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## PERSONALIZED MEDICINE AND IMAGING

**1853** HER3-Mediated Resistance to Hsp90 Inhibition Detected in Breast Cancer Xenografts by Affibody-Based PET Imaging



Carlos D. Martins, Chiara Da Pieve, Thomas A. Burley, Rhodri Smith, Daniela M. Ciobota, Louis Allott, Kevin J. Harrington, Wim J.G. Oyen, Graham Smith, and Gabriela Kramer-Marek

**1866** Further Investigation of the Role of ACYP2 and WFS1 Pharmacogenomic Variants in the Development of Cisplatin-Induced Ototoxicity in Testicular Cancer Patients

Britt I. Drögemöller, Beth Brooks, Carol Critchley, José G. Monzon, Galen E.B. Wright, Geoffrey Liu, Daniel J. Renouf, Christian K. Kollmannsberger, Philippe L. Bedard, Michael R. Hayden, Karen A. Gelmon, Bruce C. Carleton, and Colin J.D. Ross

**1872** Early Assessment of Lung Cancer Immunotherapy Response via Circulating Tumor DNA

Sarah B. Goldberg, Azeet Narayan, Adam J. Kole, Roy H. Decker, Jimmitti Teysir, Nicholas J. Carriero, Angela Lee, Roxanne Nemati, Sameer K. Nath, Shrikant M. Mane, Yanhong Deng, Nitin Sukumar, Daniel Zelterman, Daniel J. Boffa, Katerina Politi, Scott N. Gettinger, Lynn D. Wilson, Roy S. Herbst, and Abhijit A. Patel

**1881** Hybrid Capture–Based Genomic Profiling of Circulating Tumor DNA from Patients with Advanced Cancers of the Gastrointestinal Tract or Anus



Alexa B. Schrock, Dean Pavlick, Samuel J. Klempner, Jon H. Chung, Brady Forcier, Allison Welsh, Lauren Young, Bryan Leyland-Jones, Rodolfo Bordoni, Richard D. Carvajal, Joseph Chao, Razelle Kurzrock, Jason K. Sicklick, Jeffrey S. Ross, Philip J. Stephens, Craig Devoe, Fadi Braiteh, Siraj M. Ali, and Vincent A. Miller

## CANCER THERAPY: PRECLINICAL

**1891** Nitric Oxide Production by Myeloid-Derived Suppressor Cells Plays a Role in Impairing Fc Receptor–Mediated Natural Killer Cell Function

Andrew Stiff, Prashant Tripathi, Bethany Mundy-Bosse, Elizabeth McMichael, Thomas A. Mace, Brooke Benner, Kari Kendra, Amanda Campbell, Shalini Gautam, David Abood, Ian Landi, Vincent Hsu, Megan Duggan, Robert Wesolowski, Matthew Old, John Harrison Howard, Lianbo Yu, Nancy Stasik, Thomas Olencki, Natarajan Muthusamy, Susheela Tridandapani, John C. Byrd, Michael Caligiuri, and William E. Carson

**1905** A Combination of SAHA and Quinacrine Is Effective in Inducing Cancer Cell Death in Upper Gastrointestinal Cancers

Shoumin Zhu, Zheng Chen, Lihong Wang, Dunfa Peng, Abbas Belkhir, A. Craig Lockhart, and Wael El-Rifai

**1917** STAT5A/B Blockade Sensitizes Prostate Cancer to Radiation through Inhibition of RAD51 and DNA Repair



Cristina Maranto, Vindhya Udhane, David T. Hoang, Lei Gu, Vitali Alexeev, Kareem Malas, Karmel Cardenas, Jonathan R. Brody, Ulrich Rodeck, Carmen Bergom, Ken A. Iczkowski, Ken Jacobsohn, William See, Sara M. Schmitt, and Marja T. Nevalainen

**1932** Ponatinib Shows Potent Antitumor Activity in Small Cell Carcinoma of the Ovary Hypercalcemic Type (SCCOHT) through Multikinase Inhibition

Jessica D. Lang, William P.D. Hendricks, Krystal A. Orlando, Hongwei Yin, Jeffrey Kiefer, Pilar Ramos, Ritin Sharma, Patrick Pirrotte, Elizabeth A. Raupach, Chris Sereduk, Nanyun Tang, Winnie S. Liang, Megan Washington, Salvatore J. Facista, Victoria L. Zismann, Emily M. Cousins, Michael B. Major, Yemin Wang, Anthony N. Karnezis, Aleksandar Sekulic, Ralf Hass, Barbara C. Vanderhyden, Praveen Nair, Bernard E. Weissman, David G. Huntsman, and Jeffrey M. Trent

**1944** Overcoming Resistance to DNA-Targeted Agents by Epigenetic Activation of Schlafen 11 (*SLFN11*) Expression with Class I Histone Deacetylase Inhibitors

Sai-Wen Tang, Anish Thomas, Junko Murai, Jane B. Trepel, Susan E. Bates, Vinodh N. Rajapakse, and Yves Pommier

## BIOLOGY OF HUMAN TUMORS

**1954** Wide Expression and Significance of Alternative Immune Checkpoint Molecules, B7x and HHLA2, in PD-L1–Negative Human Lung Cancers

Haiying Cheng, Alain Borczuk, Murali Janakiram, Xiaoxin Ren, Juan Lin, Amer Assal, Balazs Halmos, Roman Perez-Soler, and Xingxing Zang

**1965** Small-Cell Carcinomas of the Bladder and Lung Are Characterized by a Convergent but Distinct Pathogenesis



Matthew T. Chang, Alexander Penson, Neil B. Desai, Nicholas D. Socci, Ronglai Shen, Venkatraman E. Seshan, Ritika Kundra, Adam Abeshouse, Agnes Viale, Eugene K. Cha, Xueli Hao, Victor E. Reuter, Charles M. Rudin, Bernard H. Bochner, Jonathan E. Rosenberg, Dean F. Bajorin, Nikolaus Schultz, Michael F. Berger, Gopa Iyer, David B. Solit, Hikmat A. Al-Ahmadie, and Barry S. Taylor  
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**1974** PBX3 Is Part of an EMT Regulatory Network and Indicates Poor Outcome in Colorectal Cancer

Sebastian Lamprecht, Markus Kaller, Eva Marina Schmidt, Cristina Blaj, Tobias S. Schiergens, Jutta Engel, Andreas Jung, Heiko Hermeking, Thomas G.P. Grünewald, Thomas Kirchner, and David Horst

**1987** Reactivation of cAMP Pathway by PDE4D Inhibition Represents a Novel Druggable Axis for Overcoming Tamoxifen Resistance in ER-positive Breast Cancer

Rasmi R. Mishra, Nevin Belder, Suhail A. Ansari, Merve Kayhan, Hilal Bal, Umar Raza, Pelin G. Ersan, Ünal M. Tokat, Erol Eyüpoğlu, Özge Saatci, Pouria Jandaghi, Stefan Wiemann, Ayşegül Üner, Çağlar Cekiç, Yasser Riazalhosseini, and Özgür Şahin

**2002** Long Noncoding RNA LINC01234 Functions as a Competing Endogenous RNA to Regulate CBFB Expression by Sponging miR-204-5p in Gastric Cancer

Xin Chen, Zhenyao Chen, Shanxun Yu, Fengqi Nie, Shuai Yan, Pei Ma, Qinnan Chen, Chenchen Wei, Hangjiang Fu, Tianwei Xu, Shengnan Ren, Ming Sun, and Zhaoxia Wang

**2015** REG $\gamma$  Controls Hippo Signaling and Reciprocal NF- $\kappa$ B–YAP Regulation to Promote Colon Cancer

Qingwei Wang, Xiao Gao, Tong Yu, Lei Yuan, Jie Dai, Weicang Wang, Geng Chen, Chan Jiao, Wang Zhou, Quan Huang, Long Cui, Pei Zhang, Robb E. Moses, Jianhua Yang, Fengyuan Chen, Junjiang Fu, Jianru Xiao, Lei Li, Yongyan Dang, and Xiaotao Li

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## ABOUT THE COVER

The cover shows a mixed urothelial and small cell carcinoma from a single patient. Deep sequencing of macrodissected urothelial and small-cell components revealed truncal mutations clonal in both components, indicating a common ancestral origin. Other driver mutations were clonal exclusively in one component. For details, see the article by Chang and colleagues on page 1965 of this issue.

