



- International Journal of Experimental and Clinical Pathophysiology and Drug Research
- Published bimonthly by the International Institute of Anticancer Research
- Available online with Stanford University HighWire Press

ISSN (print): 0258-851X; ISSN (online): 1791-7549

## General Policy

- IN VIVO is a multidisciplinary journal designed to bring together original high quality works and reviews on experimental and clinical biomedical research within the framework of comparative physiology and pathology. The special focus of the journal is the publication of works on: (a) experimental development and the application of new diagnostic procedures; (b) pharmacological and toxicological evaluation of new drugs and drug combinations; (c) development and characterization of models for biomedical research.
- One of the principal aims of IN VIVO is to provide for the prompt publication of accepted articles, generally within 1-2 months from final acceptance.
- IN VIVO supports: (a) the aims and the research program of the INTERNATIONAL INSTITUTE OF ANTICANCER RESEARCH (IIAR) (Kapandriti, Attiki, Greece) and (b) the organization of the INTERNATIONAL CONFERENCES OF ANTICANCER RESEARCH.

## Editorial Office

International Institute of Anticancer Research, 1st km Kapandritiou-Kalamou Rd., Kapandriti, P.O. Box 22, Attiki, 19014, Greece. Tel and Fax: +30-22950-53389; e-mail: journals@iilar-anticancer.org

For more information about IN VIVO, IIAR and the conferences please visit the IIAR websites: [www.iilar-anticancer.org](http://www.iilar-anticancer.org) and [www.iv.iilarjournals.org](http://www.iv.iilarjournals.org)

## Selection of Recent Articles

Proteomic Profiling to Identify Prognostic Biomarkers in Heart Failure. P.A. SCOTT, B. ZEIDAN, L.L. NG, M. ZEB, J.A. ROSENGARTEN, S. GARBIS, N.P. CURZEN, J.M. MORGAN, P.A. TOWNSEND (*Southampton; Leicester, UK; Athens, Greece*)

Diverging *In Vitro* Antibody Isotype Switching Preference in B-Lymphocytes from C57BL/6 and FVB Mice. A.G. PUTHIYAVEETIL, B. OKYERE, C.M. REILLY, D. CAUDELL (*Blacksburg, VA, USA*)

The Zebrafish- Danio rerio – Is a Useful Model for Measuring the Effects of Small-molecule Mitigators of Late Effects of Ionizing Irradiation. M.W. EPPERLY, N. BAHARY, M. QUADER, V. DEWALD, J.S. GREENBERGER (*Pittsburgh, PA, USA*)

Breast Cancer: Mechanisms Involved in Action of Phytoestrogens and Epigenetic Changes. A. DAGDEMIR, J. DURIF, M. NGOLLO, Y.-J. BIGNON, D. BERNARD-GALLON (*Clermont-Ferrand, France*)

Positron-emission Tomography (PET) Imaging Agents for Diagnosis of Human Prostate Cancer: Agonist vs. Antagonist Ligands. P.K. NANDA, B.E. WIENHOFF, T.L. ROLD, G.L. SIECKMAN, A.F. SZCZODROSKI, T.J. HOFFMAN, B.E. ROGERS, C.J. SMITH (*Columbia; St. Louis, MO, USA*)

*In Vivo* Models for Defining Molecular Subtypes of the Primitive Neuroectodermal Tumor Genome: Current Challenges and Solutions. J.D. LARSON, D.A. LARGAESPADA (*Minneapolis, MN, USA*)

Effects of Minocycline on Hematopoietic Recovery After Whole-body Irradiation. S. MEHROTRA, M.J. PECAUT, D.S. GRIDLEY (*Loma Linda, CA, USA*)

Sequential Changes in the Expression of Wnt- and Notch-related Genes in the Vagina and Uterus of Ovariectomized Mice after Estrogen Exposure. T. NAKAMURA, S. MIYAGAWA, Y. KATSU, T. SATO, T. IGUCHI, Y. OHTA (*Yamagata; Okazaki; Sapporo; Yokohama; Tottori, Japan*)

Catecholamines Reduce Dose-dependent Oedema Formation and Inflammatory Reaction in an Isolated Rat Lung Model. C. DACHO, A. DACHO, A. GEISSLER, C. HAUSER, K. NOWAK, G. BECK (*Heidelberg; Essen; Wiesbaden, Germany*)

Biocompatibility of Membranes with Unrestricted Somatic Stem Cells. C. NAUJOKS, F.P. VON BECK, F. LANGENBACH, M. HENTSCHEL, K. BERR, M. HOFER, R. DEPPRICH, N. KÜBLER, J. HANDSCHEL (*Düsseldorf, Germany*)

Evaluation of Aortic Valve Stenosis Using a Hybrid Approach of Doppler Echocardiography and Inert Gas Rebreathing. K. HAMM, F. TRINKMANN, F. HEGGEMANN, J. GRUETTNER, G. SCHMID-BINDERT, M. BORGGREFE, D. HAGHI, J. SAUR (*Mannheim, Germany*)

Acclimatization of Mice to Different Cage Types and Social Groupings with Respect to Fecal Secretion of IgA and Corticosterone Metabolites. C.J. BUNDGAARD, O. KALLIOKOSKI, K.S. ABELSON, J. HAU (*Copenhagen, Denmark*)

Exploring Anticarcinogenic Agents in a Rat Hepatocarcinogenesis Model – Focus on Selenium and Statins. L. BJÖRKHEM-BERGMAN, L. EKSTRÖM, L.C. ERIKSSON (*Stockholm, Sweden*)

Amentoflavone Induces Cell-cycle Arrest and Apoptosis in MCF-7 Human Breast Cancer Cells via Mitochondria-dependent Pathway. J.-S. PEI, C.-C. LIU, Y.-N. HSU, L.-L. LIN, S.-C. WANG, J.-G. CHUNG, D.-T. BAU, S.-S. LIN (*TaoYuan; Taichung, Taiwan, ROC*)

Amino Acid Chloramine Damage to Proliferating Cell Nuclear Antigen in Mammalian Cells. S.A. SALAMA, R.M. SNAPKA (*Columbus, OH, USA; Cairo, Egypt*)

The Effect of Insulin-like Growth Factor II in the Regulation of Tumour Cell Growth *In Vitro* and Tumourigenesis *In Vivo*. M. HALJE, M. NORDIN, D. BERGMAN, W. ENGSTRÖM (*Uppsala, Sweden*)

**FREE SPECIMEN COPIES OF IN VIVO ARE AVAILABLE ON REQUEST**

## Instructions to Authors 2013

*General Policy.* ANTICANCER RESEARCH (AR) will accept original high quality works and reviews on all aspects of experimental and clinical cancer research. The Editorial Policy suggests that priority will be given to papers advancing the understanding of cancer causation, and to papers applying the results of basic research to cancer diagnosis, prognosis, and therapy. AR will also accept the following for publication: (a) Abstracts and Proceedings of scientific meetings on cancer, following consideration and approval by the Editorial Board; (b) Announcements of meetings related to cancer research; (c) Short reviews (of approximately 120 words) and announcements of newly received books and journals related to cancer, and (d) Announcements of awards and prizes.

The principal aim of AR is to provide prompt publication (print and online) for original works of high quality, generally within 1-2 months from final acceptance. Manuscripts will be accepted on the understanding that they report original unpublished works on the cancer problem that are not under consideration for publication by another journal, and that they will not be published again in the same form. All authors should sign a submission letter confirming the approval of their article contents. All material submitted to AR will be subject to review, when appropriate, by two members of the Editorial Board and by one suitable outside referee. The Editors reserve the right to improve manuscripts on grammar and style.

The Editors and Publishers of AR accept no responsibility for the contents and opinions expressed by the contributors. Authors should warrantee due diligence in the creation and issuance of their work.

*NIH Open Access Policy.* The journal acknowledges that authors of NIH funded research retain the right to provide a copy of the final manuscript to the NIH four months after publication in ANTICANCER RESEARCH, for public archiving in PubMed Central.

*Copyright.* Once a manuscript has been published in ANTICANCER RESEARCH, which is a copyrighted publication, the legal ownership of all published parts of the paper has been transferred from the Author(s) to the journal. Material published in the journal may not be reproduced or published elsewhere without the written consent of the Managing Editor or Publisher.

*Format.* Two types of papers may be submitted: (i) Full papers containing completed original work, and (ii) review articles concerning fields of recognisable progress. Papers should contain all essential data in order to make the presentation clear. Reasonable economy should be exercised with respect to the number of tables and illustrations used. Papers should be written in clear, concise English. Spelling should follow that given in the "Shorter Oxford English Dictionary".

*Manuscripts.* Submitted manuscripts should not exceed fourteen (14) pages (approximately 250 words per double - spaced typed page), including abstract, text, tables, figures, and references (corresponding to 4 printed pages). Papers exceeding four printed pages will be subject to excess page charges. All manuscripts should be divided into the following sections:

(a) *First page* including the title of the presented work [not exceeding fifteen (15) words], full names and full postal addresses of all Authors, name of the Author to whom proofs are to be sent, key words, an abbreviated running title, an indication "review", "clinical", "epidemiological", or "experimental" study, and the date of submission. (Note: The order of the Authors is not necessarily indicative of their contribution to the work. Authors may note their individual contribution(s) in the appropriate section(s) of the presented work); (b) *Abstract* not exceeding 150 words, organized according to the following headings: Background/Aim - Materials and Methods/Patients and Methods - Results - Conclusion; (c) *Introduction*; (d) *Materials and Methods/Patients and Methods*; (e) *Results*; (f) *Discussion*; (g) *Acknowledgements*; (h) *References*. All pages must be numbered consecutively. Footnotes should be avoided. Review articles may follow a different style according to the subject matter and the Author's opinion. Review articles should not exceed 35 pages (approximately 250 words per double-spaced typed page) including all tables, figures, and references.

*Figures.* All figures (whether photographs or graphs) should be clear, high contrast, at the size they are to appear in the journal: 8.00 cm (3.15 in.) wide for a single column; 17.00 cm (6.70 in.) for a double column; maximum height: 20.00 cm (7.87 in.). Graphs must be submitted as photographs made from drawings and must not require any artwork, typesetting, or size modifications. Symbols, numbering and lettering should be clearly legible. The number and top of each figure must be indicated. Colour plates are charged.

*Tables.* Tables should be typed double-spaced on a separate page, numbered with Roman numerals and should include a short title.

*References.* Authors must assume responsibility for the accuracy of the references used. Citations for the reference sections of submitted works should follow the standard form of "Index Medicus" and must be numbered consecutively. In the text, references should be cited by number. Examples: 1 Sumner AT: The nature of chromosome bands and their significance for cancer research. Anticancer Res 1: 205-216, 1981. 2 McGuire WL and Chamnes GC: Studies on the oestrogen receptor in breast cancer. In: Receptors for Reproductive Hormones (O' Malley BW, Chamnes GC (eds.). New York, Plenum Publ Corp., pp 113-136, 1973.

*Nomenclature and Abbreviations.* Nomenclature should follow that given in "Chemical Abstracts", "Index Medicus", "Merck Index", "IUPAC –IUB", "Bergery's Manual of Determinative Bacteriology", The CBE Manual for Authors, Editors and Publishers (6th edition, 1994), and MIAME Standard for Microarray Data. Human gene symbols may be obtained from the HUGO Gene Nomenclature Committee (HGNC) (<http://www.gene.ucl.ac.uk/>). Approved mouse nomenclature may be obtained from <http://www.informatics.jax.org/>. Standard abbreviations are preferable. If a new abbreviation is used, it must be defined on first usage.

*Clinical Trials.* Authors of manuscripts describing clinical trials should provide the appropriate clinical trial number in the correct format in the text.

For International Standard Randomised Controlled Trials (ISRCTN) Registry (a not-for-profit organization whose registry is administered by Current Controlled Trials Ltd.) the unique number must be provided in this format: ISRCTNXXXXXXX (where XXXXXXXX represents the unique number, always prefixed by "ISRCTN"). Please note that there is no space between the prefix "ISRCTN" and the number. Example: ISRCTN47956475.

For Clinicaltrials.gov registered trials, the unique number must be provided in this format: NCTXXXXXXX (where XXXXXXXX represents the unique number, always prefixed by 'NCT'). Please note that there is no space between the prefix 'NCT' and the number. Example: NCT00001789.

*Ethical Policies and Standards.* ANTICANCER RESEARCH agrees with and follows the "Uniform Requirements for Manuscripts Submitted to Biomedical Journals" established by the International Committee of Medical Journal Editors in 1978 and updated in October 2001 ([www.icmje.org](http://www.icmje.org)). Microarray data analysis should comply with the "Minimum Information About Microarray Experiments (MIAME) standard". Specific guidelines are provided at the "Microarray Gene Expression Data Society" (MGED) website. Presentation of genome sequences should follow the guidelines of the NHGRI Policy on Release of Human Genomic Sequence Data. Research involving human beings must adhere to the principles of the Declaration of Helsinki and Title 45, U.S. Code of Federal Regulations, Part 46, Protection of Human Subjects, effective December 13, 2001. Research involving animals must adhere to the Guiding Principles in the Care and Use of Animals approved by the Council of the American Physiological Society. The use of animals in biomedical research should be under the careful supervision of a person adequately trained in this field and the animals must be treated humanely at all times. Research involving the use of human foetuses, foetal tissue, embryos and embryonic cells should adhere to the U.S. Public Law 103-41, effective December 13, 2001.

*Submission of Manuscripts.* Please follow the Instructions to Authors regarding the format of your manuscript and references. There are 3 ways to submit your article (NOTE: Please use only one of the 3 options. Do not send your article twice.):

1. To submit your article online please visit: IIAR-Submissions (<http://www.iiar-anticancer.org/submissions/login.php>)
2. You can send your article via e-mail to [journals@iiar-anticancer.org](mailto:journals@iiar-anticancer.org). Please remember to always indicate the name of the journal you wish to submit your paper. The text should be sent as a Word document (\*.doc) attachment. Tables, figures and cover letter can also be sent as e-mail attachments.
3. You can send the manuscript of your article via regular mail in a USB stick, DVD, CD or floppy disk (including text, tables and figures) together with three hard copies to the following address:

John G. Delinasios  
International Institute of Anticancer Research (IIAR)  
Editorial Office of ANTICANCER RESEARCH,  
IN VIVO, CANCER GENOMICS and PROTEOMICS.  
1st km Kapandritiou-Kalamou Road  
P.O. Box 22, GR-19014 Kapandriti, Attiki  
GREECE

Submitted articles will not be returned to Authors upon rejection.

*Galley Proofs.* Unless otherwise indicated, galley proofs will be sent to the first-named Author of the submission. Corrections of galley proofs should be limited to typographical errors. Reprints, PDF files, and/or Open Access may be ordered after the acceptance of the paper. Requests should be addressed to the Editorial Office.

Copyright© 2013 - International Institute of Anticancer Research (J.G. Delinasios). All rights reserved (including those of translation into other languages). No part of this journal may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without written permission from the Publisher.

# Subscription Order Form 2013

Please enter a Subscription to ANTICANCER RESEARCH for Volume 33 (2013).

Annual subscription rates (2013): Institutional, Euro 1,650.00 print or online; Personal, Euro 780.00 print or online;  
Prices include rapid delivery and insurance.

2013 online subscriptions include free online access to vol. 24 (2004) - 32 (2012).

Please send me the following previous volumes (1-32) at 50% discount on the above rates.

Payment is enclosed.  Please invoice.

(Checks should be made payable to J.G. Delinasios, Athens, Greece)

Please send me information about the International Institute of Anticancer Research (IIAR).

Name and Address: .....

.....  
Tel: .....

Fax: ..... e-mail: .....

Signature: ..... Date:.....

Please send this order to ANTICANCER RESEARCH, Editorial Office, IIAR, 1st km Kapandritiou-Kalamou Rd., Kapandriti,  
P.O. Box 22, Attiki, 19014, Greece. Tel & Fax: +30-22950-53389, e-mail: journals@iilar-anticancer.org

## Special 2013 Offers to Authors of ANTICANCER RESEARCH

(These offers are open to all authors of  
articles published in Anticancer Research from  
1981-2012 on a basis of priority and availability.  
Effective from January to December 2013).



Your link to the essential  
information on cancer research  
published in the last 32 years.

- 1981-2012
- 32 volumes
- over 102,200 pages
- over 15,300 original articles
- 733 reviews
- over 69,500 authors
- Conference abstracts
- Special issues
- Book reviews
- Author-Subject Indexes
- Open access articles
- Included in all abstracting  
and indexing services
- Online with Stanford  
University HighWire Press

Please complete and send this order form to:

ANTICANCER RESEARCH, International Institute of Anticancer Research,  
1st km Kapandritiou-Kalamou Rd., Kapandriti, P.O. Box 22, Attiki, 19014, Greece.

## Special Subscription Order Form 2013

- I am one of the authors of the article published in Anticancer Research Vol....., pp. ...., year .....
- Please enter my personal subscription to Anticancer Research 2013 (Volume 33) at the special Author's rate of Euro 390.00 (print or online).
- Please send me previous Volume No(s) ..... at Euro 195.00 (print) per volume.
- Please enter my personal combined 2013 subscription to Anticancer Research (Volume 33) and IN VIVO (Volume 27) at Euro 560.00 (print or online).
- My payment is enclosed.
- Please send me an invoice.

(Prices include rapid delivery and insurance. Checks should be made payable to J.G. Delinasios, Athens, Greece).

Name and address: .....

.....

Tel-Fax: .....

e-mail: .....

Date and signature: .....

# CANCER GENOMICS & PROTEOMICS

[www.cgpiiarjournals.org](http://www.cgpiiarjournals.org)

Print ISSN (2004-2012): 1109-6535  
Online ISSN: 1790-6245  
VOL. 1 (2004) - VOL. 9 (2012) (print and online)  
From VOL. 10 (2013) online – only and open access



## International Online Open Access Journal

**General Policy.** CANCER GENOMICS & PROTEOMICS (CGP) welcomes submissions of original high quality articles and reviews on all aspects of the application of genomic and proteomic technologies to experimental and clinical cancer research. The journal's scientific spectrum includes: (a) molecular causes of carcinogenesis, cancer progression and metastasis; (b) structural and functional aspects of genes in the cancer cell; (c) advances in genomic and proteomic technologies applicable to cancer research; (d) anticancer drug design and drug development.

CGP will also accept abstracts and proceedings of scientific meetings for publication, following consideration and approval by the Editorial Board. A main aim of CGP is to ensure the prompt and confidential review, and rapid publication of original works and reviews, generally within 1-3 months from submission or 1-2 months from acceptance.

CGP is published bimonthly by the **International Institute of Anticancer Research** and is available online with **Stanford University**

**HighWire Press:** For more information please visit our website [www.cgpiiarjournals.org](http://www.cgpiiarjournals.org).

### Editorial Office

International Institute of Anticancer Research, 1st km Kapandritiou-Kalamou Rd., P.O. Box 22, Kapandriti, Attiki 19014, Greece. Tel: +30 22950 52945, Fax: +30 22950 53389. E-mail: [journals@iilar-anticancer.org](mailto:journals@iilar-anticancer.org); IIAR websites: [www.iilar-anticancer.org](http://www.iilar-anticancer.org) and [www.iiarjournals.org](http://www.iiarjournals.org)

### A Selection of Recent Papers

Metastatic Biomarker Discovery Through Proteomics. L.T. BRINTON, T.A. BRETNALL, J.A. SMITH, K.A. KELLY (*Charlottesville, VA; Seattle, WA, USA*)

Genetically Engineered Fusion Proteins for Treatment of Cancer. U.H. WEIDLE, B. SCHNEIDER, G. GEORGES, U. BRINKMANN (*Penzberg, Germany*)

Identification of Differentially Expressed Proteins from Primary vs. Metastatic Pancreatic Cancer Cells Using Subcellular Proteomics. K.Q. MCKINNEY, J.-G. LEE, D. SINDRAM, M.W. RUSSO, D.K. HAN, H.L. BONKOVSKY, S.-I. HWANG (*Charlotte, NC; Farmington, CT, USA*)

Review: Are we Missing the Target? – Cancer Stem Cells and Drug Resistance in Non-small Cell Lung Cancer. S. GOTTSCHLING, P.A. SCHNABEL, F.J.F. HERTH, E. HERPEL (*Heidelberg, Germany*)

Identification of Markers Associated with Highly Aggressive Metastatic Phenotypes Using Quantitative Comparative Proteomics. M.G. TERP, R.R. LUND, O.N. JENSEN, R. LETH-LARSEN, H.J. DITZEL (*Odense, Denmark*)

Review: Breast Cancer and Metastasis: On the Way Toward Individualized Therapy. A.P. TRAPÉ, A.M. GONZALEZ-ANGULO (*Houston, TX, USA*)

In Silico Functional Profiling of Individual Prostate Cancer Tumors: Many Genes, Few Functions. I.P. GORLOV, J. BYUN, C.J. LOGOTHETIS (*Houston, TX, USA*)

Expression of Signal-induced Proliferation-associated Gene 1 (SIPA1), a RapGTPase-activating Protein, Is Increased in Colorectal Cancer and Has Diverse Effects on Functions of Colorectal Cancer Cells. K. JI, L. YE, A.-M. TOMS, R. HARGEST, T.A. MARTIN, F. RUGE, J. JI, W.G. JIANG (*Cardiff, UK; Beijing, PR China*)

Single Nucleotide Polymorphisms of Genes for EGF, TGF- $\beta$  and TNF- $\alpha$  in Patients with Pancreatic Carcinoma. L. ZHANG, G. WU, F. HERRLE, M. NIEDERGETHMANN, M. KEESE (*Frankfurt; Heidelberg, Germany; Xiamen, PR China*)

Diagnostic MicroRNA Markers to Screen for Sporadic Human Colon Cancer in Blood. F.E. AHMED, N.C. AMED, P.W. VOS, C. BONNERUP, J.N. ATKINS, M. CASEY, G.J. NUOVO, W. NAZIRI, J.E. WILEY, R.R. ALLISON (*Greenville, Goldsboro, NC; Columbus, OH, USA*)

MGMT Hypermethylation and MDR System in Glioblastoma Cancer Stem Cells. V. CALDERA, M. MELLAI, L. ANNOVAZZI, O. MONZEGLIO, A. PIAZZI, D. SCHIFFER (*Pavia; Novara, Italy*)

20-HETE-producing Enzymes Are Up-regulated in Human Cancers. A. ALEXANIAN, B. MILLER, R.J. ROMAN, A. SOROKIN (*Milwaukee, WI; Jackson, MS, USA*)

Unifying the Genomics-based Classes of Cancer Fusion Gene Partners: Large Cancer Fusion Genes are Evolutionarily Conserved. L.M. PAVA, D.T. MORTON, R. CHEN, G. BLANCK (*Tampa, FL, USA*)

Effects of Single Nucleotide Polymorphisms on Treatment Outcomes and Toxicity in Patients Treated with Sunitinib. C.H. MAENG, J.H. YI, J. LEE, J.Y. HONG, M.K. CHOI, H.A. JUNG, J.O. PARK, S.H. PARK, Y.S. PARK, W.K. KANG, H.Y. LIM ( <i>Seoul, Republic of Korea</i> ) .....	4619
Oxaliplatin-based Chemotherapy in Patients Aged 75 Years or Older with Metastatic Colorectal Cancer. M. FUKUCHI, K. ISHIBASHI, Y. TAJIMA, N. OKADA, M. YOKOYAMA, N. CHIKA, S. HATANO, T. MATSUZAWA, K. KUMAMOTO, Y. KUMAGAI, H. BABA, E. MOCHIKI, H. ISHIDA ( <i>Saitama, Japan</i> ).....	4627
Carboplatin plus Either Docetaxel or Paclitaxel for Japanese Patients with Advanced Non-small Cell Lung Cancer. M. KAWAHARA, S. ATAGI, K. KOMUTA, H. YOSHIOKA, M. KAWASAKI, Y. FUJITA, T. YONEI, F. OGUSHI, K. KUBOTA, N. NOGAMI, M. TSUCHIYA, K. SHIBATA, Y. TOMIZAWA, K. MINATO, K. FUKUOKA, K. ASAMI, T. YAMANAKA; THE JAPAN MULTINATIONAL TRIAL ORGANIZATION ( <i>Osaka; Sakai, Osaka; Kurashiki, Okayama; Koga, Fukuoka; Asahikawa, Hokkaido; Okayama, Okayama; Kochi, Kochi; Tokyo; Matsuyama, Ehime; Kyoto; Takaoka, Toyama; Shibukawa; Ota, Gunma; Nishinomiya, Hyogo; Kashiwa, Chiba; Japan; Nagoya, Aichi, Japan</i> ) .....	4631
Image-guided Stereotactic Radiosurgery for Cranial Lesions: Large Margins Compensate for Reduced Image Guidance Frequency. H. BADAKHSI, D. KAUL, P. WUST, E. WIENER, V. BUADCH, R. GRAF ( <i>Berlin, Germany</i> ).....	4639
Postoperative Follow-up of Patients with Gastric Cancer According to Nodal Status. K. SHODA, D. ICHIKAWA, S. KOMATSU, T. KUBOTA, K. OKAMOTO, H. KONISHI, A. SHIOZAKI, H. FUJIWARA, E. OTSUJI ( <i>Kyoto, Kyoto, Japan</i> ) .....	4645
Serum DNA Hypermethylation in Patients with Kidney Cancer: Results of a Prospective Study. S. HAUSER, T. ZAHALKA, G. FECHNER, S.C. MÜLLER, J. ELLINGER ( <i>Bonn, Germany</i> ) .....	4651
Biopsy and Radical Prostatectomy Pathological Patterns Influence Prostate Cancer Gene 3 (PCA3) Score. S. DE LUCA, R. PASSERA, E. BOLLITO, A. MILILLO, R.M. SCARPA, M. PAPOTTI, R. CODA, D.F. RANDONE ( <i>Torino; Orbassano, Italy</i> ) .....	4657
Outcome of Allotransplants in Patients with Chronic-phase Chronic Myeloid Leukemia Following Imatinib Failure: Prognosis Revisited. Y.-C. LIU, H.-H. HSIAO, C.-S. CHANG, T.-C. LIU, W.-C. YANG, J.-F. HSU, C.-T. HUANG, S.-F. CHO, C.-H. WU, Y.-F. TSAI, S.-F. LIN ( <i>Kaohsiung, Taiwan, ROC</i> ) .....	4663
Preserved Renal Function After Percutaneous Radiofrequency Ablation for Renal Tumors: Experience of a Single Institution. M. OFUDE, Y. KITAGAWA, W. KODA, S. UENO, Y. KADONO, H. KONAKA, A. MIZOKAMI, T. GABATA, M. NAMIKI ( <i>Kanazawa, Ishikawa, Japan</i> ) .....	4669
Platinum-based Combination Chemotherapy vs. Weekly Cisplatin During Adjuvant CCRT in Early Cervical Cancer with Pelvic LN Metastasis. Y.-Y. LEE, W. PARK, S.J. HUH, A. YOON, J.-Y. PARK, C.H. CHOI, T.-J. KIM, J.-W. LEE, B.-G. KIM, D.-S. BAE ( <i>Seoul, Republic of Korea</i> ) .....	4675

Paraneoplastic Thrombocytosis in Breast Cancer. A. RAJKUMAR, A. SZALLASI ( <i>Long Branch, NJ, USA</i> ) ....	4545
Weekly Paclitaxel as Second-line Chemotherapy in Japanese Patients with Advanced Gastric Cancer. M. KADOKURA, S. IWASA, Y. HONMA, K. KATO, T. HAMAGUCHI, Y. YAMADA, N. ENOMOTO, Y. SHIMADA ( <i>Yamanashi; Tokyo, Japan</i> ) .....	4547
Whole-body Bioelectrical Impedance Analysis in Assessing Upperlimb Lymphedema After Breast Cancer Therapy. S. BERLIT, J. BRADE, B. TUSCHY, A. HORNEMANN, H. LEWELING, V. EGHARDT, M. SÜTTERLIN ( <i>Mannheim, Germany</i> ) .....	4553
Postoperative 5-FU based Radiochemotherapy in Rectal Cancer: Retrospective Long Term Results and Prognostic Factors of a Pooled Analysis on 1,338 Patients. D. GENOVESI, R.J. MYERSON, G.A. CÈFARO, A. VINCIGUERRA, A. AUGURIO, M. TRIGNANI, M. DI TOMMASO, M. NUZZO, M. LUPATTELLI, C. ARISTEI, R. BELLAVITA, L. SCANDOLARO, D. COSENTINO, G. PANI, L. ZICCARELLI, M.A. GAMBACORTA, M.C. BARBA, E. MARANZANO, F. TRIPPA, P. SCIACERO, R. NIESPOLO, C. LEONARDI, T. IANNONE, M.E. ROSETTO, V. FUSCO, P. SANPAOLO, A. MELANO, F. VALVO, C. CAPIRCI, A. DE PAOLI, M. DI NICOLA, G. MANTELLO, V. VALENTINI, ON BEHALF OF THE G.I. A.I.R.O. WORKING GROUP ( <i>Chieti; Perugia; Como; Trento; Cosenza; Rome; Terni; Ivrea; Monza; Milan; Belluno; Viterbo; Rionero in Vulture; Cuneo; Rovigo; Aviano; Ancona, Italy; St. Louis, MO, USA</i> ) .....	4557
First Description of a Hybrid Tumor of the Sublingual Gland. W. EICHHORN, C. PRECHT, M. WEHRMANN, E. HICKMANN, M. EICHHORN, J. ZEUCH, T. LÖNING, R.E. FRIEDRICH, M. HEILAND, J. HOFFMANN ( <i>Hamburg; Balingen; Heidelberg, Germany</i> ) .....	4567
The Prognostic Significance of WNT Pathway in Surgically-treated Colorectal Cancer: $\beta$ -Catenin Expression Predicts for Disease-free Survival. K. KAMPOSORAS, A. KONSTANTARA, V. KOTOULA, S. LAKIS, G. KOUVATSEAS, E. AKRIVIADIS, E. VRETTOU, D. DIONYSOPOULOS, D. KRIKELIS, K. PAPADOPOULOU, E. CHARALAMBOUS, S. CHRISAFI, C. KONSTANTARAS, G. FOUNTZILAS ( <i>Larissa; Thessaloniki; Athens, Greece</i> ) .....	4573
Radiotherapy and Concurrent Metronomic Chemotherapy in Hormone-refractory Prostate Carcinoma: A Phase I Study. A.G. MORGANTI, M. MASSACCESI, L. CARAVATTA, G. MACCHIA, V. PICARDI, F. DEODATO, E. IPPOLITO, S. MIGNOGNA, M. FERRO, S. CILLA, G.C. MATTIUCCI, V. VALENTINI ( <i>Campobasso; Rome, Italy</i> ) .....	4585
Preoperative Neutrophil-to-Lymphocyte Ratio Predicts Clinical Outcome in Patients with Stage II and III Colon Cancer. G. ABSINGER, J. SZKANDERA, M. STOTZ, U. POSTLMAYR, M. PICHLER, A.L. RESS, R. SCHABERL-MOSER, H. LOIBNER, H. SAMONIGG, A. GERGER ( <i>Graz; Vienna, Austria</i> ) .....	4591
Prevalence of <i>H. pylori</i> Infection and Atrophic Gastritis Among Symptomatic and Dyspeptic Adults in Kazakhstan. A Hospital-based Screening Study Using a Panel of Serum Biomarkers. V. BENBERIN, R. BEKTAYEVA, R. KARABAYEVA, A. LEBEDEV, K. AKEMEYEVA, L. PALOHEIMO, K. SYRJÄNEN ( <i>Astana, Kazakhstan; Helsinki; Turku, Finland; Barretos, SP, Brazil</i> ) .....	4595
Weekly Non-pegylated Liposomal Doxorubicin Chemotherapy in Heavily Pre-treated Patients with Metastatic Breast Cancer. G. MASCI, C. GANDINI, M. ZURADELLI, A. LOSURDO, R. TORRISI, S. ROTA, G. GULLO, L. VELUTTI, L. GIORDANO, A. SANTORO ( <i>Milan, Italy; Dublin, Republic of Ireland</i> ) .....	4603
Thymidylate Synthase, Topoisomerase-1 and Microsatellite Instability: Relationship with Outcome in Mucinous Colorectal Cancer Treated with Fluorouracil. F.V. NEGRI, C. AZZONI, L. BOTTARELLI, N. CAMPANINI, A. MANDOLESI, A. WOTHERSPOON, D. CUNNINGHAM, M. SCARTOZZI, S. CASCINU, C. TINELLI, E.M. SILINI, A. ARDIZZONI ( <i>Parma; Ancona; Pavia; Italy; London, UK</i> ) .....	4611

Repression of Cell Proliferation and Androgen Receptor Activity in Prostate Cancer Cells by 2'-Hydroxyflavanone. M. OFUDE, A. MIZOKAMI, M. KUMAKI, K. IZUMI, H. KONAKA, Y. KADONO, Y. KITAGAWA, M. SHIN, J. ZHANG, E.T. KELLER, M. NAMIKI ( <i>Kanazawa, Ishikawa, Japan; Guangxi, PR China; Ann Arbor, MI, USA</i> ) .....	4453
Activity of LaSOM 65, a Monastrol-derived Compound, Against Glioblastoma Multiforme Cell Lines. C.S. STUEPP, F. FIGUEIRÓ, F.B. MENDES, E. BRAGANHOL, A. BERNARDI, R.L. FROZZA, C.G. SALBEGO, R.F.S. CANTO, D. RUSSOWSKY, V.L. EIFLER-LIMA, A.M.O. BATTASTINI ( <i>Porto Alegre, Rio Grande do Sul, Brazil</i> ) .....	4463
Low Production of Reactive Oxygen Species and High DNA Repair: Mechanism of Radioresistance of Prostate Cancer Stem Cells. Y.S. KIM, M.J. KANG, Y.M. CHO ( <i>Seoul, Republic of Korea</i> ) .....	4469
<b>Clinical Studies</b>	
Phase I Trial of Carboplatin and Etoposide in Combination with Panobinostat in Patients with Lung Cancer. A.A. TARHINI, H. ZAHOOR, B. MCLAUGHLIN, W.E GOODING, J.C. SCHMITZ, J.M. SIEGFRIED, M.A. SOCINSKI, A. ARGIRIS ( <i>Pittsburgh, PA; San Antonio, TX, USA</i> ) .....	4475
Comprehensive Head and Neck Radiotherapy Dose-Volume Constraints Do Not Apply to Smaller Volumes. W.F. MOURAD, D. SHASHA, D.M. BLAKAJ, A.S. KHORSANDI, R.A. SHOURBAJI, J. GLANZMAN, R. KABARRITI, R. YOUNG, S. PATEL, E. KATSOULAKIS, M. GÁMEZ, R. WOODE, C. LAZARUS, K.S. HU, L.B. HARRISON ( <i>New York, NY, USA</i> ) .....	4483
Early-stage Central Lung Cancer and Volumetric Modulated Arc Therapy: A Dosimetric Case Study with Literature Review. V. VALAKH, P. CHAN, K. D'ADAMO, B. MICAILY ( <i>Philadelphia, PA, USA</i> ) .....	4491
Retrospective Analysis of the Efficacy of Two Cycles of M-VAC Neoadjuvant Chemotherapy Followed by Radical Cystectomy for Muscle-invasive Bladder Cancer. Y. KITAGAWA, K. IZUMI, S. MIWA, Y. KADONO, H. KONAKA, A. MIZOKAMI, M. NAMIKI ( <i>Kanazawa, Ishikawa, Japan</i> ) .....	4497
Survival in Patients with Metastatic Spinal Cord Compression from Prostate Cancer Is Associated with the Number of Extra-spinal Organs Involved. A. WEBER, T. BARTSCHT, J.H. KARSTENS, S.E. SCHILD, D. RADES ( <i>Lübeck; Hannover, Germany; Scottsdale, AZ, USA</i> ) .....	4505
Predictive Factors of Non-sentinel Lymph Node Involvement in Patients with Invasive Breast Cancer and Sentinel Node Micrometastases. D. FRIEDMAN, M. GIPPONI, F. MURELLI, P. MESZAROS, N. SOLARI, M. MASSA, F. DEPAOLI, P. BACCINI, F. CARLI, M. GALLO, F. CAFIERO ( <i>Genoa, Italy</i> ) .....	4509
Thoracoscopic Esophagectomy in the Prone Position for Esophageal Cancer with Right Aortic Arch: Case Report. S. KANAJI, T. NAKAMURA, Y. OTOWA, M. YAMAMOTO, K. YAMASHITA, T. IMANISHI, Y. SUMI, S. SUZUKI, K. TANAKA, Y. KAKEJI ( <i>Kobe, Hyogo, Japan</i> ) .....	4515
Free Circulating DNA as a Biomarker of Prostate Cancer: Comparison of Quantitation Methods. K. RAMACHANDRAN, C.G. SPEER, S. FIDDY, I.M. REIS, R. SINGAL ( <i>Miami, FL, USA</i> ) .....	4521
Therapeutic Response of Untreatable Hepatocellular Carcinoma After Application of the Immune Modulators IL-2, BCG and Melatonin. B. TOMOV, D. POPOV, R. TOMOVA, N. VLADOV, W. DEN OTTER, Z. KRASTEV ( <i>Sofia, Bulgaria; Amsterdam, Netherlands</i> ) .....	4531
Hypofractionation with VMAT <i>versus</i> 3DCRT in Post-operative Patients with Prostate Cancer. F. ALONGI, L. COZZI, A. FOGLIATA, C. IFTODE, T. COMITO, A. CLIVIO, E. VILLA, F. LOBEFALO, P. NAVARRIA, G. REGGIORI, P. MANCOSU, E. CLERICI, S. TOMATIS, G. TAVERNA, P. GRAZIOTTI, M. SCORSETTI ( <i>Rozzano-Milan, Italy; Bellinzona, Switzerland</i> ) .....	4537

Prognostic Significance of p21 Expression in Patients with Esophageal Squamous Cell Carcinoma. A. SHIOZAKI, S. NAKASHIMA, D. ICHIKAWA, H. FUJIWARA, H. KONISHI, S. KOMATSU, T. KUBOTA, K. OKAMOTO, D. IITAKA, H. SHIMIZU, Y. NAKO, K. TAKEMOTO, M. KISHIMOTO, E. OTSUJI ( <i>Kyoto, Japan</i> ) .....	4329
Radiation-induced Dimer Formation of EGFR: Implications for the Radiosensitizing Effect of Cetuximab. M. KIYOZUKA, T. AKIMOTO, M. FUKUTOME, A. MOTEGI, N. MITSUHASHI ( <i>Tokyo, Tokyo; Kashiwa, Chiba, Japan</i> ) .....	4337
7-Substituted Coumarins Inhibit Proliferation and Migration of Laryngeal Cancer Cells <i>In Vitro</i> . M. KIEŁBUS, K. SKALICKA-WOŹNIAK, A. GRABARSKA, W. JELENIEWICZ, M. DMOSZYŃSKA-GRANICZKA, A. MARSTON, K. POLBERG, P. GAWDA, J. KLATKA, A. STEPULAK ( <i>Lublin, Poland; Bloemfontein, Republic of South Africa</i> ) .....	4347
Differential Protein Expression of Lymph Node Metastases of Papillary Thyroid Carcinoma Harboring the BRAF Mutation. W.S. PARK, K.-W. CHUNG, M.S. YOUNG, S.-K. KIM, Y.J. LEE, E.K. LEE ( <i>Seoul; Goyang, Republic of Korea</i> ) .....	4357
Anti-proliferative and Pro-apoptotic Effects from Sequenced Combinations of Andrographolide and Cisplatin on Ovarian Cancer Cell Lines. N.M. YUNOS, S.S.M. MUTALIP, M.H. JAURI, J.Q. YU, F. HUQ ( <i>Kepong, Selangor, Malaysia; Lidcombe, NSW, Australia</i> ) .....	4365
Enhancing the Activity of Cannabidiol and Other Cannabinoids <i>In Vitro</i> Through Modifications to Drug Combinations and Treatment Schedules. K.A. SCOTT, S. SHAH, A.G. DALGLEISH, W.M. LIU ( <i>London, UK</i> ) .....	4373
Circumvention of Inherent or Acquired Cytotoxic Drug Resistance <i>In Vitro</i> Using Combinations of Modulating Agents. D. CADAGAN, S. MERRY ( <i>Stoke-on-Trent, UK</i> ) .....	4381
Cytotoxicity of Dihydroartemisinin Toward Molt-4 Cells Attenuated by <i>N</i> -Tert-butyl-alphaphenylnitronate and Deferoxamine. H.W. CHAN, N.P. SINGH, H.C. LAI ( <i>Seattle, WA, USA</i> ) .....	4389
Conjugated Linoleate Reduces Prostate Cancer Viability Whereas the Effects of Oleate and Stearate Are Cell Line-dependent. R.M. HAGEN, A. RHODES, M.R. LADOMERY ( <i>Bristol, UK; Kuala Lumpur, Malaysia</i> ) .....	4395
Effects of SRC and STAT3 upon Gap Junctional, Intercellular Communication in Lung Cancer Lines. M. GELETU, S. GUY, L. RAPTIS ( <i>Kingston; Mississauga, ON, Canada</i> ) .....	4401
Citric Acid Induces Cell-cycle Arrest and Apoptosis of Human Immortalized Keratinocyte Cell Line (HaCaT) via Caspase and Mitochondrial-dependent Signaling Pathways. T.-H. YING, C.-W. CHEN, Y.-P. HSIAO, S.-J. HUNG, J.-G. CHUNG, J.-H. YANG ( <i>Taichung; Hualien, Taiwan, ROC</i> ) .....	4411
Adipose-derived Stem Cells Induced EMT-like Changes in H358 Lung Cancer Cells. Y.M. PARK, S.H. YOO, S.-H. KIM ( <i>Seongnam, Republic of Korea</i> ) .....	4421
Nox4-derived ROS Signaling Contributes to TGF- $\beta$ -induced Epithelial-mesenchymal Transition in Pancreatic Cancer Cells. R. HIRAGA, M. KATO, S. MIYAGAWA, T. KAMATA ( <i>Nagano, Japan</i> ) .....	4431
<i>In Vitro</i> Induction of Apoptosis and Necrosis by New Derivatives of Daunorubicin. M. STOJAK, L. MAZUR, M. OPYDO-CHANEK, M. ŁUKAWSKA, I. OSZCZAPOWICZ ( <i>Cracow; Warsaw, Poland</i> ) .....	4439
AG11, A Novel Dichloroflavanone Derivative with Anti-mitotic Activity Towards Human Bladder Cancer Cells. A. JUHEM, A. BOUMENDJEL, B. TOUQUET, A. GUILLOT, A. POPOV, X. RONOT, V. MARTEL-FRACHET ( <i>Grenoble, France</i> ) .....	4445

A Novel Mouse Model of Metastatic Thyroid Carcinoma Using Human Adipose Tissue-Derived Stromal/Stem Cells. E. KANDIL, A. HAUCH, P. FRIEDLANDER, K. TSUMAGARI, A. SAEED, J.M. GIMBLE, B.G. ROWAN ( <i>New Orleans; Baton Rouge, LA, USA</i> ) .....	4213
Biological Correlation of $^{18}\text{F}$ -FDG Uptake on PET in Pulmonary Neuroendocrine Tumors. K. KAIRA, H. MURAKAMI, M. ENDO, Y. OHDE, T. NAITO, H. KONDO, T. NAKAJIMA, N. YAMAMOTO, T. TAKAHASHI ( <i>Shizuoka, Japan</i> ) .....	4219
Imaging Nuclear - Cytoplasm Dynamics of Cancer Cells in the Intravascular Niche of Live Mice. A. SUETSUGU, P. JIANG, H. MORIWAKI, S. SAJI, M. BOUVET, R.M. HOFFMAN ( <i>San Diego, CA, USA; Gifu, Japan</i> ) .....	4229
Therapy with siRNA for <i>Vegf-c</i> but Not for <i>Vegf-d</i> Suppresses Widespectrum Organ Metastasis in an Immunocompetent Xenograft Model of Metastatic Mammary Cancer. M.-A. SHIBATA, E. SHIBATA, J. MORIMOTO, M. HARADA-SHIBA ( <i>Osaka; Suita; Takatsuki, Osaka, Japan</i> ) .....	4237
Prevention of Carboplatin-induced Resistance in Human Ovarian Tumor Xenografts by Selenite. P.B. CAFFREY, G.D. FRENKEL ( <i>California, PA; Newark, NJ, USA</i> ) .....	4249
Effects of Sevoflurane on Breast Cancer Cell Function <i>In Vitro</i> . P. ECIMOVIC, B. MCHUGH, D. MURRAY, P. DORAN, D.J. BUGGY ( <i>Dublin, Ireland; Cleveland, OH, USA</i> ) .....	4255
Expression of High Mobility Group A Proteins in Oral Leukoplakia. L. LARSSON, F. JÄWERT, B. MAGNUSSON, B. HASSÉUS, G. KJELLER ( <i>Gothenburg, Sweden</i> ) .....	4261
Fully-automated Radiosynthesis and <i>In Vitro</i> Uptake Investigation of [ <i>N</i> -methyl- $^{11}\text{C}$ ]methylene Blue. L.F. SCHWEIGER, T.A.D. SMITH ( <i>Aberdeen, UK</i> ) .....	4267
<i>Id4</i> Promotes Senescence and Sensitivity to Doxorubicin-induced Apoptosis in DU145 Prostate Cancer Cells. J.P. CAREY, A.E. KNOWELL, S. CHINARANAGARI, J. CHAUDHARY ( <i>Atlanta, GA, USA</i> ) .....	4271
Ursolic Acid Inhibits the Growth of Colon Cancer-initiating Cells by Targeting STAT3. W. WANG, C. ZHAO, D. JOU, J. LÜ, C. ZHANG, L. LIN, J. LIN ( <i>Wuhan, PR China; Columbus, OH, USA</i> ) .....	4279
Development and Pharmacokinetic Evaluation of a Curcumin Co-solvent Formulation. M.K. JOHN, H. XIE, E.C. BELL, D. LIANG ( <i>Houston, TX, USA</i> ) .....	4285
<i>NOTCH</i> Knockdown Affects the Proliferation and mTOR Signaling of Leukemia Cells. Y. OKUHASHI, M. ITOH, N. NARA, S. TOHDA ( <i>Tokyo, Japan</i> ) .....	4293
Establishment of New Intraperitoneal Paclitaxel-Resistant Gastric Cancer Cell Lines and Comprehensive Gene Expression Analysis. H. MURAKAMI, S. ITO, H. TANAKA, E. KONDO, Y. KODERA, H. NAKANISHI ( <i>Nagoya, Japan</i> ) .....	4299
Aberrant Expression of EZH2 Is Associated with Pathological Findings and P53 Alteration. S. SHIOGAMA, S. YOSHIBA, D. SOGA, H. MOTOHASHI, S. SHINTANI ( <i>Tokyo, Japan</i> ) .....	4309
Eicosapentaenoic Acid Modifies Cytokine Activity and Inhibits Cell Proliferation in an Oesophageal Cancer Cell Line. H. KUBOTA, H. MATSUMOTO, M. HIGASHIDA, H. MURAKAMI, H. NAKASHIMA, Y. OKA, H. OKUMURA, M. YAMAMURA, M. NAKAMURA, T. HIRAI ( <i>Okayama Japan</i> ) .....	4319
Loss of 5-Hydroxymethylcytosine and TET2 in Oral Squamous Cell Carcinoma. F. JÄWERT, B. HASSÉUS, G. KJELLER, B. MAGNUSSON, L. SAND, L. LARSSON ( <i>Gothenburg; Uppsala, Sweden</i> ) .....	4325