Highlights of This Issue 2251

SMALL MOLECULE THERAPEUTICS

2253 The CDK4/6 Inhibitor LY2835219 Overcomes Vemurafenib Resistance Resulting from MAPK Reactivation and Cyclin D1 Upregulation Vipin Yadav, Teresa F. Burke, Lysiane Huber, Robert D. Van Horn, Youyan Zhang, Sean C. Buchanan, Edward M. Chan, James J. Starling, Richard P. Beckmann, and Sheng-Bin Peng


2276 Drug Repurposing Identifies a Synergistic Combination Therapy with Imatinib Mesylate for Gastrointestinal Stromal Tumor Ziyan Y. Pessetto, Yan Ma, Jeff J. Hirst, Margaret von Mehren, Scott J. Weir, and Andrew K. Godwin

2288 Synergistic Simvastatin and Metformin Combination Chemotherapy for Osseous Metastatic Castration-Resistant Prostate Cancer Melissa A. Babcock, Sanjeev Shukla, Pingfu Fu, Edwin J. Vazquez, Michelle A. Puchowicz, Joseph P. Molter, Christine Z. Oak, Gregory T. MacLennan, Chris A. Flask, Daniel J. Lindner, Yvonne Parker, Firouz Daneshgari, and Sanjay Gupta

2303 The CREB-Binding Protein Inhibitor ICG-001 Suppresses Pancreatic Cancer Growth Michael D. Arensman, Donatello Teleca, Anna R. Lay, Kathleen M. Kershaw, Nanping Wu, Timothy R. Donahue, and David W. Dawson


2328 Nanolipolee-007, a Novel Nanoparticle-Based Drug Containing Leelamine for the Treatment of Melanoma Raghavendra Gowda, Subba Rao V. Madhunapantula, Arati Sharma, Omer F. Kuzu, and Gavin P. Robertson

LARGE MOLECULE THERAPEUTICS


2352 Systemic Delivery of a miR34a Mimic as a Potential Therapeutic for Liver Cancer Christopher L. Daige, Jason F. Wiggins, Leslie Priddy, Terri Nelligan-Davis, Jane Zhao, and David Brown

CANCER BIOLOGY AND SIGNAL TRANSDUCTION

2361 Lipid Catabolism via CPT1 as a Therapeutic Target for Prostate Cancer Isabel R. Schlaepfer, Leah Rider, Lindsey Ulkus Rodrigues, Miguel A. Gijón, Colton T. Pac, Lina Romero, Adela Cimic, S. Joseph Sirintrapun, L. Michael Glodé, Robert H. Eckel, and Scott D. Cramer

2372 Prostate Cancer Cell Response to Paclitaxel Is Affected by Abnormally Expressed Securin PTTG1 Carolina Castilla, M. Luz Flores, Rafael Medina, Begoña Pérez-Valderrama, Francisco Romero, María Tortolero, Miguel A. Japón, and Carmen Sáez

2384 Regulation of OSU-03012 Toxicity by ER Stress Proteins and ER Stress–Inducing Drugs Laurence Booth, Jane L. Roberts, Nichola Cruickshanks, Steven Grant, Andrew Poklepovic, and Paul Dent

2399 Temozolomide Induces the Production of Epidermal Growth Factor to Regulate MDR1 Expression in Glioblastoma Cells Jessian L. Munoz, Vivian Rodriguez-Cruz, Steven J. Greco, Vipul Nagula, Kathleen W. Scotto, and Pranela Rameshwar
Table of Contents

2412  BRCA2 and RAD51 Promote Double-Strand Break Formation and Cell Death in Response to Gemcitabine
Rebecca M. Jones, Panagiotis Kotsantis, Grant S. Stewart, Petra Groth, and Eva Petermann

2422  Piperlongumine Chemosensitizes Tumor Cells through Interaction with Cysteine 179 of IκBα Kinase, Leading to Suppression of NF-κB–Regulated Gene Products
Jia Gang Han, Subash C. Gupta, Sahdeo Prasad, and Bharat B. Aggarwal

2436  Calpain-Mediated Integrin Deregulation as a Novel Mode of Action for the Anticancer Gallium Compound KP46

MODELS AND TECHNOLOGIES

2450  An In Vivo Antilymphatic Screen in Zebrafish Identifies Novel Inhibitors of Mammalian Lymphangiogenesis and Lymphatic-Mediated Metastasis
Jonathan W. Astin, Stephen M.P. Jamieson, Tiffany C.Y. Eng, Maria V. Flores, June P. Misa, Annie Chien, Kathryn E. Crosier, and Philip S. Crosier

2463  Integrated Analysis of Transcriptomes of Cancer Cell Lines and Patient Samples Reveals STK11/LKB1–Driven Regulation of cAMP Phosphodiesterase-4D
Ningning He, Nayoung Kim, Mee Song, Choa Park, Somin Kim, Eun Young Park, Hwa Young Yim, Kyunga Kim, Jong Hoon Park, Keun Il Kim, Fan Zhang, Gordon B. Mills, and Sukjoon Yoon

ABOUT THE COVER

Zebrafish embryos can be used to examine mechanisms of vascular development and as a platform with which to identify novel antivascular agents; this is an image of a 2-day-old zebrafish embryo showing developing lymphatic vessels in green (lyve1:egfp) and endothelial cell nuclei in red (kdrl:nls:mcherry). This embryo was live imaged for a further 20 hours to identify novel inhibitors of lymphatic vessel growth and revealed that flunarizine, a calcium channel antagonist, was able specifically induce lymphatic endothelial cell death. For details, see the article by Astin and colleagues on page 2450.