



## CONTENTS

### Advances in Brief

- 2919** No Association of the I1307K APC Allele with Ovarian Cancer Risk in Ashkenazi Jews. John Abrahamson, Roxana Moslehi, Danny Vesprini, Beth Karlan, David Fishman, David Smotkin, Yehuda Ben David, Haim Biran, Abbie Fields, Jean-Sebastien Brunet, and Steven A. Narod.
- 2923** The APC Gene I1307K Variant Is Rare in Norwegian Patients with Familial and Sporadic Colorectal or Breast Cancer. Ragnhild A. Lothe, Merete Hektoen, Hilde Johnsen, Gunn Iren Meling, Tone Ikdahl Andersen, Torleiv O. Rognum, Annika Lindblom, and Anne-Lise Børresen-Dale.
- 2925** Targeted Therapy with a Novel Eneidiyene Antibiotic Calicheamicin  $\Theta^1$ , Effectively Suppresses Growth and Dissemination of Liver Metastases in a Syngeneic Model of Murine Neuroblastoma. Holger N. Lode, Ralph A. Reisfeld, Rupert Handgretinger, Kyriacos C. Nicolaou, Gerhard Gaedicke, and Wolfgang Wrasidlo.
- 2929** Increased Expression of Inducible Nitric Oxide Synthase and Cyclooxygenase-2 in Barrett's Esophagus and Associated Adenocarcinomas. Keith T. Wilson, Sidong Fu, Kalathur S. Ramanujam, and Stephen J. Meltzer.
- 2935** A Novel Model of Glioma Cell Invasion Using Organotypic Brain Slice Culture. Takanori Ohnishi, Hirotaka Matsumura, Shuichi Izumoto, Shoji Hiraga, and Toru Hayakawa.
- 2941** Differential Cell Cycle Regulation by Low- and High-Risk Human Papillomaviruses in Low-Grade Squamous Intraepithelial Lesions of the Cervix. Shirley A. Southern and C. Simon Herrington.
- 2946** Absence or Reduction of Fhit Expression in Most Clear Cell Renal Carcinomas. Piotr Hadaczek, Zurab Siphshvili, Maciej Markiewski, Wenancjusz Domagala, Teresa Druck, Peter A. McCue, Yuri Pekarsky, Masataka Ohta, Kay Huebner, and Jan Lubinski.
- 2952** Receptor-mediated Folate Uptake Is Positively Regulated by Disruption of the Actin Cytoskeleton. Cheryl M. Lewis, Angela K. Smith, and Barton A. Kamen.
- 2957** Tissue Inhibitor of Metalloproteinase-2 Protection of Matrix Metalloproteinase-2 from Degradation by Plasmin Is Reversed by Divalent Cation Chelator EDTA and the Bisphosphonate Aledronate. Antonietta R. Farina, Antonella Tacconelli, Anna Teti, Alberto Gulino, and Andrew R. Mackay.
- 2961** Ultraviolet B-induced DNA Damage in Human Skin and Its Modulation by a Sunscreen. Vladimir J. Bykov, Jan A. Marcusson, and Kari Hemminki.
- 2965** Optimization of the Sequence of Antigen Loading and CD40-Ligand-induced Maturation of Dendritic Cells. Michael A. Morse, H. Kim Lysterly, Eli Gilboa, Elaine Thomas, and Smita K. Nair.
- 2969** The DAM Gene Family Encodes a New Group of Tumor-specific Antigens Recognized by Human Leukocyte Antigen A2-restricted Cytotoxic T Lymphocytes. Katharina Fleischhauer, Luca Gattinoni, Piero Dalerba, Grégoire Lauvau, Elena Zanaria, Branca Dabovic, Peter M. van Endert, Claudio Bordignon, and Catia Traversari.
- 2973** AKT2, a Member of the Protein Kinase B Family, Is Activated by Growth Factors, v-Ha-ras, and v-src through Phosphatidylinositol 3-Kinase in Human Ovarian Epithelial Cancer Cells. Ai-xue Liu, Joseph R. Testa, Thomas C. Hamilton, Richard Jove, Santo V. Nicosia, and Jin Q. Cheng.
- 2978** Single Gene Complementation of the hPMS2 Defect in HEC-1-A Endometrial Carcinoma Cells. John I. Risinger, Asad Umar, Warren E. Glaab, Kenneth R. Tindall, Thomas A. Kunkel, and J. Carl Barrett.
- 2982** Interstitial Methotrexate Kinetics in Primary Breast Cancer Lesions. Markus Müller, Martin Brunner, Rainer Schmid, Robert M. Mader, Julia Bockenheimer, Günther G. Steger, Birgit Steiner, Hans G. Eichler, and Brigitte Blöchl-Daum.
- 2986** Interaction between the Protein Kinase B-Raf and the  $\alpha$ -Subunit of the 11S Proteasome Regulator. Andreas Kalmes, Carsten Hagemann, Christoph K. Weber, Ludmilla Wixler, Tillman Schuster, and Ulf R. Rapp.
- 2991** Presence of *Streptococcus anginosus* DNA in Esophageal Cancer, Dysplasia of Esophagus, and Gastric Cancer. Hiroki Sasaki, Tomoki Ishizuka, Manabu Muto, Masahiko Nezu, Yukihiro Nakanishi, Yoshishige Inagaki, Haruo Watanabe, Hiroshi Watanabe, and Masaaki Terada.

### Regular Articles

#### Biochemistry and Biophysics

- 2996**  $11\beta$ -Hydroxysteroid Dehydrogenase Responsible for Carbonyl Reduction of the Tobacco-specific Nitrosamine 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone in Mouse Lung Microsomes. Edmund Maser.
- 3004** *In Situ* Cross-Linking by Cisplatin of Nuclear Matrix-bound Transcription Factors to Nuclear DNA of Human Breast Cancer Cells. Shanti K. Samuel, Virginia A. Spencer, Lydia Bajno, Jian-Min Sun, Laurel T. Holth, Steffi Oesterreich, and James R. Davie.

#### Clinical Investigations

- 3009** Positron Emission Tomography of a Human Prostate Cancer Xenograft: Association of Changes in Deoxyglucose Accumulation with Other Measures of Outcome following Androgen Withdrawal. David B. Agus, David W. Golde, George Sgouros, Ase Ballangrud, Carlos Cordon-Cardo, and Howard I. Scher.

#### Endocrinology

- 3015** Galectin-3 Is a Presurgical Marker of Human Thyroid Carcinoma. Fabio Orlandi, Enrico Saggiorato, Giovanni Pivano, Barbara Puligheddu, Angela Termine, Susanna Cappia, Paolo De Giuli, and Alberto Angeli.
- 3021** Stimulation of Tumor Growth by Recombinant Human Insulin-like Growth Factor-I (IGF-I) Is Dependent on the Dose and the Level of IGF-I Receptor Expression. Andrew A. Butler, Vicky A. Blakesley, Maria Tsokos, Vasiliki Pouliki, Teresa L. Wood, and Derek LeRoith.

#### Epidemiology and Prevention

- 3028** Chemopreventive Effects of Nimesulide, a Selective Cyclooxygenase-2 Inhibitor, on the Development of Rat Urinary Bladder Carcinomas Initiated by *N*-Butyl-*N*-(4-hydroxybutyl)nitrosamine. Eijiro Okajima, Ayumi Denda, Seiichi Ozono, Makoto Takahama, Hiroyuki Akai, Yasutaka Sasaki, Wakashi Kitayama, Keiji Wakabayashi, and Yoichi Konishi.
- 3032** Increased Risk of Hepatoblastoma among Immature Children with a Lower Birth Weight. Masako Tanimura, Ichiro Matsui, Jun Abe, Hitoshi Ikeda, Noboru Kobayashi, Mutsuro Ohira, Masaru Yokoyama, and Michio Kaneko.

## Experimental Therapeutics

- 3036 **Super *in Vitro* Synergy between Inhibitors of Dihydrofolate Reductase and Inhibitors of Other Folate-requiring Enzymes: The Critical Role of Polyglutamylation.** Hélène M. Faessel, Harry K. Slocum, Robert C. Jackson, Theodore J. Boritzki, Youcef M. Rustum, M. G. Nair, and William R. Greco.
- 3051 **Evaluating Antibodies for Their Capacity to Induce Cell-mediated Lysis of Malignant B Cells.** Dieter Würflein, Michael Dechant, Bernhard Stockmeyer, Alison L. Tutt, Peisheng Hu, Roland Repp, Joachim R. Kalden, Jan G. J. van de Winkel, Alan L. Epstein, Thomas Valerius, Martin Glennie, and Martin Gramatzki.
- 3059 **Prevention of Brefeldin A-induced Resistance to Teniposide by the Proteasome Inhibitor MG-132: Involvement of NF- $\kappa$ B Activation in Drug Resistance.** Z. Ping Lin, Yoonkyung C. Boller, Suad M. Amer, Rosalind L. Russell, Karen A. Pacelli, Steven R. Patierno, and Katherine A. Kennedy.
- 3066 **Distinct Steps in DNA Fragmentation Pathway during Campothecin-induced Apoptosis Involved Caspase-, Benzoyloxycarbonyl- and *N*-Tosyl-L-Phenylalanylchloromethyl Ketone-sensitive Activities.** Alain-Théophile Sané and Richard Bertrand.

## Immunology

- 3073 **Role of the Endogenous Production of Interleukin 12 in Immunotherapy.** Mamoru Harada, Koji Tamada, Koichiro Abe, Kosei Yasumoto, Genki Kimura, and Kikuo Nomoto.
- 3078 **Human Renal Cell Carcinoma Antigen-specific CTLs: Antigen-driven Selection and Long-Term Persistence *in Vivo*.** Petra Jantzer and Dolores J. Schendel.
- 3087 **Cryptic Open Reading Frames in Plasmid Vector Backbone Sequences Can Provide Highly Immunogenic Cytotoxic T-Lymphocyte Epitopes.** Thorbald van Hall, Nastasja E. van de Rhee, Stephen P. Schoenberger, Michel P. M. Vierboom, Frank A. W. Verreck, Cornelis J. M. Melief, and Rienk Offringa.
- 3094 **Efficient Direct Priming of Tumor-specific Cytotoxic T Lymphocyte *in Vivo* by an Engineered APC.** Stephen P. Schoenberger, Liesbeth E. Jonges, Rob J. D. Mooijaart, Franca Hartgers, Rene E. M. Toes, W. Martin Kast, Cornelius J. M. Melief, and Rienk Offringa.

## Molecular Biology and Genetics

- 3101 **Mutation of the Type II Transforming Growth Factor- $\beta$  Receptor Is Coincident with the Transformation of Human Colon Adenomas to Malignant Carcinomas.** William M. Grady, Ashwani Rajput, Lois Myeroff, Dong F. Liu, KiHo Kwon, Joseph Willis, and Sanford Markowitz.
- 3105 **Genetic Analysis of Ovarian Germ Cell Tumors by Comparative Genomic Hybridization.** Maureen A. Riopel, Amy Spellerberg, Constance A. Griffin, and Elizabeth J. Perlman.

- 3111 **DNA Double-Strand Breaks, p53, and Apoptosis during Lymphomagenesis in *scid/scid* Mice.** Kay E. Gurley, Khoa Vo, and Christopher J. Kemp.
- 3116 **Expression and Location of Hsp70/Hsc-Binding Anti-Apoptotic Protein BAG-1 and Its Variants in Normal Tissues and Tumor Cell Lines.** Shinichi Takayama, Stanislaw Krajewski, Maryla Krajewska, Shinichi Kitada, Juan M. Zapata, Kristine Kochel, Deborah Knee, Dominic Scudiero, Gabriella Tudor, Gary J. Miller, Toshiyuki Miyashita, Masao Yamada, and John C. Reed.

## Tumor Biology

- 3132 **Variable Expression of Cytokines in Human Head and Neck Squamous Cell Carcinoma Cell Lines and Consistent Expression in Surgical Specimens.** Kendra V. Woods, Adel El-Naggar, Gary L. Clayman, and Elizabeth A. Grimm.
- 3142 **Interleukin-1 Regulates Interleukin-6 Secretion in Human Oral Squamous Cell Carcinoma *in Vitro*: Possible Influence of p53 but not Human Papillomavirus *E6/E7*.** Kendra V. Woods, Karen Adler-Storthz, Gary L. Clayman, Gail M. Francis, and Elizabeth A. Grimm.
- 3150 **Differential Expression and Androgen Regulation of the Human Selenium-binding Protein Gene *hSP56* in Prostate Cancer Cells.** Meiheng Yang and Arthur J. Sytkowski.
- 3154 **Differential Roles of Protein Kinase C and Pertussis Toxin-sensitive G-binding Proteins in Modulation of Melanoma Cell Proliferation and Motility by Thrombospondin 1.** Neng-hua Guo, Vivian S. Zabrenetzky, Lakshmi Chandrasekaran, John M. Sipes, Jack Lawler, Henry C. Krutzsch, and David D. Roberts.
- 3163 **Retinoic Acid Induced Mitogen-activated Protein (MAP)/Extracellular Signal-regulated Kinase (ERK) Kinase-dependent MAP Kinase Activation Needed to Elicit HL-60 Cell Differentiation and Growth Arrest.** Andrew Yen, Mark S. Roberson, Susi Varvayanis, and Amy T. Lee.
- 3173 **Expression of Signal Transducers and Activators of Transcription Proteins in Acute Myeloid Leukemia Blasts.** Zheng Xia, Maria R. Baer, AnneMarie W. Block, Heinz Baumann, and Meir Wetzler.
- 3181 **Adenosine and Other Low Molecular Weight Factors Released by Muscle Cells Inhibit Tumor Cell Growth.** Pnina Fishman, Sara Bar-Yehuda, and Limor Vagman

## Letters to the Editor

- 3188 **Correspondence re: L. G. Boros *et al.*, Oxythiamine and Dehydroepiandrosterone Inhibit the Nonoxidative Synthesis of Ribose and Tumor Cell Proliferation. *Cancer Res.*, 57: 4242-4248, 1997. G. Kenneth Haines III. Reply by Laszlo G. Boros.**

## 3189 Announcements

1999 Annual Meeting  
Future Annual Meetings of the AACR  
Call for Nominations for the AACR-Pezcoller International Award for Cancer Research  
Call for Nominations for AACR Awards  
AACR Special Conferences in Cancer Research  
Recent Deaths  
Calendar of Events

## 3191 Corrections

V. B. Lokeshwar *et al.*, *Cancer Res.*, 57: 773-777, 1997.  
H. Grönberg *et al.*, *Cancer Res.*, 57: 4707-4709, 1997.

## 3192 Author Index

**AACR forms available  
in the back of this issue:**

**Application for Active and  
Corresponding Membership**

**Application for Associate  
Membership**

**Also available in the back  
of this issue:**

**Guidelines for Submitting Disks to  
AACR Publications**

# Cancer Research

The Journal of Cancer Research (1916–1930) | The American Journal of Cancer (1931–1940)

## 58 (14)

*Cancer Res* 1998;58:2919-3191.

**Updated version** Access the most recent version of this article at:  
<http://cancerres.aacrjournals.org/content/58/14.citation>

**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://cancerres.aacrjournals.org/content/58/14.citation>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.