

## The Biology Behind

### Coming Unglued.

□□ Commentary on Leung *et al.*, p. 3216

Richard M. Peek, Jr., Barbara G. Schneider, and Pelayo Correa .....2951

## Report from the FDA

### United States Food and Drug Administration Approval Summary: Bortezomib for the Treatment of Progressive Multiple Myeloma after One Prior Therapy.

Robert C. Kane, Ann T. Farrell, Rajeshwari Sridhara, and Richard Pazdur.....

2955

## CCR Drug Updates

Erlotinib: Optimizing Therapy with Predictors of Response? Susan Goodin .....2961

## Molecular Pathways

### Practicalities of Drugging the Phosphatidylinositol-3-Kinase/Akt Cell Survival Signaling Pathway.

Garth Powis, Nathan Ihle, and D. Lynn Kirkpatrick .....2964

## Human Cancer Biology

### Efficient Presentation of Naturally Processed HLA Class I Peptides by Artificial Antigen-Presenting Cells for the Generation of Effective Antitumor Responses.

Naoto Hirano, Marcus O. Butler, Zhinan Xia, Alla Berezovskaya, Andrew P. Murray, Sascha Ansén, and Lee M. Nadler.....

2967

### RNA Interference Suppression of MUC1 Reduces the Growth Rate and Metastatic Phenotype of Human Pancreatic Cancer Cells.

Hideaki Tsutsumida, Benjamin J. Swanson, Pankaj K. Singh, Thomas C. Caffrey, Shinichi Kitajima, Masamichi Goto, Suguru Yonezawa, and Michael A. Hollingsworth.....

2976

### Mixed Lineage Leukemia–Rearranged Childhood Pro-B and CD10-Negative Pre-B Acute Lymphoblastic Leukemia Constitute a Distinct Clinical Entity.

Andishe Attarbaschi, Georg Mann, Margit König, Manuel Steiner, Sabine Strehl, Anita Schreiberhuber, Björn Schneider, Claus Meyer, Rolf Marschalek, Arndt Borkhardt, Winfried F. Pickl, Thomas Lion, Helmut Gadner, Oskar A. Haas, and Michael N. Dworzak on behalf of the Austrian Berlin-Frankfurt-Münster Cooperative Study Group.....

2988

### CpG Island Methylation Status in Gastric Carcinoma with and without Infection of Epstein-Barr Virus.

Moon-Sung Chang, Hiroshi Uozaki, Ja-Mun Chong, Tetsuo Ushiku, Kazuya Sakuma, Shunpei Ishikawa, Rumi Hino, Rita Rani Barua, Yoshiaki Iwasaki, Kuniyoshi Arai, Hideki Fujii, Hideo Nagai, and Masashi Fukayama.....

2995

### Glucocorticoids Suppress Tumor Angiogenesis and *In vivo* Growth of Prostate Cancer Cells.

Akihiro Yano, Yasuhisa Fujii, Aki Iwai, Yukio Kageyama, and Kazunori Kihara.....

3003

### 17 $\beta$ -Estradiol Induces Down-Regulation of *Cap43/NDRG1/Drg-1*, a Putative Differentiation-Related and Metastasis Suppressor Gene, in Human Breast Cancer Cells.

Abbas Fotovati, Teruhiko Fujii, Miki Yamaguchi, Masayoshi Kage, Kazuo Shirouzu, Shinji Oie, Yuji Basaki, Mayumi Ono, Hideaki Yamana, and Michihiko Kuwano.....

3010

### Phosphatidylinositol 3'-Kinase/AKT Signaling Is Activated in Medulloblastoma Cell Proliferation and Is Associated with Reduced Expression of PTEN.

Wolfgang Hartmann, Boris Digon-Söntgerath, Arend Koch, Anke Waha, Elmar Endl, Indra Dani, Dorota Denkhaus, Cynthia G. Goodyer, Niels Sörensen, Otmar D. Wiestler, and Torsten Pietsch.....

3019

### Peroxisome Proliferator–Activated Receptor $\alpha$ Activation Decreases Metastatic Potential of Melanoma Cells *In vitro* via Down-Regulation of Akt.

Maja Grabacka, Przemyslaw M. Plonka, Krystyna Urbanska, and Krzysztof Reiss.....

3028

---

## Imaging, Diagnosis, Prognosis

---

- Achieving a Major Molecular Response at the Time of a Complete Cytogenetic Response (CCgR) Predicts a Better Duration of CCgR in Imatinib-Treated Chronic Myeloid Leukemia Patients.** Ilaria Iacobucci, Giuseppe Saglio, Gianantonio Rosti, Nicoletta Testoni, Fabrizio Pane, Marilina Amabile, Angela Poerio, Simona Soverini, Simona Bassi, Daniela Cilloni, Renato Bassan, Massimo Breccia, Francesco Lauria, Barbara Izzo, Serena Merante, Francesco Frassoni, Stefania Paolini, Enrico Montefusco, Michele Bacarani, and Giovanni Martinelli for the GIMEMA Working Party on Chronic Myeloid Leukemia .....3037
- NOTCH1 Mutations in T-Cell Acute Lymphoblastic Leukemia: Prognostic Significance and Implication in Multifactorial Leukemogenesis.** Yong-Mei Zhu, Wei-Li Zhao, Jian-Fei Fu, Jing-Yi Shi, Qin Pan, Jiong Hu, Xiao-Dong Gao, Bing Chen, Jun-Min Li, Shu-Min Xiong, Long-Jun Gu, Jing-Yi Tang, Hui Liang, Hui Jiang, Yong-Quan Xue, Zhi-Xiang Shen, Zhu Chen, and Sai-Juan Chen .....3043
- Glutathione S-Transferase P1 Polymorphism (Ile<sup>105</sup>Val) Predicts Cumulative Neuropathy in Patients Receiving Oxaliplatin-Based Chemotherapy.** Thierry Lecomte, Bruno Landi, Philippe Beaune, Pierre Laurent-Puig, and Marie-Anne Loriot.....3050
- Clinical Significance of TROP2 Expression in Colorectal Cancer.** Takahiro Ohmachi, Fumiaki Tanaka, Koshi Mimori, Hiroshi Inoue, Katsuhiko Yanaga, and Masaki Mori.....3057
- Clinical and Immunologic Responses to Active Specific Cancer Vaccines in Human Colorectal Cancer.** Dirk Nagorsen and Eckhard Thiel.....3064
- Prognostic Significance of Activated AKT Expression in Soft-Tissue Sarcoma.** Yasuhiko Tomita, Takaya Morooka, Yoshihiko Hoshida, Binglin Zhang, Ying Qiu, Itsuko Nakamichi, Ken-ichiro Hamada, Takafumi Ueda, Norifumi Naka, Ikuo Kudawara, and Katsuyuki Aozasa .....3070

## Cancer Therapy: Clinical

---

- Epidermal Growth Factor Receptor Messenger RNA Expression, Gene Dosage, and Gefitinib Sensitivity in Non-Small Cell Lung Cancer.** Rafal Dziadziuszko, Samir E. Witte, Federico Cappuzzo, Seongjin Park, Koji Tanaka, Peter V. Danenberg, Anna E. Barón, Lucio Crino, Wilbur A. Franklin, Paul A. Bunn, Jr., Marileila Varella-Garcia, Kathleen D. Danenberg, and Fred R. Hirsch .....3078
- Phase I Trial of the Trifunctional Anti-HER2 × Anti-CD3 Antibody Ertumaxomab in Metastatic Breast Cancer.** Philipp Kiewe, Stephan Hasmüller, Steffen Kahlert, Maja Heinrigs, Brigitte Rack, Alexander Marmé, Agnieszka Korfel, Michael Jäger, Horst Lindhofer, Harald Sommer, Eckhard Thiel, and Michael Untch .....3085
- Phase II Clinical Trial Results Involving Treatment with Low-Dose Daily Oral Cyclophosphamide, Weekly Vinblastine, and Rofecoxib in Patients with Advanced Solid Tumors.** Scott D. Young, Mark Whissell, Jonathan C.S. Noble, Pablo O. Cano, Pedro G. Lopez, and Colin J. Germond .....3092
- Effect of cA2 Anti-Tumor Necrosis Factor- $\alpha$  Antibody Therapy on Hematopoiesis of Patients with Myelodysplastic Syndromes.** Anna Boula, Michael Voulgarelis, Stavroula Giannouli, George Katrinakis, Maria Psyllaki, Charalambos Pontikoglou, Fotini Markidou, George D. Eliopoulos, and Helen A. Papadaki.....3099
- Fenretinide Activity in Retinoid-Resistant Oral Leukoplakia.** Scott M. Lippman, J. Jack Lee, Jack W. Martin, Adel K. El-Naggar, Xiaochun Xu, Dong M. Shin, Margaret Thomas, Li Mao, Herbert A. Fritsche, Jr., Xian Zhou, Vassiliki Papadimitrakopoulou, Fadlo R. Khuri, Hai Tran, Gary L. Clayman, Walter N. Hittelman, Waun Ki Hong, and Reuben Lotan .....3109
- Carbogen and Nicotinamide Increase Blood Flow and 5-Fluorouracil Delivery but not 5-Fluorouracil Retention in Colorectal Cancer Metastases in Patients.** Nishi Gupta, Azeem Saleem, Barbara Kötz, Safiye Osman, Eric O. Aboagye, Robert Phillips, Clare Vernon, Harpreet Wasan, Terry Jones, Peter J. Hoskin, and Patricia M. Price.....3115

<b>Phase II Trial of Bevacizumab in Combination with Weekly Docetaxel in Metastatic Breast Cancer Patients.</b> Bhuvanewari Ramaswamy, Anthony D. Elias, Nicole T. Kelbick, Angela Dodley, Mark Morrow, Marsha Hauger, Joan Allen, Chris Rhoades, Kari Kendra, Helen X. Chen, S. Gail Eckhardt, and Charles L. Shapiro.....	3124
---	------

## Cancer Therapy: Preclinical

<b>Detection and Functional Analysis of CD8<sup>+</sup> T Cells Specific for PRAME: a Target for T-Cell Therapy.</b> Marieke Griffioen, Jan H. Kessler, Martina Borghi, Ronald A. van Soest, Caroline E. van der Minne, Jan Nouta, Sjoerd H. van der Burg, Jan Paul Medema, Peter I. Schrier, J.H. Frederik Falkenburg, Susanne Osanto, and Cornelis J.M. Melief.....	3130
<b>Infectivity-Enhanced Adenoviruses Deliver Efficacy in Clinical Samples and Orthotopic Models of Disseminated Gastric Cancer.</b> Lotta Kangasniemi, Tuula Kiviluoto, Anna Kanerva, Mari Raki, Tuuli Ranki, Merja Sarkioja, Hongju Wu, Frank Marini, Krister Höckerstedt, Helena Isoniemi, Henrik Alftan, Ulf-Håkan Stenman, David T. Curiel, and Akseli Hemminki.....	3137
<b>Real-time, Image-Guided, Convection-Enhanced Delivery of Interleukin 13 Bound to <i>Pseudomonas</i> Exotoxin.</b> Gregory J.A. Murad, Stuart Walbridge, Paul F. Morrison, Kayhan Garmestani, Jeffrey W. Degen, Martin W. Brechbiel, Edward H. Oldfield, and Russell R. Lonser.....	3145
<b>Effective Treatment of Pancreatic Cancer Xenografts with a Conditionally Replicating Virus Derived from Type 2 Herpes Simplex Virus.</b> Xinpeng Fu, Lihua Tao, Min Li, William E. Fisher, and Xiaoliu Zhang.....	3152
<b>Immunogenic HLA-B*0702-Restricted Epitopes Derived from Human Telomerase Reverse Transcriptase That Elicit Antitumor Cytotoxic T-Cell Responses.</b> Olivier Adotévi, Karine Mollier, Christine Neuveut, Sylvain Cardinaud, Emmanuelle Boulanger, Blandine Mignen, Wolf-Hervé Fridman, Maurizio Zanetti, Pierre Charneau, Eric Tartour, François Lemonnier, and Pierre Langlade-Demoyen .....	3158
<b>Novel Cytosine Deaminase Fusion Gene Enhances the Effect of Radiation on Breast Cancer in Bone by Reducing Tumor Burden, Osteolysis, and Skeletal Fracture.</b> Michael Goblirsch, Pawel Zwolak, Margaret L. Ramnaraine, Weihong Pan, Christine Lynch, Parham Alaei, and Denis R. Clohisy.....	3168
<b>Evaluation of Toxicity following Electrically Mediated Interleukin-12 Gene Delivery in a B16 Mouse Melanoma Model.</b> Loree Heller, Kathleen Merkler, Jeffrey Westover, Yolmari Cruz, Domenico Coppola, Kaaron Benson, Adil Daud, and Richard Heller.....	3177
<b>Telomerase Template Antagonist GRN163L Disrupts Telomere Maintenance, Tumor Growth, and Metastasis of Breast Cancer.</b> Amelia E. Hochreiter, Hongling Xiao, Erin M. Goldblatt, Sergei M. Gryaznov, Kathy D. Miller, Sunil Badve, George W. Sledge, and Brittney-Shea Herbert .....	3184
<b>Liposomal Quercetin Efficiently Suppresses Growth of Solid Tumors in Murine Models.</b> Zhi-ping Yuan, Li-juan Chen, Lin-yu Fan, Ming-hai Tang, Guang-li Yang, Han-su Yang, Xiao-bo Du, Guo-qing Wang, Wen-xiu Yao, Qu-mei Zhao, Bin Ye, Rui Wang, Peng Diao, Wei Zhang, Hong-bin Wu, Xia Zhao, and Yu-Quan Wei.....	3193
<b>Tumor-Targeting Properties of Novel Antibodies Specific to the Large Isoform of Tenascin-C.</b> Simon S. Brack, Michela Silacci, Manfred Birchler, and Dario Neri.....	3200

## Cancer Prevention

<b>Frequency and Spectrum of Cancers in the Peutz-Jeghers Syndrome.</b> Nicholas Hearle, Valérie Schumacher, Fred H. Menko, Sylviane Olschwang, Lisa A. Boardman, Johan J.P. Gille, Josbert J. Keller, Anne Marie Westerman, Rodney J. Scott, Wendy Lim, Jill D. Trimbath, Francis M. Giardiello, Stephen B. Gruber, G. Johan A. Offerhaus, Felix W.M. de Rooij, J.H. Paul Wilson, Anika Hansmann, Gabriela Möslein, Brigitte Royer-Pokora, Tilman Vogel, Robin K.S. Phillips, Allan D. Spigelman, and Richard S. Houlston.....	3209
---	------

---

**Effects of *Helicobacter pylori* Eradication on Methylation Status of *E-Cadherin* Gene in Noncancerous Stomach.** Wai K. Leung, Ellen P.S. Man, Jun Yu, Minnie Y.Y. Go, Ka-fai To, Yoshio Yamaoka, Victoria Y.Y. Cheng, Enders K.W. Ng, and Joseph J.Y. Sung.....3216

**Heterogeneous Nuclear Ribonucleoprotein G Shows Tumor Suppressive Effect against Oral Squamous Cell Carcinoma Cells.** Ki-Hyuk Shin, Mo K. Kang, Reuben H. Kim, Russell Christensen, and No-Hee Park.....3222

---

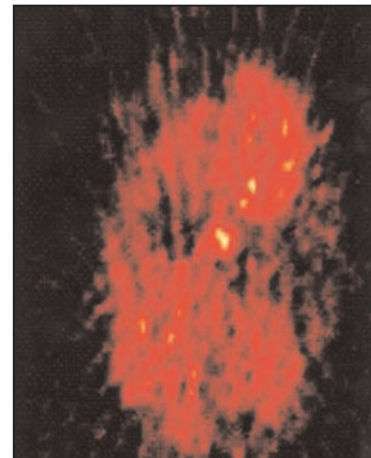
## Correction

**Article on Evaluating the Efficiency of Targeted Designs** .....3229

---

## About the Cover

Transabdominal perfusion PET scan after infusion of oxygen-15 radiolabeled water showing a well perfused spleen and normal liver with poorly perfused hepatic metastases (anteriorly and laterally). Blood flow modelling confirmed that perfusion to metastases improved after administration of carbogen and nicotinamide. For further details, please see Gupta *et al.* on page 3115 in this issue.



# Clinical Cancer Research

**12 (10)**

*Clin Cancer Res* 2006;12:2951-3229.

**Updated version** Access the most recent version of this article at:  
<http://clincancerres.aacrjournals.org/content/12/10>

**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/12/10>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.