**Highlights of This Issue** 4293

**SPECIAL FEATURES**

**CCR Translations**

4295  
"License to Kill" Reflects Joint Action of CD4 and CD8 T Cells  
Cornelis J.M. Melief  
*See related article, p. 4508*

**CCR Perspectives in Drug Approval**

4297  
Developing Standards for Breakthrough Therapy Designation in Oncology  
Sandra J. Horning, Daniel A. Haber, Wendy K.D. Selig, S. Percy Ivy, Samantha A. Roberts, Jeff D. Allen, Ellen V. Sigal, and Charles L. Sawyers  
*See related article, p. 4305*

4305  
Accelerated Approval and Breakthrough Therapy Designation: Oncology Drug Development on Speed?  
James C. Yao, Funda Meric-Bernstam, J. Jack Lee, and S. Gail Eckhardt  
*See related article, p. 4297*

**Molecular Pathways**

4309  
Molecular Pathways: Reactive Oxygen Species Homeostasis in Cancer Cells and Implications for Cancer Therapy  
Veronique Nogueira and Nissim Hay

**Reviews**

4315  
Impact of Bioinformatic Procedures in the Development and Translation of High-Throughput Molecular Classifiers in Oncology  
Charles Ferté, Andrew D. Trister, Erich Huang, Brian M. Bot, Justin Guinney, Frederic Commo, Solveig Sieberts, Fabrice André, Benjamin Besse, Jean-Charles Soria, and Stephen H. Friend

4326  
BRAF in Melanoma: Current Strategies and Future Directions  
April K.S. Salama and Keith T. Flaherty

**HUMAN CANCER BIOLOGY**

4335  
Regulation of Cell Proliferation and Migration by Keratin19-Induced Nuclear Import of Early Growth Response-1 in Breast Cancer Cells  
Ji-hyun Ju, Wooseok Yang, Kyung-min Lee, Sunhwa Oh, Kee-Soo Nam, Sarah Shim, Soon Young Shin, Myung Chan Gye, In-Sun Chu, and Incheol Shin

**CANCER THERAPY: PRECLINICAL**

4347  
Effective Activity of Cytokine-Induced Killer Cells against Autologous Metastatic Melanoma Including Cells with Stemness Features  
Loretta Gammaitoni, Lidia Giraudo, Valeria Leuci, Maja Todorovic, Giulia Mesiano, Franco Picciotto, Alberto Pisacane, Alessandro Zaccagna, Maria Giuseppa Volpe, Susanna Gallo, Daniela Caravelli, Elena Giaccone, Tiziana Venesio, Antonella Balsamo, Ymera Pignochino, Giovanni Grignani, Fabrizio Carnevale-Schianca, Massimo Aglietta, and Dario Sangiolo

4359  
Contribution of Abcc4-Mediated Gastric Transport to the Absorption and Efficacy of Dasatinib  
Brian D. Furmanski, Shuiying Hu, Ken-ichi Fujita, Lie Li, Alice A. Gibson, Laura J. Janke, Richard T. Williams, John D. Schuetz, Alex Sparreboom, and Sharyn D. Baker

4371  
Novel Targeting of Phospho-cMET Overcomes Drug Resistance and Induces Antitumor Activity in Multiple Myeloma  
Michele Moschetta, Antonio Basile, Arianna Ferrucci, Maria Antonia Frassanito, Luigia Rao, Roberto Ria, Antonio Giovanni Solimando, Nicola Giuliani, Angelina Boccarelli, Fabio Fumarola, Mauro Coluccia, Bernardo Rossini, Simona Ruggieri, Beatrice Nico, Eugenio Maiorano, Domenico Ribatti, Aldo M. Roccaro, and Angelo Vacca
Vemurafenib Synergizes with Nutlin-3 to Deplete Survivin and Suppresses Melanoma Viability and Tumor Growth
Zhenyu Ji, Raj Kumar, Michael Taylor, Anpuchchelvi Rajadurai, Alexander Marzuka-Alcalá, Y. Erin Chen, Ching-Ni Jenny Njauw, Keith Flaherty, Goran Jonsson, and Hensin Tsao

Acquired Resistance to Anti-VEGF Therapy in Glioblastoma Is Associated with a Mesenchymal Transition
Yuji Piao, Ji Liang, Lindsay Holmes, Verlene Henry, Erik Sulman, and John F. de Groot

β-Mannosylceramide Activates Type I Natural Killer T Cells to Induce Tumor Immunity without Inducing Long-Term Functional Anergy
Jessica J. O’Konek, Shingo Kato, Satomi Takao, Liat Izhab, Zheng Xia, Peter Illariov, Gurdfyl S. Besra, Masaki Terabe, and Jay A. Berzofsky

Sensitization of Pancreatic Cancer to Chemoradiation by the Chk1 Inhibitor MK8776
Carl G. Engelke, Leslie A. Parsels, Yushen Qian, Qiang Zhang, David Karnak, Jordan R. Robertson, Daria M. Tanska, Dongping Wei, Mary A. Davis, Joshua D. Parsels, Lili Zhao, Joel K. Greenson, Theodore S. Lawrence, Jonathan Maybaum, and Meredith A. Morgan

Inhibition of Protein Phosphatase 2A Radiosensitizes Pancreatic Cancers by Modulating CDC25C/CDK1 and Homologous Recombination Repair
Dongping Wei, Leslie A. Parsels, David Karnak, Mary A. Davis, Joshua D. Parsels, Amanda C. Marsh, Lili Zhao, Jonathan Maybaum, Theodore S. Lawrence, Yi Sun, and Meredith A. Morgan

Identification of Circulating MicroRNA Signatures for Breast Cancer Detection
Maurice Chan, Chiew Suan Liaw, Shen Mo Ji, Hwee Huang Tan, Chow Yin Wong, Aye Aye Thike, Puay Hoon Tan, Gay Hui Ho, and Ann Siew-Gek Lee

Memantine Protects Rats Treated with Intrathecal Methotrexate from Developing Spatial Memory Deficits
Peter D. Cole, Veena Vijayanathan, Nafeezah F. Ali, Mark E. Waghshul, Eric J. Tanenbaum, Jeremy Price, Vidhi Dalal, and Maria E. Gulinello

A Novel Aldehyde Dehydrogenase-3 Activator (Alda-99) Protects Submandibular Gland Function from Irradiation without Accelerating Tumor Growth
Nan Xiao, Hongbin Cao, Che-Hong Chen, Christina S. Kong, Rehan Ali, Cato Chan, Davud Sirjani, Edward Graves, Albert Koong, Amato Giaccia, Daria Mochly-Rosen, and Quynh-Thu Le

Nimbolide, a Limonoid Triterpene, Inhibits Growth of Human Colorectal Cancer Xenografts by Suppressing the Proinflammatory Microenvironment
Subash C. Gupta, Sahdeo Prasad, Dhanya R. Sethumadhavan, Mangalam S. Nair, Yin-Yuan Mo, and Bharat R. Aggarwal

Phase II Randomized Trial Comparing High-Dose IFN-α2b with Temozolomide Plus Cisplatin as Systemic Adjuvant Therapy for Resected Mucosal Melanoma
Bin Lian, Lu Si, Chuanliang Cui, Zhihong Chi, Xinan Sheng, Lili Mao, Ximing Li, Yan Kong, Bixia Tang, and Jun Guo

Identification of Circulating MicroRNA Signatures for Breast Cancer Detection
Maurice Chan, Chiew Suan Liaw, Shen Mo Ji, Hwee Huang Tan, Chow Yin Wong, Aye Aye Thike, Puay Hoon Tan, Gay Hui Ho, and Ann Siew-Gek Lee

Phase I Trial of a New Schedule of Romidepsin in Patients with Advanced Cancers
Identification of Promiscuous KIF20A Long Peptides Bearing Both CD4+ and CD8+ T-cell Epitopes: KIF20A-Specific CD4+ T-cell Immunity in Patients with Malignant Tumor
Yusuke Tomita, Akira Yuno, Hirotake Tsukamoto, Satoru Senju, Yasuhiro Kuroda, Masatoshi Hirayama, Atsushi Irie, Kenta Kawahara, Junji Yatsuda, Akinobu Hamada, Hirofumi Jono, Koji Yoshida, Takuya Tsunoda, Hirotugu Kohrogi, Yoshihiro Yoshitake, Yusuke Nakamura, Masanori Shinohara, and Yasuharu Nishimura
See commentary, p. 4295

Clinical, Pathologic, and Biologic Features Associated with BRAF Mutations in Non–Small Cell Lung Cancer
Stephanie Cardarella, Atsuko Ogino, Mizuki Nishino, Mohit Butaney, Jeanne Shen, Christine Lydon, Beow Y. Yeap, Lynette M. Sholl, Bruce E. Johnson, and Pasi A. Jänne

LETTER TO THE EDITOR
Oncolytic Virotherapy Trials—Letter
Akseli Hemminki, Minna Oksanen, and Maiju Merisalo-Soikkeli

PREDICTIVE BIOMARKERS AND PERSONALIZED MEDICINE
Ki67 Measured after Neoadjuvant Chemotherapy for Primary Breast Cancer

CORRECTION
Correction: MSH6 Mutations Arise in Glioblastomas during Temozolomide Therapy and Mediate Temozolomide Resistance

AC icon indicates Author Choice
CME icon indicates that this article is available for continuing medical education credit at http://cme.aacrjournals.org
For more information please visit www.aacrjournals.org

ABOUT THE COVER
The cover shows Rad51 foci (red) in pancreatic cancer cells treated with gemcitabine and radiation. Nuclei are stained with DAPI (blue). For details, see the article by Engelke and colleagues on page 4412 of this issue.