Highlights of This Issue

SPECIAL FEATURES

CCR Translations

3 The Importance of Doing Trials Right While Doing the Right Trials
David M. Dilts and Steven K. Cheng
See article p. 256

6 Elusive Extranuclear Estrogen Receptors in Breast Cancer
Ellis R. Levin
See article p. 118

CCR Drug Updates

9 Vemurafenib and BRAF Inhibition: A New Class of Treatment for Metastatic Melanoma
Jason J. Luke and F. Stephen Hodi

Molecular Pathways

15 Molecular Pathways: Targeting Proteasomal Protein Degradation in Cancer
Susan M. Molineaux

CCR Focus

22 On Drug Development, Chance, and the Prepared Mind
Susan E. Bates

23 Drug Development: Portals of Discovery
Susan E. Bates, Laleh Amiri-Kordestani, and Giuseppe Giaccone

33 BRAF Inhibitors for the Treatment of Metastatic Melanoma: Clinical Trials and Mechanisms of Resistance
Alexander Marzuka Alcalá and Keith T. Flaherty

40 The Insulin Receptor/Insulin-Like Growth Factor Receptor Family as a Therapeutic Target in Oncology
Michael Pollak

51 Inhibitors Targeting Mitosis: Tales of How Great Drugs against a Promising Target Were Brought Down by a Flawed Rationale
Edina Komlodi-Pasztor, Dan L. Sackett, and Antonio Tito Fojo

CANCER THERAPY: PRECLINICAL

127 STAT5A-Mediated SOCS2 Expression Mediates Jak2 and STAT3 Activity Following e-Src Inhibition in Head and Neck Squamous Carcinoma
Skin Tumors Induced by Sorafenib; Paradoxic RAS–RAF Pathway Activation and Oncogenic Mutations of HRAS, TP53, and TGFBR1
Jean Philippe Arnault, Christine Mateus, Bernard Escudier, Gorana Tomasic, Janine Wechsler, Emilie Hollville, Jean-Charles Soria, David Malka, Alain Sarasin, Magalie Larcher, Jocelyne André, Nyam Kamsu-Kom, Lise Boussemart, Ludovic Lacroix, Alain Spatz, Alexander M. Eggermont, Sabine Druijlenneec, Stephan Vagner, Alain Eychène, Nicolas Dumas, and Caroline Robert

Concurrent Temozolomide and Dose-Escalated Intensity-Modulated Radiation Therapy in Newly Diagnosed Glioblastoma
Christina I. Tsien, Doris Brown, Daniel Normolle, Matthew Schipper, Morand Piert, Larry Junck, Jason Heth, Diana Gomez-Hassan, Randall K. Ten Haken, Thomas Chenevert, Yue Cao, and Theodore Lawrence

PREDICTIVE BIOMARKERS AND PERSONALIZED MEDICINE

Molecular Determinants of Retinoic Acid Sensitivity in Pancreatic Cancer
Sonali Gupta, Dipankar Pramanik, Radha Mukherjee, Nathaniel R. Campbell, Sathyarayanan Elumalai, Roeland F. de Wilde, Seung-Mo Hong, Michael G. Goggins, Ana De Jesus-Acosta, Daniel Laiheru, and Anirban Maitra

TP53 Disruptive Mutations Lead to Head and Neck Cancer Treatment Failure through Inhibition of Radiation-Induced Senescence
Heath D. Skinner, Vlad C. Sandulache, Thomas J. Ow, Raymond E. Meyn, John S. Yordy, Beth M. Beadle, Allison L. Fitzgerald, Uma Giri, K. Xian Ang, and Jeffrey N. Myers

LETTER TO THE EDITOR

A CDD Polymorphism as Predictor of Capecitabine-Induced Hand-Foot Syndrome—Letter
Joseph Ciccolini, Alexandre Evrard, and Bruno Lacarelle

CORRECTIONS

Correction: Lysosomal Sequestration of Sunitinib: A Novel Mechanism of Drug Resistance

Correction: ABCB1 (MDR1) Polymorphisms and Progression-Free Survival among Women with Ovarian Cancer following Paclitaxel/Carboplatin Chemotherapy
ABOUT THE COVER

B7H3 represents a novel driver of gliomagenesis by mediating an immunosuppressive and proinvasive phenotype in glioblastoma. Immunofluorescence demonstrates the perivascularly (alpha-SMA staining; red) enhanced expression of B7H3 (vesicular distribution; green) in human glioblastoma tissue (nuclei staining; blue). For details, see the article by Lemke and colleagues on page 105 of this issue.