

## Editorial

- "PIKing" the Winner for Phosphatidylinositol 3-Kinase Inhibitors in ErbB2-Positive Breast Cancer: Let's Not "PTENed" It's Easy!**  
□□ *Commentary on Lu et al., p. 5883*  
Matthew J. Ellis and Robert Crowder.....5661

## The Biology Behind

- NF-κB Gene Signatures and p53 Mutations in Head and Neck Squamous Cell Carcinoma.**  
□□ *Commentary on Lee et al., p. 5680*  
Robert L. Ferris and Jennifer R. Grandis.....5663

## Molecular Pathways

- Targeting the Cytoplasmic and Nuclear Functions of Signal Transducers and Activators of Transcription 3 for Cancer Therapy.** Doris Germain and David A. Frank .....5665
- Hypoxia Inducible Factor-1-Independent Pathways in Tumor Angiogenesis.** Yusuke Mizukami, Yutaka Kohgo, and Daniel C. Chung .....5670

## Perspective

- Universal and Stemness-Related Tumor Antigens: Potential Use in Cancer Immunotherapy.**  
Giorgio Parmiani, Vincenzo Russo, Andrea Marrari, Gianluca Cutolo, Chiara Casati, Lorenzo Pilla, Cristina Maccalli, Licia Rivoltini, and Chiara Castelli.....5675

## Human Cancer Biology

- A Novel Nuclear Factor-κB Gene Signature Is Differentially Expressed in Head and Neck Squamous Cell Carcinomas in Association with TP53 Status.** Tin Lap Lee, Xin Ping Yang, Bin Yan, Jay Friedman, Praveen Duggal, Lorena Bagain, Gang Dong, Ning T. Yeh, Jie Wang, Jian Zhou, Abdel Elkahloun, Carter Van Waes, and Zhong Chen.....5680
- Smad3 Is Overexpressed in Advanced Human Prostate Cancer and Necessary for Progressive Growth of Prostate Cancer Cells in Nude Mice.** Shan Lu, Juwon Lee, Monica Revelo, Xiaohong Wang, Shan Lu, and Zhongyun Dong.....5692
- Identification of Toll-Like Receptor 3 as a Potential Therapeutic Target in Clear Cell Renal Cell Carcinoma.** Teppei Morikawa, Akira Sugiyama, Haruki Kume, Satoshi Ota, Takeshi Kashima, Kyoichi Tomita, Tadaichi Kitamura, Tatsuhiko Kodama, Masashi Fukayama, and Hiroyuki Aburatani.....5703
- The Proangiogenic Phenotype of Tumor-Derived Endothelial Cells is Reverted by the Overexpression of Platelet-Activating Factor Acetylhydrolase.** Sophie Doublier, Monica Ceretto, Enrico Lupia, Stefania Bravo, Benedetta Bussolati, and Giovanni Camussi.....5710
- Eotaxin-2 and Colorectal Cancer: A Potential Target for Immune Therapy.** Eleanor J. Cheadle, Kallingal Riyad, Daren Subar, Dominic G. Rothwell, Garry Ashton, Hayley Batha, David J. Sherlock, Robert E. Hawkins, and David E. Gilham.....5719
- Molecular Analysis of Colorectal Cancer Tumors from Patients with Mismatch Repair – Proficient Hereditary Nonpolyposis Colorectal Cancer Suggests Novel Carcinogenic Pathways.** Ana Sánchez-de-Abajo, Miguel de la Hoya, Marjo van Puijenbroek, Alicia Tosar, J.A. López-Asenjo, Eduardo Díaz-Rubio, Hans Morreau, and Trinidad Caldes.....5729
- Comparative Analysis of Peritoneum and Tumor Eicosanoids and Pathways in Advanced Ovarian Cancer.** Ralph S. Freedman, Ena Wang, Sonia Voiculescu, Rebecca Patenia, Roland L. Bassett, Jr., Michael Deavers, Francesco M. Marincola, Peiying Yang, and Robert A. Newman .....5736

- Amplification of PVT1 Contributes to the Pathophysiology of Ovarian and Breast Cancer.** Yinghui Guan, Wen-Lin Kuo, Jackie L. Stilwell, Hirokuni Takano, Anna V. Lapuk, Jane Fridlyand, Jian-Hua Mao, Mamie Yu, Melinda A. Miller, Jennifer L. Santos, Steve E. Kalloger, Joseph W. Carlson, David G. Ginzinger, Susan E. Celniker, Gordon B. Mills, David G. Huntsman, and Joe W. Gray.....5745
- CMTM5 Exhibits Tumor Suppressor Activities and Is Frequently Silenced by Methylation in Carcinoma Cell Lines.** Luning Shao, Yan Cui, Hongyu Li, Yanan Liu, Hongshan Zhao, Yu Wang, Yingmei Zhang, Ka Man Ng, Wenling Han, Dalong Ma, and Qian Tao.....5756
- The Impact of Sex and Smoking Status on the Mutational Spectrum of Epidermal Growth Factor Receptor Gene in Non-small Cell Lung Cancer.** Shinichi Toyooka, Keitaro Matsuo, Hisayuki Shigematsu, Takayuki Kosaka, Masaki Tokumo, Yasushi Yatabe, Syuji Ichihara, Michio Inukai, Hiroshi Suehisa, Junichi Soh, Katsuyuki Kiura, Kwun M. Fong, Huei Lee, Ignacio I. Wistuba, Adi F. Gazdar, Tetsuya Mitsudomi, and Hiroshi Date .....5763

## Imaging, Diagnosis, Prognosis

- Phosphorylation of Estrogen Receptor- $\alpha$  at Ser<sup>167</sup> Is Indicative of Longer Disease-Free and Overall Survival in Breast Cancer Patients.** Jie Jiang, Naveed Sarwar, David Peston, Elena Kulinskaya, Sami Shousha, R. Charles Coombes, and Simak Ali .....5769
- Short Telomeres: A Novel Potential Predictor of Relapse in Ewing Sarcoma.** Smadar Avigad, Inna Naumov, Anat Ohali, Marta Jeison, Gili Halevy Berco, Jacques Mardoukh, Batia Stark, Shifra Ash, Ian J. Cohen, Isaac Meller, Yehuda Kollender, Josephine Issakov, and Isaac Yaniv .....5777
- A High Tumor-Associated Macrophage Content Predicts Favorable Outcome in Follicular Lymphoma Patients Treated with Rituximab and Cyclophosphamide-Doxorubicin-Vincristine-Prednisone.** Minna Taskinen, Marja-Liisa Karjalainen-Lindsberg, Heidi Nyman, Leena-Maija Eerola, and Sirpa Leppä .....5784
- The AA Genotype of the Regulatory BCL2 Promoter Polymorphism (-938C>A) Is Associated with a Favorable Outcome in Lymph Node-Negative Invasive Breast Cancer Patients.** Hagen S. Bachmann, Friedrich Otterbach, Rainer Callies, Holger Nüchel, Maja Bau, Kurt W. Schmid, Winfried Siffert, and Rainer Kimmig.....5790
- p66 Shc Tumor Levels Show a Strong Prognostic Correlation with Disease Outcome in Stage IIA Colon Cancer.** Steven R. Grossman, Stephen Lyle, Murray B. Resnick, Edmond Sabo, Rosina T. Lis, Elizabeth Rosinha, Qin Liu, Chung-Cheng Hsieh, Gajanan Bhat, A. Raymond Frackelton, Jr., and Laurie J. Hafer.....5798
- Measurement of Cyclin E Genomic Copy Number and Strand Length in Cell-Free DNA Distinguish Malignant versus Benign Effusions.** Ritu Salani, Ben Davidson, Michael Fiegl, Christian Marth, Elisabeth Müller-Holzner, Guenther Gastl, Han-Yao Huang, Jui-Chi Hsiao, Her-Sheng Lin, Tian-Li Wang, Bai-Ling Lin, and Ie-Ming Shih .....5805
- Caspase-3 Activity Predicts Local Recurrence in Rectal Cancer.** Pieter de Heer, Elza C. de Bruin, Elma Klein-Kranenbarg, Remco I.J.M. Aalbers, Corrie A.M. Marijnen, Hein Putter, Hans J. de Bont, J. Fred Nagelkerke, J. Han J.M. van Krieken, Hein W. Verspaget, Cornelis J.H. van de Velde, and Peter J.K. Kuppen, for the Dutch Colorectal Cancer Group.....5810

## Cancer Therapy: Clinical

- Platelet-Derived Growth Factor Receptor Inhibition and Chemotherapy for Castration-Resistant Prostate Cancer with Bone Metastases.** Paul Mathew, Peter F. Thall, Corazon D. Bucana, William K. Oh, Michael J. Morris, Donnah M. Jones, Marcella M. Johnson, Sijin Wen, Lance C. Pagliaro, Nizar M. Tannir, Shi-Ming Tu, Anthony A. Meluch, Lon Smith, Lorenzo Cohen, Sun-Jin Kim, Patricia Troncoso, Isaiah J. Fidler, and Christopher J. Logothetis.....5816
- Molecular Alterations in Prostate Carcinomas that Associate with *In vivo* Exposure to Chemotherapy: Identification of a Cytoprotective Mechanism Involving Growth Differentiation Factor 15.** Chung-Ying Huang, Tomasz M. Beer, Celestia S. Higano, Lawrence D. True, Robert Vessella, Paul H. Lange, Mark Garzotto, and Peter S. Nelson .....5825

<b>Phase I Dose Escalation Study of the Anti-Insulin-Like Growth Factor-I Receptor Monoclonal Antibody CP-751,871 in Patients with Refractory Solid Tumors.</b> Paul Haluska, Heather M. Shaw, Gretchen N. Batzel, Donghua Yin, Julian R. Molina, L. Rhoda Molife, Timothy A. Yap, M. Luisa Roberts, Amarnath Sharma, Antonio Gualberto, Alex A. Adjei, and Johann S. de Bono.....	5834
<b>Phase I Dose-Finding Study of Weekly Docetaxel Followed by Flavopiridol for Patients with Advanced Solid Tumors.</b> M.N. Fornier, D. Rathkopf, M. Shah, S. Patil, E. O'Reilly, A.N. Tse, C. Hudis, R. Lefkowitz, D.P. Kelsen, and G.K. Schwartz .....	5841
<b>Adjuvant Adenovirus-Mediated Delivery of Herpes Simplex Virus Thymidine Kinase Administration Improves Outcome of Liver Transplantation in Patients with Advanced Hepatocellular Carcinoma.</b> Ning Li, Jianfeng Zhou, Danhui Weng, Chenghua Zhang, Lixin Li, Beibei Wang, Yang Song, Qiang He, Dongdong Lin, Dazhi Chen, Gang Chen, Qinglei Gao, Shixuan Wang, Gang Xu, Li Meng, Yun Ping Lu, and Ding Ma .....	5847
<b>Phase I Trial of Poly-L-Glutamate Camptothecin (CT-2106) Administered Weekly in Patients with Advanced Solid Malignancies.</b> Jade Homsy, George R. Simon, Chris R. Garrett, Gregory Springett, Ronald De Conti, Alberto A. Chiappori, Pamela N. Munster, Michelle K. Burton, Scott Stromatt, Claudia Allievi, Patrizia Angiuli, Amy Eisenfeld, Daniel M. Sullivan, and Adil I.Daud .....	5855
<b>Inflammatory Breast Cancer as a Model Disease to Study Tumor Angiogenesis: Results of a Phase IB Trial of Combination SU5416 and Doxorubicin.</b> Beth Overmoyer, Pingfu Fu, Charles Hoppel, Tomas Radivoyevitch, Robert Shenk, Marjie Persons, Paula Silverman, Kelly Robertson, Nicholas P. Ziats, Jay K. Wasman, Fadi W. Abdul-Karim, John A. Jesberger, Jeffrey Duerk, Paul Hartman, Shelli Hanks, Jonathan Lewin, Afshin Dowlati, Keith McCrae, Percy Ivy, and Scot C. Remick .....	5862
<b>A Phase II Study of Gefitinib Monotherapy in Advanced Esophageal Adenocarcinoma: Evidence of Gene Expression, Cellular, and Clinical Response.</b> David R. Ferry, Mark Anderson, Kate Beddard, Simon Tomlinson, Paul Atherfold, Jolanta Obszynska, Rebecca Harrison, and Janusz Jankowski.....	5869
<b>Phase I and Pharmacokinetic Study of Imatinib Mesylate (Gleevec) and Gemcitabine in Patients with Refractory Solid Tumors.</b> Yaqoob Ali, Yong Lin, Mecide M. Gharibo, Murugesan K. Gounder, Mark N. Stein, Theodore F. Lagattuta, Merrill J. Egorin, Eric H. Rubin, and Elizabeth A. Poplin.....	5876

## Cancer Therapy: Preclinical

<b>Preclinical Testing of Clinically Applicable Strategies for Overcoming Trastuzumab Resistance Caused by PTEN Deficiency.</b> Chien-Hsing Lu, Shannon L. Wyszomierski, Ling-Ming Tseng, Meng-Hong Sun, Keng-Hsueh Lan, Christopher L. Neal, Gordon B. Mills, Gabriel N. Hortobagyi, Francisco J. Esteva, and Dihua Yu.....	5883
<b>Characterization of a Putative Ovarian Oncogene, Elongation Factor 1<math>\alpha</math>, Isolated by Panning a Synthetic Phage Display Single-Chain Variable Fragment Library with Cultured Human Ovarian Cancer Cells.</b> Sameer Sharma, Jonathan Tammela, Xinhui Wang, Hilal Arnouk, Deborah Driscoll, Paulette Mhawech-Fauceglia, Shashikant Lele, A. Latif Kazim, and Kunle Odunsi .....	5889
<b>Herpes Simplex Virus Us3(-) Mutant as Oncolytic Strategy and Synergizes with Phosphatidylinositol 3-Kinase-Akt-Targeting Molecular Therapeutics.</b> Ta-Chiang Liu, Hiroaki Wakimoto, Robert L. Martuza, and Samuel D. Rabkin .....	5897
<b>Neutralizing B-Cell-Activating Factor Antibody Improves Survival and Inhibits Osteoclastogenesis in a Severe Combined Immunodeficient Human Multiple Myeloma Model.</b> Paola Neri, Shaji Kumar, Maria Teresa Fulciniti, Sonia Vallet, Shweta Chhetri, Sidhartha Mukherjee, YuTzu Tai, Dharminder Chauhan, Pierfrancesco Tassone, Salvatore Venuta, Nikhil C. Munshi, Teru Hideshima, Kenneth C. Anderson, and Noopur Raje .....	5903
<b>Inhibition of Jun NH<sub>2</sub>-Terminal Kinases Suppresses the Growth of Experimental Head and Neck Squamous Cell Carcinoma.</b> Neil D. Gross, Jay O. Boyle, Baoheng Du, Vikram D. Kekatpure, Agnieszka Lantowski, Howard T. Thaler, Babette B. Weksler, Kotha Subbaramaiah, and Andrew J. Dannenberg.....	5910

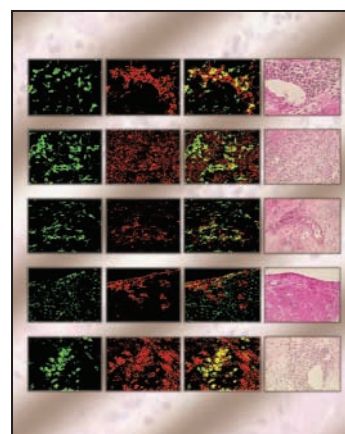
<b>The Therapeutic Efficacy of Anti-Vascular Endothelial Growth Factor Antibody, Bevacizumab, and Pemetrexed against Orthotopically Implanted Human Pleural Mesothelioma Cells in Severe Combined Immunodeficient Mice.</b> Qi Li, Seiji Yano, Hirokazu Ogino, Wei Wang, Hisanori Uehara, Yasuhiko Nishioka, and Saburo Sone.....	5918
<b>Anthrax Lethal Toxin Inhibits Growth of and Vascular Endothelial Growth Factor Release from Endothelial Cells Expressing the Human Herpes Virus 8 Viral G Protein-Coupled Receptor.</b> Philippe Depeille, John J. Young, Elissa A. Boguslawski, Bree D. Berghuis, Eric J. Kort, James H. Resau, Arthur E. Frankel, and Nicholas S. Duesbery.....	5926
<b>Imaging and Modulating Antisense Microdistribution in Solid Human Xenograft Tumor Models.</b> Joseph D. Mocanu, Kenneth W. Yip, Julia Skliarenko, Wei Shi, Pierre Busson, Kwok-Wai Lo, Carlo Bastianutto, and Fei-Fei Liu.....	5935
<b>Bortezomib Inhibits Nuclear Factor-<math>\kappa</math>B-Dependent Survival and Has Potent <i>In vivo</i> Activity in Mesothelioma.</b> Andrea Sartore-Bianchi, Fabio Gasparri, Arturo Galvani, Linda Nici, James W. Darnowski, Dario Barbone, Dean A. Fennell, Giovanni Gaudino, Camillo Porta, and Luciano Mutti .....	5942

## Cancer Susceptibility and Prevention

<b><i>N</i>-Acetylcysteine Protects Melanocytes against Oxidative Stress/Damage and Delays Onset of Ultraviolet-Induced Melanoma in Mice.</b> Murray A. Cotter, Joshua Thomas, Pamela Cassidy, Kyle Robinette, Noah Jenkins, Scott R. Florell, Sancy Leachman, Wolfram E. Samlowski, and Douglas Grossman .....	5952
<b>Association of RNASEL Variants with Prostate Cancer Risk in Hispanic Caucasians and African Americans.</b> Stacie J. Shook, Joke Beuten, Kathleen C. Torkko, Teresa L. Johnson-Pais, Dean A. Troyer, Ian M. Thompson, and Robin J. Leach.....	5959
<b>Exisulind in Combination with Celecoxib Modulates Epidermal Growth Factor Receptor, Cyclooxygenase-2, and Cyclin D1 against Prostate Carcinogenesis: <i>In vivo</i> Evidence.</b> Bhagavathi A. Narayanan, Bandaru S. Reddy, Maarten C. Bosland, Dominick Nargi, Lori Horton, Carla Randolph, and Narayanan K. Narayanan.....	5965
<b>Genetic Variants in Cell Cycle Control Pathway Confer Susceptibility to Lung Cancer.</b> Wei Wang, Margaret R. Spitz, Hushan Yang, Charles Lu, David J. Stewart, and Xifeng Wu .....	5974

## About the Cover

Peritoneum of patient with advanced epithelial ovarian cancer showing extensive infiltrate of CD163+ macrophages (green immunofluorescing cells in the first column). Second column shows cells expressing red fluorescence for different eicosanoid pathway enzymes (panels from top to bottom include COX-1, COX-2, PGES-1, PGES-2, and 15 LOX-2). Third column shows co-localization of eicosanoid pathway enzymes to CD163+ macrophages (yellow color). H&E stained sections show detailed morphology. For further details, please see the article by Freedman and associates on page 5736 of this issue.



# Clinical Cancer Research

**13 (19)**

*Clin Cancer Res* 2007;13:5661-5981.

**Updated version** Access the most recent version of this article at:  
<http://clincancerres.aacrjournals.org/content/13/19>

**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://clincancerres.aacrjournals.org/content/13/19>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.