


**Highlights of This Issue 1595**
**REVIEW**


- 1597 Insulinoma-Associated-1: From Neuroendocrine Tumor Marker to Cancer Therapeutics**  
Chiachen Chen, Abner L. Notkins, and Michael S. Lan

**MCR RapidIMPACT**

- 1605 Prostate Cancer in World Trade Center Responders Demonstrates Evidence of an Inflammatory Cascade**  
 Yixuan Gong, Li Wang, Haocheng Yu, Naomi Alpert, Mitchell D. Cohen, Colette Prophete, Lori Horton, Maureen Sisco, Sung-Hyun Park, Hyun-Wook Lee, Judith Zelikoff, Lung-Chi Chen, Dana Hashim, Mayte Suarez-Farinas, Michael J. Donovan, Stuart A. Aaronson, Matthew Galsky, Jun Zhu, Emanuela Taioli, and William K. Oh

**CANCER GENES AND NETWORKS**

- 1613 TFE3 Xp11.2 Translocation Renal Cell Carcinoma Mouse Model Reveals Novel Therapeutic Targets and Identifies GPNMB as a Diagnostic Marker for Human Disease**  
 Masaya Baba, Mitsuko Furuya, Takanobu Motoshima, Martin Lang, Shintaro Funasaki, Wenjuan Ma, Hong-Wei Sun, Hisashi Hasumi, Ying Huang, Ikuma Kato, Tsuyoshi Kadomatsu, Yorifumi Satou, Nicole Morris, Baktiar O. Karim, Lilia Ileva, Joseph D. Kalen, Luh Ade Wilan Krisna, Yukiko Hasumi, Aiko Sugiyama, Ryoma Kurahashi, Koshiro Nishimoto, Masafumi Oyama, Yoji Nagashima, Naoto Kuroda, Kimi Araki, Masatoshi Eto, Masahiro Yao, Tomomi Kamba, Toshio Suda, Yuichi Oike, Laura S. Schmidt, and W. Marston Linehan

- 1627 BRD4 Regulates Metastatic Potential of Castration-Resistant Prostate Cancer through AHNAK**  
 Jordan S. Shafran, Guillaume P. Andrieu, Balázs Györfy, and Gerald V. Denis

- 1639 The Codon 72 TP53 Polymorphism Contributes to TSC Tumorigenesis through the Notch–Nodal Axis**  
Jun-Hung Cho, Bhaumik Patel, Santosh Bonala, Hossein Mansouri, Sasikanth Manne, Surya Kumari Vadrevu, Shanawaz Ghouse, Che-Pei Kung, Maureen E. Murphy, Aristotelis Astrinidis, Elizabeth P. Henske, David J. Kwiatkowski, Maciej M. Markiewski, and Magdalena Karbowiczek
- 1652 Identification of TP53RK-Binding Protein (TPRKB) Dependency in TP53-Deficient Cancers**  
Moloy T. Goswami, Kelly R. VanDenBerg, Sumin Han, Lei Lucy Wang, Bhavneet Singh, Travis Weiss, Myles Barlow, Steven Kamberov, Kari Wilder-Romans, Daniel R. Rhodes, Felix Y. Feng, and Scott A. Tomlins
- 1665 NME1 Drives Expansion of Melanoma Cells with Enhanced Tumor Growth and Metastatic Properties**  
Ying Wang, M. Kathryn Leonard, Devin E. Snyder, Matthew L. Fisher, Richard L. Eckert, and David M. Kaetzel

**CELL FATE DECISIONS**

- 1675 HIF Inactivation of p53 in Ovarian Cancer Can Be Reversed by Topotecan, Restoring Cisplatin and Paclitaxel Sensitivity**  
Basma Parmakhtiar, Robert A. Burger, Jai-Hyun Kim, and John P. Fruehauf

**GENOME MAINTENANCE**

- 1687 Mitotic DNA Synthesis Is Differentially Regulated between Cancer and Noncancerous Cells**  
Cari L. Graber-Feesl, Kayla D. Pederson, Katherine J. Aney, and Naoko Shima

**METABOLISM**

- 1699 Reprogramming of Isocitrate Dehydrogenases Expression and Activity by the Androgen Receptor in Prostate Cancer**  
Kevin Gonthier, Raghavendra Tejo Karthik Poluri, Cindy Weidmann, Maude Tadros, and Étienne Audet-Walsh

# Table of Contents

- 1710** Targeting IDH1 as a Prosenescent Therapy in High-grade Serous Ovarian Cancer  
Erika S. Dahl, Raquel Buj, Kelly E. Leon, Jordan M. Newell, Yuka Imamura, Benjamin G. Bitler, Nathaniel W. Snyder, and Katherine M. Aird

## SIGNAL TRANSDUCTION AND FUNCTIONAL IMAGING

- 1721** Intrinsic Resistance to MEK Inhibition through BET Protein-Mediated Kinome Reprogramming in NF1-Deficient Ovarian Cancer  
Alison M. Kurimchak, Claude Shelton, Carlos Herrera-Montávez, Kelly E. Duncan, Jonathan Chernoff, and James S. Duncan
- 1735** A Ca<sup>2+</sup>-ATPase Regulates E-cadherin Biogenesis and Epithelial-Mesenchymal Transition in Breast Cancer Cells  
Donna K. Dang, Monish Ram Makena, José P. Llongueras, Hari Prasad, Myungjun Ko, Manuj Bandral, and Rajini Rao

## TUMOR MICROENVIRONMENT AND IMMUNOBIOLOGY

- 1748** Activation of PPAR $\gamma$  in Myeloid Cells Promotes Progression of Epithelial Lung Tumors through TGF $\beta$ 1  
Trisha R. Sippel, Amber M. Johnson, Howard Y. Li, Dwight Hanson, Teresa T. Nguyen, Bonnie L. Bullock, Joanna M. Poczobutt, Jeff W. Kwak, Emily K. Kleczko, Mary C. Weiser-Evans, and Raphael A. Nemenoff
- 1759** T-Cell Deletion of MyD88 Connects IL17 and  $\kappa$ B $\zeta$  to RAS Oncogenesis  
Christophe Cataisson, Rosalba Salcedo, Aleksandra M. Michalowski, Mary Klosterman, Shruti Naik, Luowei Li, Michelle J. Pan, Amalia Sweet, Jin-Qiu Chen, Laurie G. Kostecka, Megan Karwan, Loretta Smith, Ren-Ming Dai, C. Andrew Stewart, Lyudmila Lyakh, Wang-Ting Hsieh, Asra Khan, Howard Yang, Maxwell Lee, Giorgio Trinchieri, and Stuart H. Yuspa

## CORRECTION

- 1774** Correction: Prostate Cancer in World Trade Center Responders Demonstrates Evidence of an Inflammatory Cascade

 AC icon indicates AuthorChoice

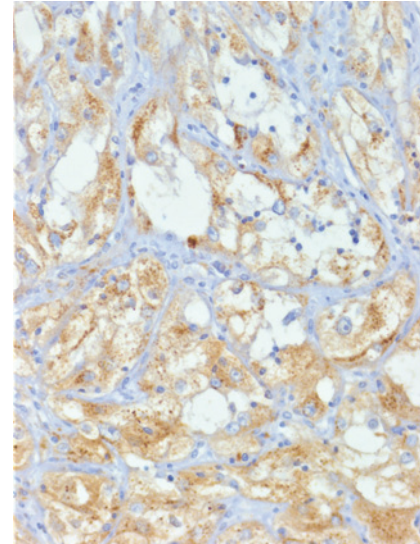
For more information please visit [www.aacrjournals.org](http://www.aacrjournals.org)



# Table of Contents

## ABOUT THE COVER

The Xp11.2 chromosomal translocation underlies a subgroup of aggressive renal cell carcinomas (TFE3-RCC) with distinct molecular and histological features. These tumors are driven by a pathogenic chimeric form of the TFE3 transcription factor, but diagnostic and therapeutic options for TFE3-RCC are limited. Using a novel transgenic mouse model, the authors found that RET kinase expression was upregulated in mouse kidney tumors with chimeric TFE3 signaling, and TFE3-RCC mouse tumors demonstrated a therapeutic response to the RET inhibitor vandetanib. As shown in a representative section on the cover, immunohistochemical staining for RET was also positive in human kidney tumors from patients with TFE3-RCC. Additionally, the authors identified Glycoprotein Nonmetastatic B (GPNMB) as a novel biomarker of TFE3-RCC that outperformed the conventional marker, Cathepsin K. These findings expand the potential diagnostic and therapeutic options for TFE3-RCC, and present a novel mouse model for further preclinical investigation. See the article by Baba et al. on page 1613 for more information.



# Molecular Cancer Research

17 (8)

*Mol Cancer Res* 2019;17:1595-1774.

**Updated version** Access the most recent version of this article at:  
<http://mcr.aacrjournals.org/content/17/8>

**E-mail alerts** [Sign up to receive free email-alerts](#) related to this article or journal.

**Reprints and Subscriptions** To order reprints of this article or to subscribe to the journal, contact the AACR Publications Department at [pubs@aacr.org](mailto:pubs@aacr.org).

**Permissions** To request permission to re-use all or part of this article, use this link <http://mcr.aacrjournals.org/content/17/8>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.