Nagasaki, Yoshitsugu Kaku, Takayuki Okamoto, Yoko Ohwada, Kazuhide Ohta, Yusuke Okuda, Rika Fujimaru, Ken Hatae, Naonori Kumagai, Emi Sawanobori, Hitoshi Nakazato, Yasufumi Ohtsuka, Koichi Nakanishi, Yuko Shima, Ryojiro Tanaka, Akira Ashida, Koichi Kamei, Kenji Ishikura, Kandai Nozu, Katsushi Tokunaga, and Kazumoto Iijima, and for the Research Consortium on Genetics of Childhood Idiopathic Nephrotic Syndrome in Japan

2200 ★ **Decline in Kidney Function among Apparently Healthy Young Adults at Risk of Mesoamerican Nephropathy**
Marvin Gonzalez-Quiroz, Evangelia-Theano Smpokou, Richard J. Silverwood, Armando Camacho, Dorien Faber, Brenda La Rosa Garcia, Amin Oomatia, Michael Hill, Jason Glaser, Jennifer Le Blond, Catharina Wesseling, Aurora Aragon, Liam Smeeth, Neil Pearce, Dorothea Nitsch, and Ben Caplin

CLINICAL RESEARCH

2213 **The Prognostic Value of Histopathologic Lesions in Native Kidney Biopsy Specimens: Results from the Boston Kidney Biopsy Cohort Study**
Anand Srivastava, Ragnar Palsson, Arnaud D. Kaze, Margaret E. Chen, Polly Palacios, Venkata Sabbiseti, Rebecca A. Betensky, Theodore I. Steinman, Ravi I. Thadhani, Gearoid M. McMahon, Isaac E. Stillman, Helmut G. Rennke, and Sushrut S. Waikar

2225 **Early Proteinuria Lowering by Angiotensin-Converting Enzyme Inhibition Predicts Renal Survival in Children with CKD**
Sophie M. van den Belt, Hidde J.L. Heerspink, Valentina Gracchi, Dick de Zeeuw, Elke Wühl, and Franz Schaefer, and on behalf of the ESCAPE Trial Group

2234 C5b9 Formation on Endothelial Cells Reflects Complement Defects among Patients with Renal Thrombotic Microangiopathy and Severe Hypertension

Sjoerd A.M.E.G. Timmermans, Myrurgia A. Abdul-Hamid, Judith Potjewijd, Ruud O.M.F.I.H. Theunissen, Jan G.M.C. Damoiseaux, Chris P. Reutelingsperger, Pieter van Paassen, and on behalf of the Limburg Renal Registry

2244 Detection of Splicing Abnormalities and Genotype-Phenotype Correlation in X-linked Alport Syndrome

Tomoko Horinouchi, Kandai Nozu, Tomohiko Yamamura, Shogo Minamikawa, Takashi Omori, Keita

Nakanishi, Junya Fujimura, Akira Ashida, Mineaki Kitamura, Mitsuhiro Kawano, Wataru Shimabukuro, Chizuko Kitabayashi, Aya Imafuku, Keiichi Tamagaki, Koichi Kamei, Kenjiro Okamoto, Shuichiro Fujinaga, Masafumi Oka, Toru Igarashi, Akinori Miyazono, Emi Sawanobori, Rika Fujimaru, Koichi Nakanishi, Yuko Shima, Masafumi Matsuo, Ming Juan Ye, Yoshimi Nozu, Naoya Morisada, Hiroshi Kaito, and Kazumoto Iijima

2255 ERRATA