

ANTICANCER RESEARCH

International Journal of Cancer Research and Treatment

ISSN: 0250-7005

Volume 36, Number 12, December 2016

Contents

Reviews

- Lung Adenocarcinoma in Never Smokers: Problems of Primary Prevention from Aspects of Susceptible Genes and Carcinogens. I. OKAZAKI, S. ISHIKAWA, W. ANDO, Y. SOHARA (*Tokyo; Nasushiobara; Okegawa, Japan*) 6207

- Vitamin D and Myofibroblasts in Fibrosis and Cancer: At Cross-purposes with TGF- β /SMAD Signaling. S. SHANY, I. SIGAL-BATIKOFF, S. LAMPRECHT (*Beersheva, Israel*) 6225

Experimental Studies

- Ectopic Myoglobin Expression Is Associated with a Favourable Outcome in Head and Neck Squamous Cell Carcinoma Patients. S. MELLER, A. VAN ELLEN, H. GEVENSLEBEN, A. BICKER, T. HANKELN, T.A. GORR, V. SAILER, F. DRÖGE, F. SCHRÖCK, F. BOOTZ, A. SCHRÖCK, S. PERNER, D. DIETRICH, G. KRISTIANSEN (*Bonn; Mainz; Essen; Lübeck; Borstel, Germany; Zurich, Switzerland; New York, NY, USA*) 6235

- A Single Intravesical Instillation of VAX014 Inhibits Orthotopic Superficial Bladder Tumor Implantation to Increase Survival. B.M. HANCOCK, K.L. MCGUIRE, S. TSUJI, K. REIL, V. HERNANDEZ, M.J. GIACALONE, W.T. GODBEY (*San Diego, CA; New Orleans, LA, USA*) 6243

- Kinomics Screening Identifies Aberrant Phosphorylation of CDC25C in *FLT3*-ITD-positive AML. F. PERNER, T.M. SCHNÖDER, T. FISCHER, F.H. HEIDEL (*Magdeburg; Jena, Germany*) 6249

- Multicellular Spheroids as a Model for Hypoxia-induced EMT. C. LEE, A. SIU, D.M. RAMOS (*San Francisco, CA, USA*) 6259

Contents continued on the back cover

ANTICANCER RESEARCH

International Journal of Cancer Research and Treatment



ISSN (print): 0250-7005

ISSN (online): 1791-7530

Editorial Board

- P. A. ABRAHAMSSON, Malmö, Sweden
B. B. AGGARWAL, Houston, TX, USA
T. AKIMOTO, Kashiwa, Chiba, Japan
P. Z. ANASTASIADIS, Jacksonville, FL, USA
A. ARGIRIS, San Antonio, TX, USA
J. P. ARMAND, Toulouse, France
V. I. AVRAMIS, Los Angeles, CA, USA
R. C. BAST, Houston, TX, USA
D.-T. BAU, Taichung, Taiwan, ROC
G. BAUER, Freiburg, Germany
E. E. BAULIEU, Le Kremlin-Bicetre, France
E. J. BENZ, Jr., Boston, MA, USA
J. BERGH, Stockholm, Sweden
F. T. BOSMAN, Lausanne, Switzerland
G. BROICH, Monza, Italy
Ø. S. BRULAND, Oslo, Norway
J. M. BUATTI, Iowa City, IA, USA
M. M. BURGER, Basel, Switzerland
M. CARBONE, Honolulu, HI, USA
C. CARLBERG, Kuopio, Finland
J. CARLSSON, Uppsala, Sweden
A. F. CHAMBERS, London, ON, Canada
P. CHANDRA, Frankfurt am Main, Germany
L. CHENG, Indianapolis, IN, USA
J.-G. CHUNG, Taichung, Taiwan, ROC
E. DE CLERCQ, Leuven, Belgium
W. DEN OTTER, Amsterdam, The Netherlands
E. P. DIAMANDIS, Toronto, ON, Canada
G. TH. DIAMANDOPOULOS, Boston, MA, USA
D. W. FELSHER, Stanford, CA, USA
J. A. FERNANDEZ-POL, Chesterfield, MO, USA
I. J. FIDLER, Houston, TX, USA
A. P. FIELDS, Jacksonville, FL, USA
B. FUCHS, Zurich, Switzerland
D. FUCHS, Innsbruck, Austria
G. GABBANI, Geneva, Switzerland
R. GANAPATHI, Charlotte, NC, USA
A. F. GAZDAR, Dallas, TX, USA
J. H. GESCHWIND, Baltimore, MD, USA
A. GIORDANO, Philadelphia, PA, USA
G. GITSCHE, Freiburg, Germany
R. H. GOLDFARB, Guilford, CT, USA
L. HELSON, Quakertown, PA, USA
R. M. HOFFMAN, San Diego, CA, USA
S. C. JHANWAR, New York, NY, USA
J. V. JOHANNESSEN, Oslo, Norway
B. KAINA, Mainz, Germany
P. -L. KELLOKUMPU-LEHTINEN, Tampere, Finland
D. G. KIEBACK, Schleswig, Germany
R. KLAUDOR, Hamburg, Germany
S. D. KOTTARIDIS, Athens, Greece
G. R. F. KRUEGER, Köln, Germany
Pat M. KUMAR, Manchester, UK
- Shant KUMAR, Manchester, UK
O. D. LAERUM, Bergen, Norway
F. J. LEJEUNE, Lausanne, Switzerland
L. F. LIU, Piscataway, NJ, USA
D. M. LOPEZ, Miami, FL, USA
E. LUNDGREN, Umeå, Sweden
Y. MAEHARA, Fukuoka, Japan
J. MAHER, London, UK
J. MARECAUX, Strasbourg, France
J. MARK, Skövde, Sweden
S. S. MARTIN, Baltimore, MD, USA
S. MITRA, Houston, TX, USA
S. MIYAMOTO, Fukuoka, Japan
M. MUELLER, Villingen-Schwenningen, Germany
F. M. MUGGIA, New York, NY, USA
M. NAMIKI, Kanazawa, Ishikawa, Japan
R. NARAYANAN, Boca Raton, FL, USA
K. NILSSON, Uppsala, Sweden
S. PATHAK, Houston, TX, USA
J.L. PERSSON, Malmö, Sweden
G. J. PILKINGTON, Portsmouth, UK
C. D. PLATSOUCAS, Norfolk, VA, USA
A. POLLACK, Jerusalem, Israel
M. RIGAUD, Limoges, France
U. RINGBORG, Stockholm, Sweden
M. ROSELLI, Rome, Italy
A. SCHAUER, Göttingen, Germany
M. SCHNEIDER, Wuppertal, Germany
A. SETH, Toronto, ON, Canada
G. V. SHERBET, Newcastle-upon-Tyne, UK
G.-I. SOMA, Kagawa, Japan
G. S. STEIN, Burlington, VT, USA
T. STIGBRAND, Umeå, Sweden
T. M. THEOPHANIDES, Athens, Greece
P. M. UELAND, Bergen, Norway
H. VAN VLIERBERGHE, Ghent, Belgium
R. G. VILE, Rochester, MN, USA
M. WELLER, Zurich, Switzerland
B. WESTERMARK, Uppsala, Sweden
Y. YEN, Duarte, CA, USA
M.R.I. YOUNG, Charleston, SC, USA
B. ZUMOFF, New York, NY, USA
- J. G. DELINASIOS, Athens, Greece
Managing Editor
G. J. DELINASIOS, Athens, Greece
Assistant Managing Editor and Executive Publisher
E. ILIADIS, Athens, Greece
Production Editor

Editorial Office: International Institute of Anticancer Research, 1st km Kapandritiou-Kalamou Rd., Kapandriti, P.O. Box 22, Attiki 19014, Greece. Tel / Fax: +30-22950-53389.

U.S. Branch: Anticancer Research USA, Inc., 111 Bay Avenue, Highlands, NJ 07732, USA.

E-mails: Editorial Office: journals@iiar-anticancer.org

Managing Editor: editor@iiar-anticancer.org

ANTICANCER RESEARCH supports: (a) the establishment and the activities of the INTERNATIONAL INSTITUTE OF ANTICANCER RESEARCH (IIAR; Kapandriti, Attiki, Greece); and (b) the organization of the International Conferences of Anticancer Research. The IIAR is a member of UICC. For more information about ANTICANCER RESEARCH, IIAR and the Conferences, please visit the IIAR website: www.iiar-anticancer.org

Publication Data: ANTICANCER RESEARCH (AR) is published monthly from January 2009. Each annual volume comprises 12 issues. Annual Author and Subject Indices are included in the last issue of each volume. ANTICANCER RESEARCH Vol. 24 (2004) and onwards appears online with Stanford University HighWire Press from April 2009.

Copyright: On publication of a manuscript in AR, which is a copyrighted publication, the legal ownership of all published parts of the paper passes from the Author(s) to the Journal.

Annual Subscription Rates 2016 per volume: Institutional subscription US\$ 1,898.00 (online) or US\$ 2,277.00 (print & online). Personal subscription US\$ 897.00 (online) or US\$ 1,277.00 (print & online). Prices include rapid delivery and insurance. The complete previous volumes of Anticancer Research (Vol. 1-35, 1981-2015) are available at 50% discount on the above rates.

Subscription Orders: Orders can be placed at agencies, bookstores, or directly with the Publisher. (e-mail: subscriptions@iiar-anticancer.org)

Advertising: All correspondence and rate requests should be addressed to the Editorial Office.

Book Reviews: Recently published books and journals should be sent to the Editorial Office. Reviews will be published within 2-4 months.

Articles in ANTICANCER RESEARCH are regularly indexed in all bibliographic services, including Current Contents (Life Sciences), Science Citation Index, Index Medicus, Biological Abstracts, PubMed, Chemical Abstracts, Excerpta Medica, University of Sheffield Biomedical Information Service, Current Clinical Cancer, AIDS Abstracts, Elsevier Bibliographic Database, EMBASE, Compendex, GEOBASE, EMBiology, Elsevier BIOBASE, FLUIDEX, World Textiles, Scopus, Progress in Palliative Care, Cambridge Scientific Abstracts, Cancergram (International Cancer Research Data Bank), MEDLINE, Reference Update - RIS Inc., PASCAL-CNRS, Inpharma-Reactions (Datastar, BRS), CABS, Immunology Abstracts, Telegen Abstracts, Genetics Abstracts, Nutrition Research Newsletter, Dairy Science Abstracts, Current Titles in Dentistry, Inpharma Weekly, BioBase, MedBase, CAB Abstracts/Global Health Databases, Investigational Drugs Database, VINITI Abstracts Journal, Leeds Medical Information, Pubshub, Sociedad Iberoamericana de Información Científica (SIIC) Data Bases.

Authorization to photocopy items for internal or personal use, or the internal or personal clients, is granted by ANTICANCER RESEARCH, provided that the base fee of \$2.00 per copy, plus 0.40 per page is paid directly to the Copyright Clearance Center, 27 Congress Street, Salem, MA 01970, USA. For those organizations that have been granted a photocopy license by CCC, a separate system of payment has been arranged. The fee code for users of the Transactional Reporting Service is 0250-7005/2016 \$2.00 +0.40.

The Editors and Publishers of ANTICANCER RESEARCH accept no responsibility for the opinions expressed by the contributors or for the content of advertisements appearing therein.

Copyright© 2016, International Institute of Anticancer Research (Dr. John G. Delinarios), All rights reserved.

D.T.P. BY IIAR

PRINTED BY ENTYPO, ATHENS, GREECE. PRINTED ON ACID-FREE PAPER

Reviews