

# Molecular Cancer Therapeutics

A Journal of the American Association for Cancer Research

Volume 8, Number 9

September 2009

## Spotlight on Clinical Response

- Activate and resist: L576P-KIT in GIST** .....2491  
Elena Conca, Tiziana Negri, Alessandro Gronchi, Elena Fumagalli, Elena Tamborini,  
Giovanni Maria Pavan, Maurizio Fermeglia, Marco A. Pierotti, Sabrina Pricl,  
and Silvana Pilotti

## Review

- The role of vascular endothelial growth factor SNPs as predictive and prognostic markers for major solid tumors** .....2496  
Lokesh Jain, Craig A. Vargo, Romano Danesi, Tristan M. Sissung, Douglas K. Price,  
David Venzon, Jürgen Venitz, and William D. Figg

## Research Articles

- Triptolide induces cell death independent of cellular responses to imatinib in blast crisis chronic myelogenous leukemia cells including quiescent CD34<sup>+</sup> primitive progenitor cells** .....2509  
Duncan H. Mak, Wendy D. Schober, Wenjing Chen, Marina Konopleva, Jorge Cortes,  
Hagop M. Kantarjian, Michael Andreeff, and Bing Z. Carter
- Preclinical biomarkers for a cyclin-dependent kinase inhibitor translate to candidate pharmacodynamic biomarkers in phase I patients** .....2517  
Windy Berkofsky-Fessler, Tri Q. Nguyen, Paul Delmar, Juliette Molnos, Charu Kanwal,  
Wanda DePinto, James Rosinski, Patricia McLoughlin, Steve Ritland, Mark DeMario,  
Krishna Tobon, John F. Reidhaar-Olson, Ruediger Rueger, and Holly Hilton
- Combination of EGFR and MEK1/2 inhibitor shows synergistic effects by suppressing EGFR/HER3-dependent AKT activation in human gastric cancer cells** .....2526  
Young-Kwang Yoon, Hwang-Phill Kim, Sae-Won Han, Hyung-Seok Hur, Do Youn Oh,  
Seock-Ah Im, Yung-Jue Bang, and Tae-You Kim
- AZD6244 (ARRY-142886) enhances the therapeutic efficacy of sorafenib in mouse models of gastric cancer** .....2537  
Shu Yang, Van Chanh Ngo, Guo Bin Lew, Lih Wen Valerie Chong, Swee Shean Lee,  
Wei Jie Richard Ong, Wei Ling Irene Lam, Choon Hua Thng, Heng Nung Koong,  
Hock Soo Ong, Alexander Chung, Pierce Chow, Jonathan Lee, Khee Chee Soo,  
and Hung Huynh
- Targeting vascular endothelial growth factor receptor-1 and -3 with cediranib (AZD2171): effects on migration and invasion of gastrointestinal cancer cell lines** .....2546  
M. Pia Morelli, Amy M. Brown, Todd M. Pitts, John J. Tentler, Fortunato Ciardiello,  
Anderson Ryan, Juliane M. Jürgensmeier, and S. Gail Eckhardt

*contents continued*

<b>An allosteric kinase inhibitor binds the p21-activated kinase autoregulatory domain covalently</b> .....	2559
Julien Viaud and Jeffrey R. Peterson	
<b>Prostate-derived factor—a novel inhibitor of drug-induced cell death in colon cancer cells</b> .....	2566
Irina Proutski, Leanne Stevenson, Wendy L. Allen, Andrea McCulla, John Boyer, Estelle G. McLean, Daniel B. Longley, and Patrick G. Johnston	
<b>Celecoxib antagonizes perifosine’s anticancer activity involving a cyclooxygenase-2-dependent mechanism</b> .....	2575
Heath A. Elrod, Ping Yue, Fadlo R. Khuri, and Shi-Yong Sun	
<b>A novel small molecule with potent anticancer activity inhibits cell growth by modulating intracellular labile zinc homeostasis</b> .....	2586
Mario Huesca, Lisa S. Lock, Aye Aye Khine, Stéphane Viau, Robert Peralta, I. Howard Cukier, Hongnan Jin, Raed A. Al-Qawasmeh, Yoon Lee, Jim Wright, and Aiping Young	
<b>A novel target for treatment of chordoma: signal transducers and activators of transcription 3</b> .....	2597
Cao Yang, Joseph H. Schwab, Andrew J. Schoenfeld, Francis J. Hornicek, Kirkham B. Wood, G. Petur Nielsen, Edwin Choy, Henry Mankin, and Zhenfeng Duan	
<b>Inhibition of type I histone deacetylase increases resistance of checkpoint-deficient cells to genotoxic agents through mitotic delay</b> .....	2606
John P. Alao, Jeanette Olesch, and Per Sunnerhagen	
<b>Combinatorial efficacy of anti-CS1 monoclonal antibody elotuzumab (HuLuc63) and bortezomib against multiple myeloma</b> .....	2616
Frits van Rhee, Susann M. Szmania, Myles Dillon, Anne M. van Abbema, Xin Li, Mary K. Stone, Tarun K. Garg, JuMei Shi, Amberly M. Moreno-Bost, Rui Yun, Balaji Balasa, Bishwa Ganguly, Debra Chao, Audie G. Rice, Fenghuang Zhan, John D. Shaughnessy, Jr., Bart Barlogie, Shmuel Yaccoby, and Daniel E.H. Afar	
<b>Nuclear factor <math>\kappa</math>B inhibitors alleviate and the proteasome inhibitor PS-341 exacerbates radiation toxicity in zebrafish embryos</b> .....	2625
Borbala Daroczi, Gabor Kari, Qing Ren, Adam P. Dicker, and Ulrich Rodeck	
<b>Targeting NF-<math>\kappa</math>B signaling pathway suppresses tumor growth, angiogenesis, and metastasis of human esophageal cancer</b> .....	2635
Bin Li, Yuk Yin Li, Sai Wah Tsao, and Annie L.M. Cheung	
<b>NF-<math>\kappa</math>B activation in endothelial cells is critical for the activity of angiostatic agents</b> .....	2645
Sebastien P. Tabruyn, Sylvie Mémet, Patrick Avé, Catherine Verhaeghe, Kevin H. Mayo, Ingrid Struman, Joseph A. Martial, and Arjan W. Griffioen	
<b>Tumor necrosis factor deficiency inhibits mammary tumorigenesis and a tumor necrosis factor neutralizing antibody decreases mammary tumor growth in neu/erbB2 transgenic mice</b> .....	2655
Mary Ann Warren, Suzanne F. Shoemaker, David J. Shealy, Wiam Bshara, and Margot M. Ip	

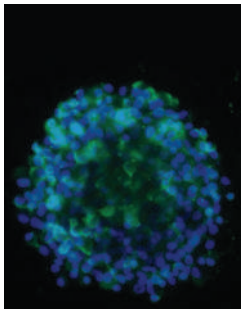
<b>Modulation of transcription by the peroxisome proliferator-activated receptor <math>\delta</math>-binding RNA aptamer in colon cancer cells</b> .....	2664
Hoyun Kwak, Injoo Hwang, Jee Ho Kim, Mee Young Kim, Ji Sun Yang, and Sunjoo Jeong	
<b>EpCAM-targeted delivery of nanocomplexed siRNA to tumor cells with designed ankyrin repeat proteins</b> .....	2674
Johannes Winkler, Patricia Martin-Killias, Andreas Plückthun, and Uwe Zangemeister-Wittke	
<b>Correcting miR-15a/16 genetic defect in New Zealand Black mouse model of CLL enhances drug sensitivity</b> .....	2684
Erica Salerno, Brian J. Scaglione, Frederick D. Coffman, Brian D. Brown, Alessia Baccharini, Helen Fernandes, Gerald Marti, and Elizabeth S. Raveche	
<b>Anticancer activity of targeted proapoptotic peptides and chemotherapy is highly improved by targeted cell surface calreticulin-inducer peptides</b> .....	2693
Michel Obeid	
<b>Structure-based design of an urokinase-type plasminogen activator receptor-derived peptide inhibiting cell migration and lung metastasis</b> .....	2708
Maria Vincenza Carriero, Immacolata Longanesi-Cattani, Katia Bifulco, Ornella Maglio, Liliana Lista, Antonio Barbieri, Giuseppina Votta, Maria Teresa Masucci, Claudio Arra, Renato Franco, Mario De Rosa, Maria Patrizia Stoppelli, and Vincenzo Pavone	
<b>Suberoylanilide hydroxamic acid sensitizes human oral cancer cells to TRAIL-induced apoptosis through increase DR5 expression</b> .....	2718
Cheng-Chang Yeh, Yi-Ting Deng, De-Yuan Sha, Michael Hsiao, and Mark Yen-Ping Kuo	
<b>Curcumin induces proapoptotic effects against human melanoma cells and modulates the cellular response to immunotherapeutic cytokines</b> .....	2726
Matthew A. Bill, Courtney Bakan, Don M. Benson, Jr., James Fuchs, Gregory Young, and Gregory B. Lesinski	
<b>High antitumor activity of RLI, an interleukin-15 (IL-15)-IL-15 receptor <math>\alpha</math> fusion protein, in metastatic melanoma and colorectal cancer</b> .....	2736
Anne Bessard, Véronique Solé, Grégory Bouchaud, Agnès Quéméner, and Yannick Jacques	
<b>Chemokine CXC receptor 4-mediated glioma tumor tracking by bone marrow-derived neural progenitor/stem cells</b> .....	2746
Qijin Xu, Xiangpeng Yuan, Minlin Xu, Fred McLafferty, Jinwei Hu, Bong Seop Lee, Gentao Liu, Zhaohui Zeng, Keith L. Black, and John S. Yu	
<b>Recombinant adeno-associated virus encoding Epstein-Barr virus latent membrane proteins fused with heat shock protein as a potential vaccine for nasopharyngeal carcinoma</b> .....	2754
Jianqing Pan, Qin Zhang, Jianfeng Zhou, Ding Ma, Xiao Xiao, and Dao Wen Wang	

contents continued

**Adenovirus-mediated down-regulation of X-linked inhibitor of apoptosis protein inhibits colon cancer** .....2762  
Yun Dai, Liang Qiao, Kwok Wah Chan, Mo Yang, Jieyu Ye, Rongxin Zhang, Juan Ma, Bing Zou, Colin S.C. Lam, Jide Wang, Roberta Pang, Victoria P.Y. Tan, H.Y. Lan, Benjamin C.Y. Wong

**Corrections**

**T-VISA-E1A promotes cancer cell death** .....2771  
**NDSP, novel secreted factor in neuroblastoma** .....2771



**On the Cover**

Bone marrow-derived neural progenitor/stem cells form neurospheres and express typical neural stem cell marker nestin. Immunofluorescence staining of the neurospheres reveals expression of nestin protein (*green*). Counterstaining of the nuclei with DAPI is depicted (*blue*). These adult neural stem cells manifest glioma tracking property mediated through chemokine CXC receptor 4 signaling. For details, see the article by Xu and colleagues on page 2746.

*Molecular Cancer Therapeutics* is abstracted or indexed in MEDLINE/Index Medicus, Chemical Abstracts (STN), Biological Abstracts, Biochemistry & Biophysics Citation Index, BIOSYS Previews® Database, and Science Citation Index. *Molecular Cancer Therapeutics* is also published online. Please visit <http://mct.aacrjournals.org>.

**Authors...Submit your papers online at  
[mct.msubmit.net](http://mct.msubmit.net)**

# Molecular Cancer Therapeutics

**8 (9)**

*Mol Cancer Ther* 2009;8:2491-2771.

**Updated version** Access the most recent version of this article at:  
<http://mct.aacrjournals.org/content/8/9>

**E-mail alerts** [Sign up to receive free email-alerts](#) related to this article or journal.

**Reprints and Subscriptions** To order reprints of this article or to subscribe to the journal, contact the AACR Publications Department at [pubs@aacr.org](mailto:pubs@aacr.org).

**Permissions** To request permission to re-use all or part of this article, use this link <http://mct.aacrjournals.org/content/8/9>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.