

2075 **This Month's Highlights**

**Future Articles**

**ASN News**

2077 **Nephrology beyond JASN**

## Editorials

2086 **Stem Cell Therapy for Glomerular Disease**

Ton J. Rabelink and Cees van Kooten

→ See related article by Kunter et al. (pp. 2202–2212).

2089 **Water for ADPKD? Probably, Yes**

Vicente E. Torres

→ See related article by Nagao et al. (pp. 2220–2227).

2092 **Risk for Progression to ESRD: Further Evidence from Population-Based Studies**

Haimanot Wasse and William McClellan

→ See related article by Hallan et al. (pp. 2275–2284).

2094 **Chronic Kidney Disease Prevalence and Treated End-Stage Renal Disease Incidence: A Complex Relationship**

Bénédicte Stengel and Cécile Couchoud

→ See related article by Hallan et al. (pp. 2275–2284).

2097 **Muscle Wasting in Kidney Disease: Let's Get Physical**

T. Alp Ikizler and Jonathan Himmelfarb

→ See related article by Johansen et al. (pp. 2307–2314).

## Frontiers in Nephrology

Dick de Zeeuw, Guest Editor

2099 **Albuminuria: A Sign of Vascular Problems?**

Dick de Zeeuw

2100 **Microalbuminuria as an Early Marker for Cardiovascular Disease**

Dick de Zeeuw, Hans-Henrik Parving, and Robert H. Henning

2106 **Microalbuminuria and Risk for Cardiovascular Disease: Analysis of Potential Mechanisms**

Coen D.A. Stehouwer and Yvo M. Smulders

2112 **Cross-Talk between the Kidney and the Cardiovascular System**

Kerstin Amann, Christoph Wanner, and Eberhard Ritz

2120 **Screening, Monitoring, and Treatment of Albuminuria: Public Health Perspectives**

Paul E. de Jong and Gary C. Curhan

## Basic Science Articles

### Cell and Transport Physiology

- 2127 **Identification and Functional Characterization of a New Human Kidney-Specific H<sup>+</sup>/Organic Cation Antiporter, Kidney-Specific Multidrug and Toxin Extrusion 2**  
Satohiro Masuda, Tomohiro Terada, Atsushi Yonezawa, Yuko Tanihara, Koshiro Kishimoto, Toshiya Katsura, Osamu Ogawa, and Ken-ichi Inui
- 2136 ★ **Late-Onset Manifestation of Antenatal Bartter Syndrome as a Result of Residual Function of the Mutated Renal Na<sup>+</sup>-K<sup>+</sup>-2Cl<sup>-</sup> Co-Transporter**  
Carsten A. Pressler, Jolanta Heinzinger, Nikola Jeck, Petra Waldegger, Ulla Pechmann, Stephan Reinalter, Martin Konrad, Rolf Beetz, Hannsjörg W. Seyberth, and Siegfried Waldegger
- 2143 **Macula Densa Control of Renin Secretion and Preglomerular Resistance in Mice with Selective Deletion of the B Isoform of the Na,K,2Cl Co-Transporter**  
Mona Oppermann, Diane Mizel, George Huang, Cuiling Li, Chuxia Deng, Franziska Theilig, Sebastian Bachmann, Josie Briggs, Jurgen Schnermann, and Hayo Castrop
- 2153 **Pendrin Regulation in Mouse Kidney Primarily Is Chloride-Dependent**  
Marion Vallet, Nicolas Picard, Dominique Loffing-Cueni, Marinos Fysekidis, May Bloch-Faure, Georges Deschênes, Sylvie Breton, Pierre Meneton, Johannes Loffing, Peter S. Aronson, Régine Chambrey, and Dominique Eladari

### Cell Biology

- 2164 ★ **Essential Role of Integrin-Linked Kinase in Podocyte Biology: Bridging the Integrin and Slit Diaphragm Signaling**  
Chunshun Dai, Donna B. Stolz, Sheldon I. Bastacky, Rene St.-Arnaud, Chuanyue Wu, Shoukat Dedhar, and Youhua Liu

### Chronic Kidney Disease

- 2176 ★ **Molecular Mechanism for Elevation of Asymmetric Dimethylarginine and Its Role for Hypertension in Chronic Kidney Disease**  
Kyoko Matsuguma, Seiji Ueda, Sho-ichi Yamagishi, Yuriko Matsumoto, Utako Kaneyuki, Ryo Shibata, Toshiko Fujimura, Hidehiro Matsuoka, Masumi Kimoto, Seiya Kato, Tsutomu Imaizumi, and Seiya Okuda

### Hemodynamics and Vascular Regulation

- 2184 **Mechanisms for Renal Blood Flow Control Early in Diabetes as Revealed by Chronic Flow Measurement and Transfer Function Analysis**  
Tracy D. Bell, Gerald F. DiBona, Ying Wang, and Michael W. Brands

### Pathophysiology of Renal Disease and Progression

- 2193 **Involvements of Rho-Kinase and TGF- $\beta$  Pathways in Aldosterone-Induced Renal Injury**  
Guang-Ping Sun, Masakazu Kohno, Peng Guo, Yukiko Nagai, Kayoko Miyata, Yu-Yan Fan, Shoji Kimura, Hideyasu Kiyomoto, Koji Ohmori, De-Tian Li, Youichi Abe, and Akira Nishiyama
- 2202 ★ **Transplanted Mesenchymal Stem Cells Accelerate Glomerular Healing in Experimental Glomerulonephritis**  
Uta Kunter, Song Rong, Zivka Djuric, Peter Boor, Gerhard Müller-Newen, Donghai Yu, and Jürgen Floege  
→ See related editorial by Rabelink and van Kooten (pp. 2086–2088).
- 2213 **Mild Tubular Damage Induces Calcium Oxalate Crystalluria in a Model of Subtle Hyperoxaluria: Evidence that a Second Hit Is Necessary for Renal Lithogenesis**  
Giovanni Gambaro, Maria Luisa Valente, Edoardo Zanetti, Mila Della Barbera, Dorella Del Prete, Angela D'Angelo, and Andrea Trevisan
- 2220 **Increased Water Intake Decreases Progression of Polycystic Kidney Disease in the PCK Rat**  
Shizuko Nagao, Kazuhiro Nishii, Makoto Katsuyama, Hiroki Kurahashi, Tohru Marunouchi, Hisahide Takahashi, and Darren P. Wallace  
→ See related editorial by Torres (pp. 2089–2091).

## Clinical Science Articles

### Clinical Nephrology

- 2228 ★ **Glomerular Involvement in Adults with Sickle Cell Hemoglobinopathies: Prevalence and Clinical Correlates of Progressive Renal Failure**  
Antonio Guasch, Jose Navarrete, Kaleed Nass, and Carlos F. Zayas
- 2236 **Chronic Inhibition of Mammalian Target of Rapamycin Signaling Downregulates Insulin Receptor Substrates 1 and 2 and AKT Activation: A Crossroad between Cancer and Diabetes?**  
Salvatore Di Paolo, Annalisa Teutonico, Domenica Leogrande, Carmen Capobianco, and Paolo F. Schena

## Chronic Kidney Disease

- 2245 **Regional Arterial Stiffness in Patients with Type 2 Diabetes and Chronic Kidney Disease**  
Eiji Kimoto, Tetsuo Shoji, Kayo Shinohara, Sawako Hatsuda, Katsuhito Mori, Shinya Fukumoto, Hidenori Koyama, Masanori Emoto, Yasuhisa Okuno, and Yoshiki Nishizawa

## Human Genetics

- 2253 **Renal Tubular Dysgenesis, a Not Uncommon Autosomal Recessive Disorder Leading to Oligohydramnios: Role of the Renin-Angiotensin System**  
Mireille Lacoste, Yi Cai, Liliane Guicharnaud, Françoise Mounier, Yves Dumez, Raymonde Bouvier, Frédérique Dijoud, Marie Gonzales, Jane Chatten, Anne-Lise Delezoide, Laurent Daniel, Madeleine Joubert, Nicole Laurent, Jacqueline Aziza, Tahya Sellami, Hatem Ben Amar, Catherine Jarnet, Anne Marie Frances, Farida Daïkha-Dahmane, Aurore Coulomb, Thomas J. Neuhaus, Bernard Foliguet, Pierre Chenal, Pascale Marcocelles, Jean Marie Gasc, Pierre Corvol, and Marie Claire Gubler

## Epidemiology and Outcomes

- 2264 **Clinical and Histologic Determinants of Renal Outcome in ANCA-Associated Vasculitis: A Prospective Analysis of 100 Patients with Severe Renal Involvement**  
Robert A.F. de Lind van Wijngaarden, Herbert A. Hauer, Ron Wolterbeek, David R.W. Jayne, Gill Gaskin, Niels Rasmussen, Laure-Hélène Noël, Franco Ferrario, Rüdiger Waldherr, E. Christiaan Hagen, Jan A. Bruijn, and Ingeborg M. Bajema; for the European Vasculitis Study Group (EUVAS)

- 2275 **International Comparison of the Relationship of Chronic Kidney Disease Prevalence and ESRD Risk**  
Stein I. Hallan, Josef Coresh, Brad C. Astor, Arne Åsberg, Neil R. Powe, Solfrid Romundstad, Hans A. Hallan, Stian Lydersen, and Jostein Holmen  
→ See related editorials by Wasse & McClellan (pp. 2092–2093) and Stengel & Couchoud (pp. 2094–2096).

- 2285 **Haplotype of Signal Transducer and Activator of Transcription 3 Gene Predicts Cardiovascular Disease in Dialysis Patients**  
Lin Zhang, W.H. Linda Kao, Yvette Berthier-Schaad, Yongmei Liu, Laura Plantinga, Bernard G. Jaar, Nancy Fink, Neil Powe, Michael J. Klag, Michael W. Smith, and Josef Coresh

- 2293 ★ **Anemia as a Predictor of Cardiovascular Events in Patients with Elevated Serum Creatinine**  
Alexander M. Walker, Gary Schneider, Jason Yeaw, Beth Nordstrom, Sean Robbins, and Daniel Pettitt

- 2299 **Agreement of Immunosuppression Regimens Described in Medicare Pharmacy Claims with the Organ Procurement and Transplantation Network Survey**  
Paula M. Stirnemann, Steven K. Takemoto, Mark A. Schnitzler, Daniel C. Brennan, Kevin C. Abbott, , Paolo Salvalaggio, Thomas E. Burroughs, Jeffrey A. Gavard, Lisa M. Willoughby, and Krista L. Lentine

## Clinical Dialysis

- 2307 ★ **Effects of Resistance Exercise Training and Nandrolone Decanoate on Body Composition and Muscle Function among Patients Who Receive Hemodialysis: A Randomized, Controlled Trial**  
Kirsten L. Johansen, Patricia L. Painter, Giorgos K. Sakkas, Patricia Gordon, Julie Doyle, and Tiffany Shubert  
→ See related editorial by Izkler and Himmelfarb (pp. 2097–2098).

- 2315 **On-Line Hemodiafiltration Reduces the Proinflammatory CD14<sup>+</sup>CD16<sup>+</sup> Monocyte-Derived Dendritic Cells: A Prospective, Crossover Study**  
Julia Carracedo, Ana Merino, Sonia Nogueras, Diana Carretero, Isabel Berdud, Rafael Ramírez, Ciro Tetta, Mariano Rodríguez, Alejandro Martín-Malo, and Pedro Aljama

- 2322 **Comparison of Percutaneous Coronary Intervention with Medication in the Treatment of Coronary Artery Disease in Hemodialysis Patients**  
Kaoru Yasuda, Hirotake Kasuga, Toru Aoyama, Hiroshi Takahashi, Takanobu Toriyama, Yasumasa Kawade, Shigejiro Iwashima, Shigeki Yamada, Hirohisa Kawahara, Shoichi Maruyama, Yukio Yuzawa, Hideki Ishii, Toyooki Murohara, Seiichi Matsuo

## Clinical Transplantation

- 2333 ★ **IL-6 Promoter Polymorphism –174 Is Associated with New-Onset Diabetes after Transplantation**  
Jamal Bamoulid, Cécile Courivaud, Marina Deschamps, Patricia Mercier, Christophe Ferrand, Alfred Penfornis, Pierre Tiberghien, Jean-Marc Chalopin, Philippe Saas, and Didier Ducloux

## Announcements

- 2341 **Announcements**