

# ANTICANCER RESEARCH

## International Journal of Cancer Research and Treatment

ISSN: 0250-7005

Volume 31, Number 11, November 2011

### Contents

#### *Experimental Studies*

- \* Review: Rho Kinase Proteins—Pleiotropic Modulators of Cell Survival and Apoptosis. C.A. STREET, B.A. BRYAN (*Worcester, MA; El Paso, TX, USA*) ..... 3645
- Selective Gelatinase Inhibitor Peptide Is Effective in Targeting Tongue Carcinoma Cell Tumors *In Vivo*. J. SUOJANEN, S.-T. VILEN, P. NYBERG, P. HEIKKILÄ, O. PENATE-MEDINA, P.E.J. SARIS, J. HAGSTRÖM, T.-M. RANTA, T. SALO, T. SORSA, J. REUNANEN (*Helsinki; Oulu, Finland; New York, NY, USA*) ..... 3659
- Comparison of Cancer-Cell Seeding, Viability and Deformation in the Lung, Muscle and Liver, Visualized by Subcellular Real-time Imaging in the Live Mouse. K. HAYASHI, H. KIMURA, K. YAMAUCHI, N. YAMAMOTO, H. TSUCHIYA, K. TOMITA, H. KISHIMOTO, A. HASEGAWA, M. BOUVET, R.M. HOFFMAN (*San Diego, CA, USA; Kanazawa, Ishikawa; Okayama, Japan*) ..... 3665
- Synthetic Oleanane Triterpenoid, CDDO-Me, Induces Apoptosis in Ovarian Cancer Cells by Inhibiting Prosurvival AKT/NF- $\kappa$ B/mTOR Signaling. X. GAO, Y. LIU, D. DEEB, A.S. ARBAB, A.M. GUO, S.A. DULCHAVSKY, S.C. GAUTAM (*Detroit, MI, USA*) ..... 3673
- Targeting Cyclin D1 in Non-small Cell Lung Cancer and Mesothelioma Cells by Antisense Oligonucleotides. S.S. SAINI, M.A. KLEIN (*Minneapolis, MN, USA*) ..... 3683
- Antitumour Activity of S-1 in Combination with Cetuximab on Human Gastric Cancer Cell Lines *In Vivo*. T. KOBUNAI, T. WATANABE, T. FUKUSATO (*Tokyo, Japan*) ..... 3691

*Contents continued on the back cover*

Melanocyte-specific Immune Response in a Patient with Multiple Regressing Nevi and a History of Melanoma. R. SPEECKAERT, N. VAN GEEL, R.M. LUITEN, M. VAN GELE, M. SPEECKAERT, J. LAMBERT, K. VERMAELEN, E.P.M. TJIN, L. BROCHEZ ( <i>Ghent, Belgium; Amsterdam, Netherlands</i> ) .....	3697
MSC <sup>TRAIL</sup> -mediated HepG2 Cell Death in Direct and Indirect Co-cultures. X.-Y. SUN, J. NONG, K. QIN, H. LU, M.R. MONIRI, L.-J. DAI, G.L. WARNOCK ( <i>Nanning, PR China; Vancouver, BC, Canada</i> ) .....	3705
Cell to Cell Interactions Influence Sensitivity of Liver Cell Lines during Hyperthermia. U. MAYRHAUSER, P. STIEGLER, V. STADLBAUER, S. KOESTENBAUER, B. LEBER, K. KONRAD, F. IBERER, K. TSCHELIESSNIGG ( <i>Graz, Austria</i> ) .....	3713
Novel Curcumin Analogs, GO-Y030 and GO-Y078, Are Multitargeted Agents with Enhanced Abilities for Multiple Myeloma. C. KUDO, H. YAMAKOSHI, A. SATO, H. OHORI, C. ISHIOKA, Y. IWABUCHI, H. SHIBATA ( <i>Akita; Sendai, Japan</i> ) .....	3719
Cell Death Forms and HSP70 Expression in U87 Cells after Ionizing Radiation and/or Chemotherapy. A. PAOLINI, F. PASI, A. FACOETTI, G. MAZZINI, F. CORBELLA, R. DI LIBERTO, R. NANO ( <i>Pavia, Italy</i> ) .....	3727
Indole-3-carbinol Inhibits Telomerase Activity and Gene Expression in Prostate Cancer Cell Lines. S. ADLER, G. RASHID, A. KLEIN ( <i>Kfar Saba; Tel Aviv, Israel</i> ) .....	3733
Differential Cytotoxicity of Triphala and its Phenolic Constituent Gallic acid on Human Prostate Cancer LNCap and Normal Cells. L.H. RUSSELL JR., E. MAZZIO, R.B. BADISA, Z.-P. ZHU, M. AGHARAHIMI, D.J. MILLINGTON, C.B. GOODMAN ( <i>Tallahassee; Gainesville, FL, USA</i> ) .....	3739
Mechanisms Underlying Gemcitabine Resistance in Pancreatic Cancer and Sensitisation by the iMiD <sup>TM</sup> Lenalidomide. R.A. FRYER, B. BARLETT, C. GALUSTIAN, A.G. DALGLEISH ( <i>London, UK; Summit, NJ, USA</i> ) .....	3747
5-Azacytidine Reverses Drug Resistance in Bladder Cancer Cells. K. RAMACHANDRAN, E. GORDIAN, R. SINGAL ( <i>Miami, FL, USA</i> ) .....	3757
Silibinin Suppresses EGFR Ligand-induced CD44 Expression through Inhibition of EGFR Activity in Breast Cancer Cells. S. KIM, J. HAN, J.S. KIM, J.-H. KIM, J.-H. CHOE, J.-H. YANG, S.J. NAM, J.E. LEE ( <i>Seoul, South Korea</i> ) .....	3767
Relationship between LAT1 Expression and Response to Platinum-based Chemotherapy in Non-small Cell Lung Cancer Patients with Postoperative Recurrence. K. KAIRA, T. TAKAHASHI, H. MURAKAMI, T. SHUKUYA, H. KENMOTSU, T. NAITO, N. ORIUCHI, Y. KANAI, M. ENDO, H. KONDO, T. NAKAJIMA, N. YAMAMOTO ( <i>Shizuoka; Gunma; Osaka, Japan</i> ) .....	3775
Differential Akt Signalling in Non-seminomatous Testicular Germ Cell Tumors. J. HENNENLOTTER, B. AMEND, U. VOGEL, M. RENNINGER, C. SPRINGER, U. KUEHS, A. STENZL, J. BEDKE ( <i>Tuebingen; Karlsruhe, Germany</i> ) .....	3783
Synergism from Combinations of Cisplatin and Oxaliplatin with Quercetin and Thymoquinone in Human Ovarian Tumour Models. M.U. NESSA, P. BEALE, C. CHAN, J.Q. YU, F. HUQ ( <i>Lidcombe; Concord, NSW, Australia</i> ) .....	3789
Induction of Apoptosis by Cannabinoids in Prostate and Colon Cancer Cells Is Phosphatase Dependent. S. SREEVALSAN, S. JOSEPH, I. JUTOORU, G. CHADALAPAKA, S.H. SAFE ( <i>College Station; Houston, TX, USA</i> ) .....	3799
An Active Endocytosis Pathway Is Required for the Cytotoxic Effects of Glycosylated Antitumor Ether Lipids. P. SAMADDER, H.-S. BYUN, R. BITTMAN, G. ARTHUR ( <i>Winnipeg, MB, Canada; Flushing, NY, USA</i> ) .....	3809

Phosphorylation of STAT3 in Head and Neck Cancer Requires p38 MAPKinase, whereas Phosphorylation of STAT1 Occurs via a Different Signaling Pathway. C. RIEBE, R. PRIES, K.N. SCHROEDER, B. WOLLENBERG ( <i>Lübeck, Germany</i> ).....	3819
The Role of Circulating Dendritic Cells in Patients with Unresectable Pancreatic Cancer. S. HIROOKA, H. YANAGIMOTO, S. SATOI, T. YAMAMOTO, H. TOYOKAWA, S. YAMAKI, R. YUI, K. INOUE, T. MICHIURA, A-H. KWON ( <i>Hirakata, Osaka, Japan</i> ).....	3827
Detection of <i>TFPI2</i> Methylation in the Serum of Gastric Cancer Patients. K. HIBI, T. GOTO, A. SHIRAHATA, M. SAITO, G. KIGAWA, H. NEMOTO, Y. SANADA ( <i>Yokohama, Japan</i> ) .....	3835
Inhibition of Tumor Growth by Antibody to ADAMTS1 in Mouse Xenografts of Breast Cancer. T. HIRANO, K. HIROSE, K. SAKURAI, M. MAKISHIMA, K. SASAKI, S. AMANO ( <i>Tokyo, Japan</i> ) .....	3839
Relationship between <i>TYMS</i> and <i>ERCC1</i> mRNA Expression and <i>In Vitro</i> Chemosensitivity in Colorectal Cancer. Y.B. CHO, H.J. CHUNG, W.Y. LEE, S.H. CHOI, H.C. KIM, S.H. YUN, H.-K. CHUN ( <i>Seoul, South Korea</i> ) ....	3843
Mode of Cell Death Associated with Adenovirus-mediated Suicide Gene Therapy in HNSCC Tumor Model. D. SRIVASTAVA, G. JOSHI, K. SOMASUNDARAM, R. MULHERKAR ( <i>Mumbai; Bangalore, India</i> ).....	3851
Down-regulation of MiR-206 Promotes Proliferation and Invasion of Laryngeal Cancer by Regulating VEGF Expression. T. ZHANG, M. LIU, C. WANG, C. LIN, Y. SUN, D. JIN ( <i>Harbin, PR China</i> ) .....	3859
 <i>Clinical Studies</i> 	
Lymph Node Assessment with <sup>18</sup> F-FDG-PET and MRI in Uterine Cervical Cancer. J. MONTEIL, A. MAUBON, S. LEOBON, S. ROUX, B. MARIN, J. RENAUDIE, D. GENET, V. FERMEAU, Y. AUBARD, N. TUBIANA-MATHIEU ( <i>Limoges, France</i> ) .....	3865
Prolonged Administration of Temozolomide in Adult Patients with Anaplastic Glioma. C.F. FREYSCHLAG, D.R. SMOLCZYK, E. JANZEN, K. SCHMIEDER, C. THOMÉ, F. LOHR, F. WENZ, C. WEISS, J. TUETTENBERG, M. SEIZ ( <i>Innsbruck, Austria; Mannheim; Idar-Oberstein, Germany</i> ) .....	3873
Serum N-Telopeptide of Type I Collagen and Bone Alkaline Phosphatase and their Relationship in Patients with Non-small Cell Lung Carcinoma and Bone Metastases. Preliminary Results. F. LUMACHI, F. MARINO, G. FANTI, G.B. CHIARA, S.M.M. BASSO ( <i>Padova; Pordenone, Italy</i> ) .....	3879
Correlation of Gene Expression of ATP-binding Cassette Protein and Tyrosine Kinase Signaling Pathway in Patients with Hepatocellular Carcinoma. K. HOFFMANN, L. SHIBO, Z. XIAO, T. LONGERICH, M.W. BÜCHLER, P. SCHEMMER ( <i>Heidelberg, Germany</i> ).....	3883
Cigarette Smoking and the Risk of Dying from Tobacco-related Malignancies by Race. J.N. CURRAN, E. GARRETT-MAYER, M.J. CARPENTER, M.E. FORD, G.A. SILVESTRI, D.T. LACKLAND, A.J. ALBERG ( <i>Charleston, SC, USA</i> ) .....	3891
Ethnic Differences in Neuroendocrine Expression in Prostate Cancer Tissue. T.B. DORFF, S.V. LIU, S. XIONG, J. CAI, D. HAWES, J. PINSKI ( <i>Los Angeles, CA, USA</i> ) .....	3897
Patients' Satisfaction with Different Modalities of Prostate Cancer Therapy – A Retrospective Survey among 634 Patients. W. WAGNER, T. BÖLLING, C. HAMBRUEGGE, J. HARTLAPP, M.G. KRUKEMEYER ( <i>Osnabrück; Extertal, Germany</i> ) .....	3903
Intra-arterial Chemoinfusion prior to Chemoradiotherapy with Full-dose Systemic Gemcitabine for Management of Locally Advanced Pancreatic Cancer. T. TANAKA, H. NISHIOFUKU, T. TAMAMOTO, M. SHO, H. ANAI, S. SUEYOSHI, H. SAKAGUCHI, M. HASEGAWA, Y. NAKAJIMA, K. KICHIKAWA ( <i>Nara, Japan</i> ) .....	3909

Investigative Clinical Study on Prostate Cancer Part VII: Prolactin and the Pituitary–Testis–Prostate Axis at the Time of Initial Diagnosis and Subsequent Cluster Selection of the Patient Population. A.B. PORCARO, C. GHIMENTON, A. PETROZZIELLO, F. MIGLIORINI, M. ROMANO, T. SAVA, B. CARUSO, C. COCCO, S.Z. ANTONIOLLI, V. LACOLA, E. RUBILOTTA, C. MONACO, L. COMUNALE ( <i>Verona, Italy</i> ) .....	3913
ADH-1 in the Treatment of Metastatic Adrenocortical Carcinoma - Case Report. N. YAROM, D. STEWART, L. AVRUCH, R. MALIK, J. WELLS, D.J. JONKER ( <i>Ottawa, ON, Canada; Houston, TX, USA</i> ) .....	3921
Hepatic Intra-arterial Cetuximab in Combination with 5-Fluorouracil and Cisplatin as Salvage Treatment for Sorafenib-refractory Hepatocellular Carcinoma. G. POGGI, B. MONTAGNA, F. MELCHIORRE, P. QUARETTI, A. DELMONTE, A. RICCARDI, B. TAGLIAFERRI, F. SOTTOTETTI, P. DI CESARE, M.G. STELLA, L. VILLANI, M. ZORZETTO, G. GRECO, G. CORNALBA, G. BERNARDO ( <i>Pavia; Milan, Italy</i> ).....	3927
Repeated Localized Treatment for Extranodal Marginal Zone Lymphoma – Case Report and Review of Literature. C.E. SCHÖNKNECHT, C. NIEDER, M. MOLLS, S.T. ASTNER ( <i>Munich, Germany; Bodø; Tromsø, Norway</i> ) .....	3935
Association of <i>hOGG1</i> and <i>XPD</i> Polymorphisms with Urothelial Carcinoma in Taiwan. Y.-H. WANG, S.-D. YEH, K.-H. SHEN, C.-H. SHEN, M.-C. TUNG, C.-T. LIU, H.-Y. CHIOU ( <i>Taipei; Tainan; Chiayi; Taichung, Taiwan, ROC</i> ).....	3939
Polymorphisms in DNA Repair Gene <i>XRCC1</i> and Skin Cancer Risk: A Meta-analysis. H. ZHANG, W. LI, M.J. FRANKLIN, A.Z. DUDEK ( <i>New York, NY; Lexington, KY; Minneapolis, MN, USA</i> ) .....	3945
Bevacizumab in Pediatric Patients: How Safe Is It? M.D. DE PASQUALE, A. CASTELLANO, L. DE SIO, C. DE LAURENTIS, A. MASTRONUZZI, A. SERRA, R. COZZA, A. JENKNER, M.A. DE IORIS ( <i>Rome, Italy</i> ).....	3953
Prevalence of Level V Metastases in Node-positive Head and Neck Squamous Cell Carcinoma. S. WIEGAND, A.P. ZIMMERMANN, A.M. SESTERHENN, J.A. WERNER ( <i>Marburg, Germany</i> ) .....	3959
Tumor Response and Negative Distal Resection Margins of Rectal Cancer after Hyperthermochemoradiation Therapy. S. TSUTSUMI, Y. TABE, T. FUJII, S. YAMAGUCHI, T. SUTO, R. YAJIMA, H. MORITA, T. KATO, M. SHIOYA, J.-I. SAITO, T. ASAO, T. NAKANO, H. KUWANO ( <i>Maebashi, Gunma, Japan</i> ) .....	3963
Arterial Blood Pressure, Serum Calcium and PTH in Elderly Men with Parathyroid Tumors and Primary Hyperparathyroidism. F. LUMACHI, V. CAMOZZI, G. LUISETTO, S. ZANELLA, S.M.M. BASSO ( <i>Padova; Pordenone, Italy</i> ) .....	3969
Beckwith-Wiedemann Syndrome: Potassium Ascorbate with Ribose Therapy in a Syndrome with High Neoplastic Risk. C. ANICHINI, C. LO RIZZO, M. LONGINI, G. PAOLI, R.M. DI BARTOLO, F. PROIETTI, G. BUONOCORE ( <i>Siena; Firenze, Italy</i> ).....	3973
Characterization of Dysplastic Nodules, Early Hepatocellular Carcinoma and Progressed Hepatocellular Carcinoma in Cirrhosis with Contrast-Enhanced Ultrasound. A. GIORGIO, G. CALISTI, A. DI SARNO, N. FARELLA, G. DE STEFANO, U. SCOGNAMIGLIO, V. GIORGIO ( <i>Naples; Rome, Italy</i> ) .....	3977
Clinical Experience with Chemoradiotherapy Comprising S-1 Plus Low-dose Cisplatin in a Patient with Stage IV Anal Cancer. N. NITORI, Y. KATO, A. KATO, T. DEGUCHI, A. OKADA, M. KOJIMA, J. KURODA, T. KADOMURA, K. KUBOTA, N. ORIGUCHI, M. FUJISAKI, M. KITAJIMA ( <i>Tokyo; Tochigi, Japan</i> ) .....	3983
Resection of Solitary Metachronous Lymph Node Metastasis from Hepatocellular Carcinoma Following Transarterial Chemotherapy with Cisplatin: A Case Report. T. KUROKAWA, S. YAMAZAKI, M. MORIGUCHI, M. AOKI, Y. WATANABE, T. HIGAKI, T. TAKAYAMA ( <i>Tokyo, Japan</i> ) .....	3991

Long-term Vaccine Therapy with Autologous Whole Tumor Cell-pulsed Dendritic Cells for a Patient with Recurrent Rectal Carcinoma. H. ONISHI, T. MORISAKI, E. BABA, M. NAKAMURA, S. INABA, H. KUROKI, K. MATSUMOTO, M. KATANO ( <i>Fukuoka; Kumamoto; Kanagawa, Japan</i> ) .....	3995
Impact of Baseline Hepatitis B Viral DNA Levels on Survival of Patients with Advanced Hepatocellular Carcinoma. Y.-Y. SHAO, P.-J. CHEN, Z.-Z. LIN, C.-C. HUANG, Y.-H. DING, Y.-H. LEE, C.-H. HSU, A.-L. CHENG ( <i>Taipei; Yunlin, Taiwan, ROC</i> ) .....	4007
Assessment of ‘Cancer-prone Personality’ Characteristics in Healthy Study Subjects and in Patients with Breast Disease and Breast Cancer Using the Commitment Questionnaire: A Prospective Case–Control Study in Finland. M. ESKELINEN, P. OLLONEN ( <i>Kuopio, Finland</i> ) .....	4013
Measurement of Pessimism: Hopelessness Scale in Healthy Study Subjects, and in Patients with Benign Breast Disease and Breast Cancer: A Prospective Case–Control Study in Finland. M. ESKELINEN, P. OLLONEN ( <i>Kuopio, Finland</i> ) .....	4019
Symptomatic Bone Marrow Involvement in Breast Cancer – Clinical Presentation, Treatment, and Prognosis: A Single Institution Review of 22 Cases. H.-G. KOPP, K. KRAUSS, T. FEHM, A. STAEBLER, J. ZAHM, W. VOGEL, L. KANZ, F. MAYER ( <i>Tuebingen, Germany</i> ) .....	4025
Prognostic Significance of TIMP-1 in Non-small Cell Lung Cancer. M. PESTA, V. KULDA, R. KUCERA, M. PESEK, J. VRZALOVA, V. LISKA, L. PECEN, V. TRESKA, J. SAFRANEK, M. PRAZAKOVA, O. VYCITAL, J. BRUHA, L. HOLUBEC, O. TOPOLCAN ( <i>Prague; Pilsen, Czech Republic</i> ) .....	4031
3D Breast Ultrasound: A Significant Predictor in Breast Cancer Reduction under Pre-operative Chemotherapy. M. WARM, V. DUDA, C. EICHLER, N. HARBECK, A. GOSSMANN, A. THOMAS, M. HOOPMANN, R. OHLINGER, M. BREIDENBACH, R.E. KATES ( <i>Cologne; Marburg; Berlin; Greifswald; Otterfing, Germany</i> ) .....	4039
Nomogram for Suboptimal Cytoreduction at Primary Surgery for Advanced Stage Ovarian Cancer. C.G. GERESTEIN, M.J. EIJKEMANS, J. BAKKER, O.E. ELGERSMA, M.E.L VAN DER BURG, G.S. KOOI, C.W. BURGER ( <i>Rotterdam; Utrecht; Dordrecht, Netherlands</i> ) .....	4043
Errata .....	4051
* Review (page 3645)	