

# ANTICANCER RESEARCH

International Journal of Cancer Research and Treatment

ISSN: 0250-7005

Volume 38, Number 8, August 2018

## Contents

### Reviews

- Relationship Between Metabolic Disorders and Breast Cancer Incidence and Outcomes. Is There a Preventive and Therapeutic Role for Berberine? M. CAZZANIGA, B. BONANNI (*Milan, Italy*) ..... 4393

### Experimental Studies

- 4-HPR Is an Endoplasmic Reticulum Stress Aggravator and Sensitizes Breast Cancer Cells Resistant to TRAIL/Apo2L. A.L. ANDING, J.D. JONES, M.A. NEWTON, R.W. CURLEY JR, M. CLAGETT-DAME (*Madison, WI; Columbus, OH, USA*) ..... 4403

- Color-coded Imaging Distinguishes Cancer Cells, Stromal Cells, and Recombinant Cancer-stromal Cells in the Tumor Microenvironment During Metastasis. M. NAKAMURA, A. SUETSUGU, K. HASEGAWA, T. SATAKE, T. KUNISADA, M. SHIMIZU, S. SAJI, H. MORIWAKI, R.M. HOFFMAN (*Gifu, Japan; San Diego, CA, USA*) ..... 4417

- Synthesis and Structure–Activity Relationships of Tetrahydro- $\beta$ -carboline Derivatives as Anticancer and Cancer-chemopreventive Agents. M. ZHANG, E.-J. PARK, T.P. KONDRATYUK, J.M. PEZZUTO, D. SUN (*Hilo, HI; Brooklyn, NY, USA*) ..... 4425

- Mutant GATA3 Actively Promotes the Growth of Normal and Malignant Mammary Cells. N. EMMANUEL, K.A. LOFGREN, E.A. PETERSON, D.R. MEIER, E.H. JUNG, P.A. KENNY (*Bronx, NY; Crosse; Madison, WI, USA*) ..... 4435

Contents continued on the back cover

CD133 Expression as a <i>Helicobacter pylori</i> -independent Biomarker of Gastric Cancer Progression. R. HOWARD, S. AL DIFFALHA, J. PIMIENTO, J. MEJIA, H. ENDERLING, A. GIULIANO, D. COPPOLA (Tampa, FL, USA; Valle del Cauca, Colombia) .....	4443
Quantitative Structure–Cytotoxicity Relationship of Pyrano[4,3- <i>b</i> ]chromones. J. NAGAI, H. SHI, Y. KUBOTA, K. BANDOW, N. OKUDAIRA, Y. UESAWA, H. SAKAGAMI, M. TOMOMURA, A. TOMOMURA, K. TAKAO, Y. SUGITA (Tokyo; Saitama, Japan; Shanghai, PR China) .....	4449
Quantitative Structure–Cytotoxicity Relationship of 3-( <i>N</i> -Cyclicamino)chromone Derivatives. H. SHI, J. NAGAI, T. SAKATSUME, K. BANDOW, N. OKUDAIRA, Y. UESAWA, H. SAKAGAMI, M. TOMOMURA, A. TOMOMURA, K. TAKAO, Y. SUGITA (Shanghai, PR China; Saitama; Tokyo, Japan) .....	4459
Antineoplastic Actions of Cinnamic Acids and Their Dimers in Breast Cancer Cells: A Comparative Study. M. HUNKE, W. MARTINEZ, A. KASHYAP, T. BOKOSKIE, M. PATTABIRAMAN, S. CHANDRA (Kearney, NE, USA).....	4469
Alpha-Santalol, a Component of Sandalwood Oil Inhibits Migration of Breast Cancer Cells by Targeting the $\beta$ -catenin Pathway. A. BOMMAREDDY, K. KNAPP, A. NEMETH, J. STEIGERWALT, T. LANDIS, A.L. VANWERT, H.P. GORIJAVOLU, C. DWIVEDI (Wilkes-Barre, PA; Dayton, NJ; Brookings, SD, USA).....	4475
Intratumoral Accumulation and Clonal Expansion May Not Be Decisive for Rejection of Allogeneic Tumors by CD8+ T-Lymphocytes. J. JURŠĚNAITĖ, I. GIRKONTAITĖ, A. ŠIAURYS, M. MAURICAS, D. CHARACIEJUS (Vilnius, Lithuania) .....	4481
Cannabinoid Receptor-1 Up-regulation in Azoxymethane (AOM)-treated Mice After Dietary Treatment with Quercetin. V. TUTINO, V. DE NUNZIO, A. TAFARO, G. BIANCO, I. GIGANTE, M.P. SCAVO, R. D’ALESSANDRO, M.G. REFOLO, C. MESSA, M.G. CARUSO, M. NOTARNICOLA (Bari, Italy) .....	4485
Development and Evaluation of Talazoparib Nanoemulsion for Systemic Therapy of <i>BRCA1</i> -mutant Cancer. N.K. MEHRA, R.R. TEKMAL, S. PALAKURTHI (Kingsville; San Antonio, TX, USA) .....	4493
Nelfinavir Induces Endoplasmic Reticulum Stress and Sensitizes Renal Cancer Cells to TRAIL. K. OKUBO, A. SATO, M. ISONO, T. ASANO, T. ASANO (Tokorozawa, Japan) .....	4505
Circulating Pre-microRNA-488 in Peripheral Blood Is a Potential Biomarker for Predicting Recurrence in Breast Cancer. T. MASUDA, Y. SHINDEN, M. NODA, H. UEO, Q. HU, Y. YOSHIKAWA, Y. TSURUDA, Y. KURODA, S. ITO, H. EGUCHI, S. OHNO, K. MIMORI (Beppu; Fukuoka; Tokyo, Japan).....	4515
Implication of BIS in the Migration and Invasion of A549 Non-small Cell Lung Cancer Cells. J. LEE, H.H. YUN, S. KIM, S.H. JI, H.-J. KUH, J.-H. LEE (Seoul, Republic of Korea).....	4525
A Small-molecule Kinase Inhibitor, CEP-1347, Inhibits Survivin Expression and Sensitizes Ovarian Cancer Stem Cells to Paclitaxel. K. TOGASHI, M. OKADA, M. YAMAMOTO, S. SUZUKI, T. SANOMACHI, S. SEINO, H. YAMASHITA, C. KITANAKA (Yamagata, Japan) .....	4535
RBPJ and MAML3: Potential Therapeutic Targets for Small Cell Lung Cancer. H. ONISHI, S. ICHIMIYA, K. YANAI, M. UMEBAYASHI, K. NAKAMURA, A. YAMASAKI, A. IMAIZUMI, S. NAGAI, M. MURAHASHI, H. OGATA, T. MORISAKI (Fukuoka; Tokyo, Japan).....	4543
Modulation of Exposure to Static Magnetic Field Affects Targeted Therapy of Solid Tumors <i>In Vivo</i> . D. GELLRICH, U. SCHMIDTMAYER, J. ECKRICH, J. HAGEMANN, S. BECKER, S. STRIETH (Munich; Hannover; Mainz, Germany) .....	4549

Accuracy of Risk Prediction Models for Breast Cancer and <i>BRCA1/BRCA2</i> Mutation Carrier Probabilities in Israel. E.S. KENAN, M. FRIGER, D. SHOCHAT-BIGON, H. SCHAYEK, R. BERNSTEIN-MOLHO, E. FRIEDMAN ( <i>Beer Sheba; Tel-Hashomer; Tel-Aviv, Israel</i> ) .....	4557
Evaluation of the Antitumor Potential of the Resorcinolic Lipid 3-Heptyl-3,4,6-trimethoxy-3H-isobenzofuran-1-one in Breast Cancer Cells. A.P.M. RABACOW, A. MEZA, E.J.T. DE OLIVEIRA, N. DE DAVID, N. VITOR, A.C.M.B. ANTONIOLLI-SILVA, M.D.F.C. MATOS, R.T. PERDOMO, R.D.S. GOMES, D.P. DE LIMA, A. BEATRIZ, R.J. OLIVEIRA ( <i>Campo Grande; Londrina; Dourados, Brazil</i> ).....	4565
Exocyclic Sulfur and Selenoorganic Compounds Towards Their Anticancer Effects: Crystallographic and Biological Studies. E. ŻESŁAWSKA, A. KINCSES, V. UNGER, V. TÓTH, G. SPENGLER, W. NITEK, W. TEJCHMAN ( <i>Kraków, Poland; Szeged, Hungary</i> ).....	4577
Morphological Analysis of Amoeboid–Mesenchymal Transition Plasticity After Low and High LET Radiation on Migrating and Invading Pancreatic Cancer Cells. A. FACOETTI, C. DI GIOIA, F. PASI, R. DI LIBERTO, F. CORBELLA, R. NANO, M. CIOCCA, F. VALVO, R. ORECCHIA ( <i>Pavia; Milan, Italy</i> ).....	4585
Extracellular Matrix–receptor Interaction Signaling Genes Associated with Inferior Breast Cancer Survival. M.-H. YEH, Y.-J. TZENG, T.-Y. FU, J.-J. YOU, H.-T. CHANG, L.-P. GER, K.-W. TSAI ( <i>Kaohsiung; Taichung; Pingtung, Taiwan, ROC</i> ) .....	4593
Tight Junction Protein 1 Dysfunction Contributes to Cell Motility in Bladder Cancer. K.-W. TSAI, W.-T. KUO, S.-Y. JENG ( <i>Kaohsiung; Pingtung; Taipei, Taiwan, ROC</i> ).....	4607
Effect of Simultaneous Inhibition of Protein Kinase CK2 and Thymidylate Synthase in Leukemia and Breast Cancer Cells. P. WIŃSKA, K. SKIERKA, E. ŁUKOWSKA-CHOJNACKA, M. KORONKIEWICZ, J. CIEŚLA, M. BRETNER ( <i>Warsaw, Poland</i> ) .....	4617
Tissue Rebuilding During Spontaneous Regression of Melanoma in the Melanoma-bearing Libechov Minipig. D. PLANSKA, J. KOVALSKA, J. CIZKOVA, V. HORAK ( <i>Prague; Libechov, Czech Republic</i> ).....	4629
Impact of COX2 Inhibitor for Regulation of PD-L1 Expression in Non-small Cell Lung Cancer. K. SHIMIZU, R. OKITA, S. SAISHO, A. MAEDA, Y. NOJIMA, M. NAKATA ( <i>Kurashiki, Japan</i> ).....	4637
Particle Stability During Pressurized Intra-peritoneal Aerosol Chemotherapy (PIPAC). A. MIKOLAJCZYK, V. KHOSRAWIPOUR, J. SCHUBERT, H. CHAUDHRY, A. PIGAZZI, T. KHOSRAWIPOUR ( <i>Wroclaw, Poland; Dortmund, Germany; Irvine, CA, USA</i> ) .....	4645
Evaluation of Injectable Chitosan-based Co-crosslinking Hydrogel for Local Delivery of <sup>188</sup> Re-LIPO-DOX to Breast-tumor-bearing Mouse Model. F.-Y.J. HUANG, C.-C. HUNG, C.-W. CHANG, J.-H. CHAO, B.-T. HSIEH ( <i>Hsinchu; Taichung, Taiwan, ROC</i> ) .....	4651
Biomarkers of Oxidative Stress Associated with the Risk of Potentially Malignant Oral Disorders. T. SENGHORE, Y.-F. LI, F.-C. SUNG, M.-H. TSAI, C.-H. HUA, C.-S. LIU, R.-J. HUANG, C.-C. YEH ( <i>Taipei; Taichung, Taiwan, ROC; Banjul, Gambia</i> ).....	4661
Investigation into Enhancing Capecitabine Efficacy in Colorectal Cancer by Inhibiting Focal Adhesion Kinase Signaling. J.J. SIM, M.H. PARK, J.-H. BAEK, H. LEE, K.-Y. JEONG, H.M. KIM ( <i>Incheon, Republic of Korea</i> ).....	4667
Transperitoneal <i>Versus</i> Extraperitoneal Laparoscopic Lymphadenectomy for Gynecological Malignancies: A Systematic Review and Meta-analysis. A. PRODRMIDOU, N. MACHAIRAS, E. SPARTALIS, I.D. KOSTAKIS, C. IAVAZZO, D. MORIS, D.I. TSILIMIGRAS, A. ATHANASIOU, N. NIKITEAS ( <i>Athens; Piraeus, Greece</i> ) .....	4677

*Clinical Studies*

Overexpression of FGFR3 in HPV-positive Tonsillar and Base of Tongue Cancer Is Correlated to Outcome. C. BERSANI, L. HAEGGBLOM, R.G. URSU, S.E. GIUSCA, L. MARKLUND, T. RAMQVIST, A. NÄSMAN, T. DALIANIS (*Stockholm, Sweden; Iasi, Romania*)..... 4683

Prophylactic Effect of Polaprezinc, a Zinc-L-carnosine, Against Chemotherapy-induced Oral Mucositis in Pediatric Patients Undergoing Autologous Stem Cell Transplantation. M. FUNATO, M. OZEKI, A. SUZUKI, M. ISHIHARA, R. KOBAYASHI, A. NOZAWA, S. YASUE, S. ENDO-OHNISHI, T. FUKAO, Y. ITOH (*Gifu, Japan*) ..... 4691

Phase I Study Evaluating the Combination of Afatinib with Carboplatin and Pemetrexed After First-line EGFR-TKIs. S. WATANABE, O. YAMAGUCHI, A. MASUMOTO, Y. MAENO, Y. KAWASHIMA, O. ISHIMOTO, S. SUGAWARA, H. YOSHIKAWA, T. KIKUCHI, T. NUKIWA, K. KOBAYASHI (*Niigata; Saitama; Sendai; Tokyo, Japan*) ..... 4699

Prognostic Significance of Neutrophil-to-lymphocyte Ratio in the Framework of the 8th TNM Edition for Breast Cancer. P. FERRONI, M. ROSELLI, O.C. BUONOMO, A. SPILA, I. PORTARENA, A. LAUDISI, M.G. VALENTE, S.P. PIRILLO, L. FORTUNATO, L. COSTARELLI, F. CAVALIERE, F. GUADAGNI (*Rome; Viterbo, Italy*) ..... 4705

Tumor Budding Versus Mismatch Repair Status in Colorectal Cancer – An Exploratory Analysis. M. KARLBERG, K. STENSTEDT, M. HALLSTRÖM, P. RAGNHAMMAR, C. LENANDER, D. EDLER (*Stockholm, Sweden*)..... 4713

Clinical Characteristics of Liver Metastasis in Nivolumab-treated Patients with Non-small Cell Lung Cancer. T. SHIROYAMA, H. SUZUKI, M. TAMIYA, A. TAMIYA, A. TANAKA, N. OKAMOTO, K. NAKAHAMA, Y. TANIGUCHI, S.-I. ISA, T. INOUE, F. IMAMURA, S. ATAGI, T. HIRASHIMA (*Osaka, Japan*)..... 4723

The Frequency and Prognostic Value of Neutrophilia in Chronic Lymphocytic Leukemia. I. LEVY, Z. VADASZ, A. POLLIACK, T. TADMOR (*Haifa; Jerusalem, Israel*) ..... 4731

Preoperative Prognostic Nutritional Index Predicts Long-term Outcome in Gastric Cancer: A Propensity Score-matched Analysis. N. HIRAHARA, Y. TAJIMA, Y. FUJII, T. YAMAMOTO, R. HYAKUDOMI, T. TANIURA, S. KAJI, Y. KAWABATA (*Shimane, Japan*)..... 4735

The Impact of EndoPredict Clinical Score on Chemotherapy Recommendations in Women with Invasive ER+/HER2–Breast Cancer Stratified as Having Moderate or Poor Prognosis by Nottingham Prognostic Index. K. MOKBEL, U. WAZIR, A. WAZIR, A. KASEM, K. MOKBEL (*London, UK; Albany, NY, USA*) ..... 4747

Chitinase-3-like Protein 1 (YKL-40) Expression in Squamous Cell Skin Cancer. J. SALOMON, A. PIOTROWSKA, Ł. MATUSIAK, P. DZIĘGIEL, J.C. SZEPIETOWSKI (*Wrocław, Poland*)..... 4753

Diagnostic Utility of Prostein, Uroplakin II and SATB2 for Diagnosing Carcinoma of Unknown Primary Origin: A Systematic Immunohistochemical Profiling. K. MOCHIZUKI, M. KAWAI, T. ODATE, I. TAHARA, T. INOUE, K. KASAI, T. NAKAZAWA, R. KATOH, T. KONDO (*Chuo, Japan*) ..... 4759

Relationship Among Tumor Attenuation Value of Pre-contrast Computed Tomography (CT), Washout Rate and Constituent Cells in Adrenal Adenoma: Proposition of a New Approach for Diagnosing Adrenal Adenoma on Dynamic CT. A. NISHIE, M. SUGIMOTO, Y. ASAYAMA, K. ISHIGAMI, Y. USHIJIMA, Y. TAKAYAMA, D. OKAMOTO, N. FUJITA, A. YOKOMIZO, K. TATSUGAMI, H. HONDA (*Fukuoka, Japan*) ..... 4767

Pilot Study of Probe-based Confocal Laser Endomicroscopy with Fluorescein-dripping Method for Liver Tumors. M. MORIMOTO, S. HONJO, T. SAKAMOTO, E. UCHINAKA, M. AMISAKI, Y. ARAI, M. YAMAMOTO, Y. FUKUMOTO, T. OSAKI, N. TOKUYASU, K. ASHIDA, H. SAITO, Y. FUJIWARA (*Yonago, Japan*) ..... 4775

Chemoradiotherapy-induced Changes in Mucinous Components in Rectal Cancer Tissue: Evaluation on High Iron Diamine-alcian Blue and Mucin 1 Staining. H. MIYAKITA, S. SADAHIRO, Y. KAMEI, T. OGIMI, G. SAITO, K. OKADA, A. TANAKA, T. SUZUKI, H. KAJIWARA, T. AKIBA ( <i>Kanagawa, Japan</i> ) .....	4783
Treatment of Adrenal Metastases with Conventional or Hypofractionated Image-guided Radiation Therapy – Patterns and Outcomes. D. BUERGY, L. RABE, K. SIEBENLIST, F. STIELER, J. FLECKENSTEIN, F.A. GIORDANO, F. WENZ, J. BODA-HEGGEMANN ( <i>Mannheim, Germany</i> ).....	4789
Clinical Impact of Histological Heterogeneity in the Metastatic Lymph Nodes of Patients with Colorectal Cancer. K. HIRAYAMA, M. SUDOH, H. SHIMIZU, S. FURUYA, Y. AKAZAWA, H. IINO, K. SHIRAIISHI, H. AKAIKE, N. HOSOMURA, Y. KAWAGUCHI, H. AMEMIYA, H. KAWAIDA, S. INOUE, H. KONO, H. FUJII, D. ICHIKAWA ( <i>Yamanashi, Japan</i> ) .....	4797
A Phase I Study of S-1-based Concurrent Chemoradiotherapy Followed by Gemcitabine and S-1 in Metastatic Pancreatic Adenocarcinoma. S.-H. YANG, Y.-Y. SHAO, C.-C. LIN, S.-H. KUO, A.-L. CHENG, K.-H. YEH ( <i>Taipei, Taiwan, ROC</i> ) .....	4805
Preoperative Evaluation of Myometrial Invasion in Endometrial Carcinoma: Prospective Intra-individual Comparison of Magnetic Resonance Volumetry, Diffusion-weighted and Dynamic Contrast-enhanced Magnetic Resonance Imaging. S.F. THIEME, F. COLLETTINI, J. SEHOULI, L. BIOCCA, A. LELLA, M. WAGNER, J. ALMUHEIMID, H. PLETT, M.Z. MUALLEM ( <i>Berlin; Essen, Germany</i> ) .....	4813
Nuclear Expression of CD133 Is Associated with Good Prognosis in Patients with Colorectal Adenocarcinoma. Y.-M. LEE, M.-K. YEO, I.-O. SEONG, K.-H. KIM ( <i>Cheonan; Daejeon, Republic of Korea</i> ) .....	4819
Partial Bladder Boost Using Lipiodol Marking During Image-guided Radiotherapy for Bladder Cancer. R. NAKAMURA, H. KAKUHARA, K. KIKUCHI, T. SEGAWA, H. OIKAWA, K. IWASAKI, W. OBARA, H. ARIGA ( <i>Morioka, Japan</i> ) .....	4827
Predicting the Ambulatory Status of Patients Irradiated for Metastatic Spinal Cord Compression (MSCC) from Head-and-neck Cancer. D. RADES, C. STAACKMANN, S. JANSSEN ( <i>Lübeck; Hannover, Germany</i> ) .....	4833
Platinum-based Agent and Fluorouracil in Metastatic Breast Cancer: A Retrospective Monocentric Study with a Review of the Literature. L. ROSSI, C. BIAGIONI, A. MCCARTNEY, E. MORETTI, M. PESTRIN, G. SANNA, E. RISI, L. MALORNI, A. DI LEO, L. BIGANZOLI ( <i>Prato, Italy; Bellinzona; Lugano, Switzerland</i> ) .....	4839
Sigmoid Colon Adenocarcinoma with Isolated Loss of PMS2 Presenting in a Patient with Synchronous Prostate Cancer with Intact MMR: Diagnosis and Analysis of the Family Pedigree. W. LIU, D. ZHANG, S.A. TAN, X. LIU, J. LAI ( <i>Changsha, PR China; Gainesville, FL, USA</i> ) .....	4847
Cost-Effectiveness of Carbon Ion Radiation Therapy for Skull Base Chordoma Utilizing Long-Term (10-Year) Outcome Data. T. SPRAVE, V. VERMA, F. STERZING, T. BRUCKNER, K. HEES, B. LAND, O. JÄKEL, K. HERFARTH, J. DEBUS, M. UHL ( <i>Heidelberg; Kempten; Dortmund; Mannheim, Germany; Omaha, NE, USA</i> ) ...	4853
Development of a Questionnaire for Monitoring Risk Factors for Chemotherapy-induced Nausea and Vomiting – A NOGGO Pilot Study. H. RITTMEISTER, G. OSKAY-ÖZCELIK, R. RICHTER, J. SEHOULI, J.P. GRABOWSKI ( <i>Berlin, Germany</i> ) .....	4859
Preoperative CA-125 Value as a Predictive Factor for Postoperative Outcome in First Relapse of Platinum-sensitive Serous Ovarian Cancer. A. PARASHKEVOVA, J. SEHOULI, R. RICHTER, D. DIMITROVA, E.I. BRAICU, M.Z. MUALLEM ( <i>Berlin, Germany</i> ).....	4865
Predictors for High Microsatellite Instability in Patients with Colorectal Cancer Fulfilling the Revised Bethesda Guidelines. K. ARAKAWA, K. HATA, K. KAWAI, T. TANAKA, T. NISHIKAWA, K. SASAKI, Y. SHUNO, M. KANEKO, M. HIYOSHI, S. EMOTO, K. MURONO, H. NOZAWA ( <i>Tokyo, Japan</i> ) .....	4871

The Lymph Node Ratio Is an Independent Prognostic Factor in Pancreatic Cancer Patients Who Receive Curative Resection Followed by Adjuvant Chemotherapy. T. AOYAMA, N. YAMAMOTO, M. KAMIYA, M. MURAKAWA, H. TAMAGAWA, S. SAWAZAKI, M. NUMATA, M. SHIOZAWA, S. KOBAYASHI, M. UENO, M. MORIMOTO, N. YUKAWA, T. OSHIMA, T. YOSHIKAWA, Y. RINO, M. MASUDA, S. MORINAGA ( <i>Yokohama, Japan</i> ) .....	4877
Controlling Nutritional Status (CONUT) Score Is a Prognostic Marker in Metastatic Colorectal Cancer Patients Receiving First-line Chemotherapy. N. DAITOKU, Y. MIYAMOTO, R. TOKUNAGA, Y. SAKAMOTO, Y. HIYOSHI, M. IWATSUKI, Y. BABA, S. IWAGAMI, N. YOSHIDA, H. BABA ( <i>Kumamoto, Japan</i> ) .....	4883
CT Texture Analysis of Ductal Adenocarcinoma Downstaged After Chemotherapy. V. CIARAVINO, N. CARDOBI, R. DE ROBERTIS, P. CAPELLI, D. MELISI, F. SIMIONATO, G. MARCHEGIANI, R. SALVIA, M. D'ONOFRIO ( <i>Verona, Italy</i> ).....	4889
Brainstem Glioblastoma Multiforme in a Patient with NF1. J.T. FORTUNATO, B. REYS, P. SINGH, E. PAN ( <i>Detroit, MI; Dallas, TX, USA</i> ) .....	4897
The Effect of Roux-en-Y Reconstruction on Type 2 Diabetes in the Early Postoperative Period. H. KASHIHARA, M. SHIMADA, K. YOSHIKAWA, J. HIGASHIJIMA, T. MIYATANI, T. TOKUNAGA, M. NISHI, C. TAKASU ( <i>Tokushima, Japan</i> ) .....	4901
OPG, OPN, EGF and VEGF Levels at Individual Breslow Score Stages in Malignant Melanoma. I. TRESKOVA, O. TOPOLCAN, J. WINDRICOVA, V. SIMANEK, D. SLOUKA, V. TRESKA, R. KUCERA ( <i>Pilsen, Czech Republic</i> ) .....	4907
Long-term Response to First-line Pazopanib Therapy in mRCC Patients: A Multicenter Italian Experience. A. SBRANA, E. BIASCO, F. PAOLIERI, E. PALESANDRO, C. CASERTA, R. IACOVELLI, B. DETTI, D. SANTINI, A. MOSCA, F. MORELLI, G. FORNARINI, U. DE GIORGI, C. MASINI, L. GALLI ( <i>Pisa; Livorno; Turin; Terni; Verona; Florence; Rome; Novara; San Giovanni Rotondo; Genoa; Meldola; Reggio Emilia, Italy</i> ) .....	4913
Treatment of Naïve HCC Combined with Segmental or Subsegmental Portal Vein Tumor Thrombosis: Liver Resection <i>Versus</i> TACE Followed by Radiotherapy. J.I. YU, G.-S. CHOI, D.H. LIM, E. LEE, J.-W. JOH, C.H.D. KWON, J.M. KIM, S. KIM, S.-Y. WOO, S.W. PAIK, H.C. PARK ( <i>Seoul; Changwon, Republic of Korea</i> ) .....	4919
Relationship Between FDG Uptake and Neutrophil/Lymphocyte Ratio in Patients with Invasive Ductal Breast Cancer. T. FUJII, K. YANAI, S. TOKUDA, Y. NAKAZAWA, S. KUROZUMI, S. OBAYASHI, R. YAJIMA, T. HIRAKATA, K. SHIRABE ( <i>Gunma, Japan</i> ) .....	4927
Skeletal Muscle Volume and Intramuscular Adipose Tissue Are Prognostic Predictors of Postoperative Complications After Hepatic Resection. N. HARIMOTO, H. HOSHINO, R. MURANUSHI, K. HAGIWARA, T. YAMANAKA, N. ISHII, M. TSUKAGOSHI, T. IGARASHI, A. WATANABE, N. KUBO, K. ARAKI, K. SHIRABE ( <i>Maebashi, Japan</i> ) .....	4933
Comparison of Feeding Jejunostomy <i>via</i> Gastric Tube <i>Versus</i> Jejunum After Esophageal Cancer Surgery. T. KONISHI, A. SHIOZAKI, H. FUJIWARA, H. KONISHI, K. TAKEMOTO, M. KUDOU, K. SHODA, T. ARITA, T. KOSUGA, R. MORIMURA, Y. MURAYAMA, Y. KURIU, H. IKOMA, T. KUBOTA, M. NAKANISHI, K. OKAMOTO, E. OTSUJI ( <i>Kyoto, Japan</i> ) .....	4941
A Bi-national Analysis of 252 Pancreatic Resections for Chronic Pancreatitis with Regard to Incidental Carcinoma Sequence and Overall Postoperative Outcome. T. MALINKA, F. KLEIN, T.L. THU, C.S. RÖSCH, H. WUNDSAM, M. BIEBL, J. PRATSCHKE, M. BAHRA, R. FÜGGER ( <i>Berlin, Germany; Linz, Austria</i> ).....	4947

Quality of Life and Radiation-induced Late Toxicity Following Intensity-modulated <i>Versus</i> Three-dimensional Conformal Radiotherapy for Patients with Spinal Bone Metastases: Results of a Randomized Trial. T. SPRAVE, V. VERMA, R. FÖRSTER, I. SCHLAMPP, K. HEES, T. BRUCKNER, T. BOSTEL, R. EL SHAFIE, N.H. NICOLAY, J. DEBUS, H. RIEF ( <i>Heidelberg; Dortmund; Freiburg, Germany; Pittsburgh, PA, USA; Zurich, Switzerland</i> ) .....	4953
Quality of Life Following Stereotactic Body Radiotherapy <i>Versus</i> Three-Dimensional Conformal Radiotherapy for Vertebral Metastases: Secondary Analysis of an Exploratory Phase II Randomized Trial. T. SPRAVE, V. VERMA, R. FÖRSTER, I. SCHLAMPP, T. BRUCKNER, T. BOSTEL, R.A. EL SHAFIE, N.H. NICOLAY, J. DEBUS, H. RIEF ( <i>Heidelberg; Freiburg, Germany; Pittsburgh, PA, USA; Zurich, Switzerland</i> ) .....	4961