# Table of Contents

## October 2014 · Volume 13 · Number 10

### Molecular Cancer Therapeutics

#### SMALL MOLECULE THERAPEUTICS

- **2251** Highlights of This Issue

- **2253** The CDK4/6 Inhibitor LY2835219 Overcomes Vemurafenib Resistance Resulting from MAPK Reactivation and Cyclin D1 Upregulation  

- **2264** Inhibition of Endoglin–GIPC Interaction Inhibits Pancreatic Cancer Cell Growth  

- **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. Babcook, 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 Telesca, Anna R. Lay, Kathleen M. Kershaw, Nanping Wu, Timothy R. Donahue, and David W. Dawson

- **2315** BET Protein Antagonist JQ1 Is Synergistically Lethal with FLT3 Tyrosine Kinase Inhibitor (TKI) and Overcomes Resistance to FLT3-TKI in AML Cells Expressing FLT-ITD  

- **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

- **2341** Redirected T-Cell Killing of Solid Cancers Targeted with an Anti-CD3/Trop-2–Bispecific Antibody Is Enhanced in Combination with Interferon-α  
  Edmund A. Rossi, Diane L. Rossi, Thomas M. Cardillo, Chien-Hsing Chang, and David M. Goldenberg

- **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  

- **2372** Prostate Cancer Cell Response to Paclitaxel Is Affected by Abnormally Expressed Securin PTTG1  
  Carolina Castillo, M. Luz Flores, Rafael Medina, Begona Perez-Valderrama, Francisco Romero, Maria Torotero, Miguel A. Japon, and Carmen Saez

- **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.F. 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.