

1021 **This Month's Highlights**

Future Articles

ASN News

1023 **Nephrology beyond JASN**

Editorials

1027 **Adult Nephrology Fellowship Training in the United States: Trends and Issues**
Mark E. Rosenberg

1034 **Declassifying Glomerulonephritis**
Daniel Zecher and Fadi G. Lakkis
→ See related article by Wu et al. (pp. 1180–1189).

1036 **Glomerular Filtration Rate and Albuminuria: Twin Manifestations of Nephropathy in Diabetes**
Ian H. de Boer and Michael W. Steffes
→ See related article by Perkins et al. (pp. 1353–1361).

Presidential Address

1038 **American Society of Nephrology Presidential Address 2006: Chronic Kidney Disease as a Public Health Threat—New Strategy for a Growing Problem**
Thomas D. DuBose, Jr.

Reviews

1046 **Antibody-Mediated Renal Allograft Rejection: Diagnosis and Pathogenesis**
Robert B. Colvin

1057 **Advances in Urinary Proteome Analysis and Biomarker Discovery**
Danilo Fliser, Jan Novak, Visith Thongboonkerd, Angel Argilés, Vera Jankowski, Mark A. Girolami, Joachim Jankowski, and Harald Mischak

Basic Science Articles

Cell and Transport Physiology

1072 ★ **Regulation of Renal Sodium Transporters during Severe Inflammation**
Christoph Schmidt, Klaus Höcherl, Frank Schweda, Armin Kurtz, and Michael Bucher

1084 **Early Aldosterone-Induced Gene Product Regulates the Epithelial Sodium Channel by Deubiquitylation**
Panagiotis Fakitsas, Gabriele Adam, Dorothée Daidié, Miguel X. van Bemmelen, Fatemeh Fouladkou, Andrea Patrignani, Ulrich Wagner, Richard Warth, Simone M.R. Camargo, Olivier Staub, and François Verrey

Cell Biology

- 1093 ★ **Human T and Natural Killer Cells Possess a Functional Renin-Angiotensin System: Further Mechanisms of Angiotensin II-Induced Inflammation**
Mollie Jurewicz, David H. McDermott, Joan M. Sechler, Kathryn Tinckam, Ayumi Takakura, Charles B. Carpenter, Edgar Milford, and Reza Abdi
- 1103 **Lack of Connexin 40 Causes Displacement of Renin-Producing Cells from Afferent Arterioles to the Extraglomerular Mesangium**
Lisa Kurtz, Frank Schweda, Cor de Wit, Wilhelm Kriz, Ralph Witzgall, Richard Warth, Alexander Sauter, Armin Kurtz, and Charlotte Wagner
- 1112 **Antineutrophil Cytoplasm Antibody-Stimulated Neutrophil Adhesion Depends on Diacylglycerol Kinase-Catalyzed Phosphatidic Acid Formation**
Julie M. Williams, Trevor R. Pettitt, Wendy Powell, Joseph Grove, Caroline O.S. Savage, and Michael J.O. Wakelam

Genetics and Development

- 1121 ***Pax2* and *Pax8* Regulate Branching Morphogenesis and Nephron Differentiation in the Developing Kidney**
Melina Narlis, David Grote, Yaned Gaitan, Sami K. Boualia, and Maxime Bouchard
- 1130 **Glycogen Synthase Kinase-3 Inactivation and Stabilization of β -Catenin Induce Nephron Differentiation in Isolated Mouse and Rat Kidney Mesenchymes**
Satu Kuure, Anna Popsueva, Madis Jakobson, Kirsi Sainio, and Hannu Sariola
- 1140 **The Bradykinin B2 Receptor Gene Is a Target of Angiotensin II Type 1 Receptor Signaling**
Bing Shen, Lisa M. Harrison-Bernard, Andrew J. Fuller, Vanessa Vanderpool, Zubaida Saifudeen, and Samir S. El-Dahr

Hemodynamics and Vascular Regulation

- 1150 **Pituitary Adenylate Cyclase-Activating Polypeptide Stimulates Renin Secretion *via* Activation of PAC1 Receptors**
Matthias Hautmann, Ulla G. Friis, Michael Desch, Vladimir Todorov, Hayo Castrop, Florian Segerer, Christiane Otto, Günther Schütz, and Frank Schweda

Basic Immunology and Pathology

- 1157 **Mouse Podocyte Complement Factor H: The Functional Analog to Human Complement Receptor 1**
Jessy J. Alexander, Ying Wang, Anthony Chang, Alexander Jacob, Andrew W.M. Minto, Menaka Karmegam, Mark Haas, and Richard J. Quigg
- 1167 **Inhibition of p38 Mitogen-Activated Protein Kinase Is Effective in the Treatment of Experimental Crescentic Glomerulonephritis and Suppresses Monocyte Chemoattractant Protein-1 but Not IL-1 β or IL-6**
Abdulmunem Sheryanna, Gurjeet Bhargal, John McDaid, Jennifer Smith, Anthony Manning, Brian M.J. Foxwell, Marc Feldmann, H. Terence Cook, Charles D. Pusey, and Frederick W.K. Tam
- 1180 ★ **Depletion of $\gamma\delta$ T Cells Exacerbates Murine Adriamycin Nephropathy**
Huiling Wu, Yuan Min Wang, Yiping Wang, Min Hu, Geoff Yu Zhang, John F. Knight, David C.H. Harris, and Stephen I. Alexander
→ See related editorial by Zecher and Lakkis (pp. 1034–1035).

Pathophysiology of Renal Disease and Progression

- 1190 **Deletion of Protein Kinase C- ϵ Signaling Pathway Induces Glomerulosclerosis and Tubulointerstitial Fibrosis *In Vivo***
Matthias Meier, Jan Menne, Joon-Keun Park, Marcel Holtz, Faikah Gueler, Thorsten Kirsch, Mario Schiffer, Michael Mengel, Carsten Lindschau, Michael Leitges, and Hermann Haller
- 1199 **Mitochondria Are the Major Targets in Albumin-Induced Apoptosis in Proximal Tubule Cells**
Elif Erkan, Prasad Devarajan, and George J. Schwartz
- 1209 **Simvastatin Prevents Coronary Microvascular Remodeling in Renovascular Hypertensive Pigs**
Xiang-Yang Zhu, Elena Daghini, Alejandro R. Chade, Claudio Napoli, Erik L. Ritman, Amir Lerman, and Lilach O. Lerman

- 1218 ★ **Protective Role of Hypoxia-Inducible Factor-2 α against Ischemic Damage and Oxidative Stress in the Kidney**
Ichiro Kojima, Tetsuhiro Tanaka, Reiko Inagi, Hideki Kato, Toshiharu Yamashita, Ai Sakiyama, Osamu Ohneda, Norihiko Takeda, Masataka Sata, Toshio Miyata, Toshiro Fujita, and Masaomi Nangaku
- 1227 **Long-Term Treatment of Glucagon-Like Peptide-1 Analog Exendin-4 Ameliorates Diabetic Nephropathy through Improving Metabolic Anomalies in *db/db* Mice**
Cheol Whee Park, Hyeong Wook Kim, Seung Hyun Ko, Ji Hee Lim, Gyeong Ryul Ryu, Hyun Wha Chung, Sang Woo Han, Seog Jun Shin, Byung Kee Bang, Matthew D. Breyer, and Yoon Sik Chang
- 1239 **Immunoglobulin Light Chains Generate Hydrogen Peroxide**
Pei-Xuan Wang and Paul W. Sanders

Disease of the Month

- 1246 **Lipoprotein Metabolism and Lipid Management in Chronic Kidney Disease**
Bonnie C.H. Kwan, Florian Kronenberg, Srinivasan Beddhu, and Alfred K. Cheung

Clinical Science Articles

Human Genetics

- 1262 **Impaired Protein Stability of 11 β -Hydroxysteroid Dehydrogenase Type 2: A Novel Mechanism of Apparent Mineralocorticoid Excess**
Atanas G. Atanasov, Irena D. Ignatova, Lyubomir G. Nashev, Bernhard Dick, Paolo Ferrari, Felix J. Frey, and Alex Odermatt
- 1271 **Transcriptional and Functional Analyses of *SLC12A3* Mutations: New Clues for the Pathogenesis of Gitelman Syndrome**
Eva Riveira-Munoz, Qing Chang, Nathalie Godefroid, Joost G. Hoenderop, René J. Bindels, Karin Dahan, and Olivier Devuyst; for the Belgian Network for the Study of Gitelman Syndrome
- 1284 ★ **Association between *Angiotensin-Converting Enzyme* Gene Polymorphisms and Diabetic Nephropathy: Case-Control, Haplotype, and Family-Based Study in Three European Populations**
Samy Hadjadj, Lise Tarnow, Carol Forsblom, Gbenga Kazeem, Michel Marre, Per-Henrik Groop, Hans-Henrik Parving, François Cambien, David A. Tregouet, Ivo G. Gut, Alexandre Théva, Dominique Gauguier, Martin Farrall, Roger Cox, Fumihiko Matsuda, Mark Lathrop, FinnDiane Study Group, and Nathalie Hager-Vionnet; for the EURAGEDIC (European Rational Approach for the Genetics of Diabetic Complications) Study Group

Epidemiology and Outcomes

- 1292 ★ **Incidence and Outcomes in Acute Kidney Injury: A Comprehensive Population-Based Study**
Tariq Ali, Izhar Khan, William Simpson, Gordon Prescott, John Townend, William Smith, and Alison MacLeod
- 1299 **Longitudinal Study of Racial and Ethnic Differences in Developing End-Stage Renal Disease among Aged Medicare Beneficiaries**
Jay L. Xue, Paul W. Eggers, Lawrence Y. Agodoa, Robert N. Foley, and Allan J. Collins
- 1307 ★ **Reduced Kidney Function as a Risk Factor for Incident Heart Failure: The Atherosclerosis Risk in Communities (ARIC) Study**
Anna Kottgen, Stuart D. Russell, Laura R. Loehr, Ciprian M. Crainiceanu, Wayne D. Rosamond, Patricia P. Chang, Lloyd E. Chambless, and Josef Coresh
- 1316 **Left Atrial Volume Monitoring and Cardiovascular Risk in Patients with End-Stage Renal Disease: A Prospective Cohort Study**
Giovanni Tripepi, Francesco Antonio Benedetto, Francesca Mallamaci, Rocco Tripepi, Lorenzo Malatino, and Carmine Zoccali

Clinical Dialysis

- 1323 **Soluble CD154 Is a Unique Predictor of Nonfatal and Fatal Atherothrombotic Events in Patients Who Have End-Stage Renal Disease and Are on Hemodialysis**
Berthold Hoher, Lutz Liefeldt, Thomas Quaschnig, Philipp Kalk, Reinhard Ziebig, Michael Godes, Katharina Relle, Gernot Asmus, and Johannes-Peter Stasch

1331 **Prevention of Sepsis during the Transition to Dialysis May Improve the Survival of Transplant Failure Patients**
Olwyn Johnston, Nadia Zalunardo, Caren Rose, and John S. Gill

Clinical Immunology and Pathology

1338 ★ **Antigen and Epitope Specificity of Anti-Glomerular Basement Membrane Antibodies in Patients with Goodpasture Disease with or without Anti-Neutrophil Cytoplasmic Antibodies**
Rui Yang, Thomas Hellmark, Juan Zhao, Zhao Cui, Marten Segelmark, Ming-hui Zhao, and Hai-yan Wang

Chronic Kidney Disease

1344 **Prevalence and Characteristics of a Family History of End-Stage Renal Disease among Adults in the United States Population: Reasons for Geographic and Racial Differences in Stroke (REGARDS) Renal Cohort Study**
William McClellan, Rebecca Speckman, Leslie McClure, Virginia Howard, Ruth C. Campbell, Mary Cushman, Paul Audhya, George Howard, and David G. Warnock

Clinical Nephrology

1353 ★ **Microalbuminuria and the Risk for Early Progressive Renal Function Decline in Type 1 Diabetes**
Bruce A. Perkins, Linda H. Ficociello, Betsy E. Ostrander, Kristen H. Silva, Janice Weinberg, James H. Warram, and Andrzej S. Krolewski
→ See related editorial by de Boer and Steffes (pp. 1036–1037).

Announcements

1362 **Announcements**