Contents

Highlights of This Issue 1

SPECIAL FEATURES

CCR Translations

3 Molecular Targeting of Neural Cancer Stem Cells: TTAGGG, Youre It!
Anita B. Hjelmeland and Jeremy N. Rich
See article p. 111

CCR New Strategies

6 New Strategies in the Molecular Targeting of Glioblastoma: How Do You Hit a Moving Target?
Timothy F. Cloughesy and Paul S. Mischel

Molecular Pathways

12 p27: A Barometer of Signaling Deregulation and Potential Predictor of Response to Targeted Therapies
Seth A. Wander, Dekuang Zhao, and Joyce M. Slangerland

Review

19 Interindividual Variability of Response to Rituximab: From Biological Origins to Individualized Therapies
Guillaume Cartron, Ralf Ulrich Trappe, Philippe Solal-Céligny, and Michael Hallek

HUMAN CANCER BIOLOGY

31 Frequent hSNF5/INI1 Germline Mutations in Patients with Rhabdoid Tumor
Franck Bourdeaut, Delphine Lequin, Laurence Brugères, Stéphanie Reynaud, Christelle Dufour, François Doz, Nicolas André, Jean-Louis Stephan, Yves Pérel, Odile Oberlin, Daniel Orbach, Christophe Bergeron, Xavier Rialland, Paul Fréneaux, Dominique Ranchere, Dominique Figarella-Branger, Georges Audry, Stéphanie Puget, D. Gareth Evans, Joan Carles Ferreres Pinas, Valeria Capra, Véronique Mosseri, Isabelle Coupier, Marion Gauthier-Villars, Gaele Pierron, and Olivier Delattre

39 Long Exposure of Environmental Tobacco Smoke Associated with Activating EGFR Mutations in Never-Smokers with Non–Small Cell Lung Cancer
Tomoya Kawaguchi, Masahiko Ando, Akihito Kubo, Minoru Takada, Shini Jr Atagi, Kyoichi Okishio, Kazuhiro Asami, Akihide Matsumura, Kazuyuki Tsujino, Sai-Hong Ignatius Ou, and Hidefumi Sasaki

46 Characterization of Tumor-Suppressive Function of SOX6 in Human Esophageal Squamous Cell Carcinoma
Yan-Ru Qin, Hong Tang, Fajun Xie, Haibo Liu, Yinghui Zhu, Jiaoyu Ai, Leilei Chen, Yan Li, Dora L. Kwong, Li Fu, and Xin-Yuan Guan

56 Ewing Tumors That Do Not Overexpress BMI-1 Are a Distinct Molecular Subclass with Variant Biology: A Report from the Children’s Oncology Group
Aaron Cooper, John van Doorninck, Lingyun Ji, Darren Russell, Marc Ladanyi, Hiroyuki Shimada, Mark Kralio, Richard B. Womer, Jessie Hao-ru Hsu, Dafydd Thomas, Timothy J. Triche, Richard Sposto, and Elizabeth R. Lawlor
Polysaccharide Krestin Is a Novel TLR2 Agonist that Mediates Inhibition of Tumor Growth via Stimulation of CD8 T Cells and NK Cells

Interleukin-6 Modulates Graft-versus-Host Responses after Experimental Allogeneic Bone Marrow Transplantation

Role of ATP-Binding Cassette and Solute Carrier Transporters in Erlotinib CNS Penetration and Intracellular Accumulation

A Novel Fusion Toxin Derived from an EpCAM-Specific Designed Ankyrin Repeat Protein Has Potent Antitumor Activity

Neural Tumor-Initiating Cells Have Distinct Telomere Maintenance and Can be Safely Targeted for Telomerase Inhibition

Antitumor Activity of SNX-2112, a Synthetic Heat Shock Protein-90 Inhibitor, in MET-Amplified Tumor Cells with or without Resistance to Selective MET Inhibition

The Ability to Form Primary Tumor Xenographs Is Predictive of Increased Risk of Disease Recurrence in Early-Stage Non–Small Cell Lung Cancer

Pazopanib Reveals a Role for Tumor Cell B-Raf in the Prevention of HER2+ Breast Cancer Brain Metastasis

Combined Analysis of Estrogen Receptor β-1 and Progesterone Receptor Expression Identifies Lung Cancer Patients with Poor Outcome

Prognostic Significance of the Detection of Peripheral Blood CEACAM5mRNA-Positive Cells by Real-Time Polymerase Chain Reaction in Operable Colorectal Cancer

Total Marrow Irradiation: A New Ablative Regimen as Part of Tandem Autologous Stem Cell Transplantation for Patients with Multiple Myeloma
183 Phase I Trial of TGF-β2 Antisense GM-CSF Gene-Modified Autologous Tumor Cell (TAG) Vaccine
Jairo Olivares, Padmasini Kumar, Yang Yu, Phillip B. Maples, Neil Senzer, Cynthia Bedell, Minal Barve, Alex Tong, Beena O. Pappen, Joseph Kuhn, Mitchell Magee, Gladice Wallraven, and John Nemunaitis

193 Phase I Study of E7820, an Oral Inhibitor of Integrin α2 Expression with Antiangiogenic Properties, in Patients with Advanced Malignancies
Monica Mita, Kevin R. Kelly, Alain Mita, Alejandro D. Ricart, Ofelia Romero, Anthony Tolcher, Laurel Hook, Chukwueke Okereke, Ilya Krivelevich, Daniel P. Rossignol, Francis J. Giles, Eric K. Rowinsky, and Chris Takimoto

ABOUT THE COVER

Human glioma tumor initiating cells are targets for telomerase inhibition. Immunofluorescence studies show that glioma tumor-initiating cells express high levels of nestin (neuronal precursor cells marker, shown in green). These cells have substantially higher telomerase activity than normal tissue stem cells and can therefore be specifically and safely targeted for telomerase inhibition. For further details, please see Castelo-Branco and coworkers on page 111 in this issue.