

in vivo

International Journal of Experimental and Clinical Pathophysiology and Drug Research

Volume 33, Number 2, March-April 2019

Contents

Review

- | | |
|--|-----|
| Oxidative Stress and Oral Mucosal Diseases: An Overview. N. SARDARO, F. DELLA VELLA, M.A. INCALZA, D. DI STASIO, A. LUCCHESE, M. CONTALDO, C. LAUDADIO, M. PETRUZZI (<i>Bari; Naples, Italy</i>) | 289 |
|--|-----|

- | | |
|--|-----|
| The Role of 3D Printing in Colorectal Surgery: Current Evidence and Future Perspectives. X. PAPAZARKADAS, E. SPARTALIS, D. PATSOURAS, A. IOANNIDIS, D. SCHIZAS, K. GEORGIOU, D. DIMITROULIS, N. NIKITEAS (<i>Athens, Greece</i>) | 297 |
|--|-----|

Experimental Studies

- | | |
|--|-----|
| Malignant Transformation of Fanconi Anemia Complementation Group D2-deficient (<i>Fancd2^{-/-}</i>) Hematopoietic Progenitor Cells by a Single HPV16 Oncogene. X. ZHANG, R. FISHER, D. SHIELDS, W. HOU, D. FRANICOLA, H. WANG, M.W. EPPERLY, L. RIGATTI, J.S. GREENBERGER (<i>Pittsburgh, PA, USA</i>) | 303 |
|--|-----|

- | | |
|--|-----|
| Cytotoxicity and Pro-inflammatory Properties of Aliphatic Alpha, Beta-unsaturated Acid and Ester Monomers in RAW264.7 Cells and Their Chemical Reactivity. Y. MURAKAMI, A. KAWATA, S. SUZUKI, S. FUJISAWA (<i>Sakado, Japan</i>) | 313 |
|--|-----|

- | | |
|---|-----|
| Intra- and Postoperative Blood Flow Monitoring in a Sheep Model of Uterus Transplantation. A. KENGELBACH-WEIGAND, L. LOTZ, R. SCHMID, W. LANG, M.W. BECKMANN, I. HOFFMANN, R.E. HORCH, S.P. RENNER, R. DITTRICH, A.M. BOOS, T. HILDEBRANDT (<i>Erlangen, Germany</i>) | 325 |
|---|-----|

- | | |
|---|-----|
| Extent of Inflammation and Foreign Body Reaction to Porous Polyethylene <i>In Vitro</i> and <i>In Vivo</i> . T. VOLLMOMMER, A. HENNINSEN, R.E. FRIEDRICH, O.H. FELTHAUS, F. EDER, C. MORSCZECK, R. SMEETS, S. GEHMERT, M. GOSAU (<i>Hamburg; Regensburg, Germany; Basel, Switzerland</i>) | 337 |
|---|-----|

Contents continued on the back cover

Establishment of a Primary Culture System of Human Periodontal Ligament Cells that Differentiate into Cementum Protein 1-expressing Cementoblast-like Cells. H. KADOKURA, T. YAMAZAKI, Y. MASUDA, Y. KATO, A. HASEGAWA, H. SAKAGAMI, S. YOKOSE (<i>Saitama, Japan</i>)	349
8-Hydroxy- β -methylbutyrate Suppresses NF- κ B Activation and IL-6 Production in TE-1 Cancer Cells. S. MIYAKE, A. OGO, H. KUBOTA, F. TERAMOTO, T. HIRAI (<i>Kurashiki, Japan</i>)	353
The Effect of Haemostatic Dressing Prototypes for the Emergency Services in the Porcine Haemostatic System. Z. ADAMIAK, J. BORYS, W. KRYSTKIEWICZ, A. POMANIOWSKI, M. JALYNNSKI, P. HOLAK, M. BRZEZINSKI, P. JASTRZEBSKI, A. TOBOLSKA, J. GLODEK (<i>Olsztyn; Bialystok; Gdansk, Poland</i>)	359
Salivary Glycine Is a Significant Predictor for the Attenuation of Polyp and Tumor Microenvironment Formation by Fucoxanthin in AOM/DSS Mice. M. TERASAKI, S. MASAKA, C. FUKADA, M. HOUZAKI, T. ENDO, T. TANAKA, H. MAEDA, K. MIYASHITA, M. MUTOH (<i>Hokkaido; Gifu; Aomori; Tokyo, Japan</i>)	365
Anticancer Effects of Baicalein in FRO Thyroid Cancer Cells Through the Up-regulation of ERK/p38 MAPK and Akt Pathway. S.E. HAN, C.H. PARK, I.S. NAM-GOONG, Y.I. KIM, E.S. KIM (<i>Ulsan, Republic of Korea</i>)	375
Ursolic Acid Induces Apoptotic Cell Death Through AIF and Endo G Release Through a Mitochondria-dependent Pathway in NCI-H292 Human Lung Cancer Cells <i>In Vitro</i> . C.-J. CHEN, Y.-L. SHIH, M.-Y. YEH, N.-C. LIAO, H.-Y. CHUNG, K.-L. LIU, M.-H. LEE, P.-Y. CHOU, H.-Y. HOU, J.-S. CHOU, J.-G. CHUNG (<i>Miaoli; Taipei; New Taipei; Changhua; Taichung, Taiwan, ROC</i>)	383
The Pathogenic Effect of Cortactin Tyrosine Phosphorylation in Cutaneous Squamous Cell Carcinoma. L. ZHU, E. CHO, G. ZHAO, M.R. ROH, Z. ZHENG (<i>Yanji, PR China; Seoul; Incheon, Republic of Korea</i>)	393
Pentoxifylline Enhances the Apoptotic Effect of Carboplatin in Y79 Retinoblastoma Cells. C.C. CRUZ-GALVEZ, P.C. ORTIZ-LAZARENO, E.J. PEDRAZA-BRINDIS, M.M. VILLASENOR-GARCIA, E. REYES-URIUBE, A. BRAVO-HERNANDEZ, R.A. SOLIS-MARTINEZ, M. CANCINO-MARENTES, C. RODRIGUEZ-PADILLA, A. BRAVO-CUELLAR, G. HERNANDEZ-FLORES (<i>Guadalajara; Ocotlan; San Nicolas de los Garza; Tepatitlan de Morelos, Mexico</i>)	401
The Evaluation of Proteoglycan Levels and the Possible Role of ACAN Gene (c.6423T>C) Variant in Patients With Lumbar Disc Degeneration Disease. C.K. YALTIRIK, Ö. TIMIRCI-KAHRAMAN, S. GULEC-YILMAZ, S. OZDOGAN, B. ATALAY, T. ISBIR (<i>Istanbul, Turkey</i>)	413
Osteogenic Evaluation of Goose-beak Bones According to Processing Temperature. J.M. KIM, S.H. CHOI (<i>Seoul; Cheongju, Republic of Korea</i>)	419
Fusigen Reduces Intracellular Reactive Oxygen Species and Nitric Oxide Levels. V. KITIYANANT, P. LOTRAKUL, C. KANCHANABANCA, P. PADUNGROS, H. PUNNAPAYAK, S. PRASONGSUK, P. CHANVORACHOTE (<i>Bangkok, Thailand; Surabaya, Indonesia</i>)	425
Altered Resistin Concentrations in Mid-trimester Amniotic Fluid of Fetuses With Trisomies 18 and 13: A Window onto the Pathophysiology of Trisomies 18 and 13. N. VRACHNIS, E. DALAKLI, D. ZYGOURIS, N. VLACHADIS, N. SALAKOS, D. BOTSIDIS, S. KALANTARIDOU, N. DRAKOULIS, G. MASTORAKOS, G. CREATSAS, E. DELIGEOROGLOU, Z. ILIODROMITI (<i>Athens, Greece</i>)	433

Hypoxia of Rats Subjected to Carotid Artery Ligation Results in Impaired Neurogenesis and Reduced Number of Cortical Neurons. Y. CHUNG, H. CHO, G.H. JO, Y. JUN (<i>Gwangju, Republic of Korea</i>)	441
Comprehensive Analysis of Somatic Mutations in Colorectal Cancer With Peritoneal Metastasis. J.-H. LEE, B.K. AHN, S.S. BAIK, K.H. LEE (<i>Gyeongju; Seoul, Republic of Korea</i>)	447
Clinical Studies	
Mid- to Long-term Outcomes After Split-thickness Skin Graft vs. Skin Extension by Multiple Incisions. J.N. KERN, F. WEIDEMANN, P.F. O'LOUGHLIN, C. KRETTEK, R. GAULKE (<i>Hannover, Germany; Cork, Ireland</i>)	453
Contribution of Serum Biomarkers to Prognostic Assessment in Patients With Oligometastatic Prostate Cancer. C. NIEDER, A. DALHAUG, A. PAWINSKI (<i>Bodø; Tromsø, Norway</i>)	465
Predictors of Postpartal Retained Products of Conception. F. THANGARAJAH, M. BRUNNER, C. PAHMEYER, J.C. RADOSA, C. EICHLER, S. LUDWIG, B. MORGENSTERN, P. MALLMANN (<i>Cologne; Homburg, Germany</i>)	469
Feasibility of Carbon Ion Radiotherapy in the Treatment of Gynecological Melanoma. A. BARCELLINI, V. VITOLO, A. FACOETTI, P. FOSSATI, L. PREDA, M.R. FIORE, B. VISCHIONI, A. IANNALFI, M. BONORA, S. RONCHI, E. D'IPPOLITO, R. PETRUCCI, G. VISELNER, M. CIOCCHI, F. VALVO, R. ORECCHIA (<i>Pavia; Milan, Italy</i>)	473
Gefitinib Plus Bevacizumab vs. Gefitinib Alone for EGFR Mutant Non-squamous Non-small Cell Lung Cancer. C. KITAGAWA, M. MORI, M. ICHIKI, N. SUKOH, A. KADA, A.M. SAITO, Y. ICHINOSE (<i>Nagoya; Toyonaka; Fukuoka; Sapporo, Japan</i>)	477
Breast Cancer in Lean Postmenopausal Women Might Have Specific Pathological Features. T. UOMORI, Y. HORIMOTO, A. ARAKAWA, K. IIJIMA, M. SAITO (<i>Tokyo, Japan</i>)	483
Cadaveric Study on Retrograde Calcaneotibial Fixation of Unstable Ankle Fractures. E.M. LOSCHAN, P. O'LOUGHLIN, C. KRETTEK, R. GAULKE (<i>Hannover, Germany; Cork, Ireland</i>)	489
Skin Extension by Multiple Incisions (SEMI). R. GAULKE (<i>Hannover, Germany</i>)	495
Post-esophagectomy Adjuvant Chemotherapy Benefits Esophageal Cancer Patients. M. SOHDA, H. SAITO, K. KURIYAMA, T. YOSHIDA, Y. KUMAKURA, H. HONJYO, K. HARA, D. OZAWA, S. SUZUKI, N. TANAKA, M. SAKAI, T. MIYAZAKI, M. FUKUCHI, H. KUWANO (<i>Maebashi, Japan</i>)	501
Analysis of Pleiotropic Effects of Nivolumab in Pretreated Advanced or Recurrent Non-small Cell Lung Cancer Cases. Y. AKANO, K. KURIBAYASHI, N. FUNAGUCHI, Y. KODA, E. FUJIMOTO, K. MIKAMI, T. MINAMI, R. TAKAHASHI, T. YOKOI, T. KIJIMA (<i>Hyogo; Gifu, Japan</i>)	507
Successful Implantation and Live Birth Following Autologous Platelet-rich Plasma Treatment for a Patient With Recurrent Implantation Failure and Chronic Endometritis. K. SFAKIANOUDIS, M. SIMOPOULOU, N. NITSOS, L. LAZAROS, A. RAPANI, A. PANTOU, M. KOUTSILIERIS, Y. NIKAS, K. PANTOS (<i>Athens, Greece</i>)	515
The Impact of Low Muscle Mass in Patients Undergoing Emergency Surgery for Colonic Perforation – A Single-center Experience. H. IMAMURA, M. HARAGUCHI, S. MINAMI, Y. ISAGAWA, M. MORITA, M. HIRABARU, D. KAWAHARA, H. TOKAI, K. NODA, K. INOUE, S. EGUCHI (<i>Nagasaki, Japan</i>)	523

Carbon Ion Radiotherapy in the Management of Unusual Liposarcomas: A Case Report. V. VITOLO, A. BARCELLINI, P. FOSSATI, M.R. FIORE, B. VISCHIONI, A. IANNALFI, A. FACOETTI, M. BONORA, S. RONCHI, E. D'IPPOLITO, R. PETRUCCI, G. VISELNER, L. PREDA, M. CIOCCHA, F. VALVO, R. ORECCHIA (<i>Pavia; Milan, Italy</i>)	529
Clinical and Radiological Mid-to-Long-term Outcomes Following Ankle Arthrolysis. F.-I. ROHLFING, U. WIEBKING, P.F. O'LOUGHLIN, C. KRETTEK, R. GAULKE (<i>Hannover, Germany; Cork, Ireland</i>).....	535
A Cross-sectional Survey of the Clinical Manifestations and Underlying Illness of Cough. T. OTOSHI, T. NAGANO, Y. FUNADA, K. TAKENAKA, H. NAKATA, H. OHNISHI, T. NISHIUMA, T. NAKAJIMA, T. KAGESHITA, T. TSUCHIYA, M. YAMAMOTO, K. KOBAYASHI, Y. NISHIMURA (<i>Kobe; Takatsuki; Akashi, Japan</i>)	543
Primary Mediastinal HER2-positive Apocrine Carcinoma in Mature Teratoma Treated With Anti-HER2 Therapy and Chemoradiation. K. SUGIYAMA, A. IWAKOSHI, M. SATOH, K. SHIRAISSI, K. NOZAWA, Y. KOGURE, C. KITAGAWA, S. MORITANI, E. KATO, H. SAKA (<i>Nagoya; Nagakute; Otsu, Japan</i>)	551
ACE Gene Variant Causing High Blood Pressure May Be Associated With Medication-related Jaw Osteonecrosis. C. YAPIJAKIS, V. PAPAKOSTA, S. VASSILIOU (<i>Athens, Greece</i>).....	559
Severe Encephalopathy, Lactic Acidosis and Hyperammonaemia With FOLFIRI Plus Aflibercept After Two-stage Hepatectomy: A Case Report. Y. HARA, Y. MIYAMOTO, Y. HIYOSHI, M. IWATSUKI, Y. BABA, N. YOSHIDA, H. BABA (<i>Kumamoto, Japan</i>)	563
Infrared and Raman Spectroscopic Studies of Molecular Disorders in Skin Cancer. J. ANASTASSOPOULOU, M. KYRIAKIDOU, E. MALESIOU, M. RALLIS, T. THEOPHANIDES (<i>Athens, Greece</i>)	567
The Association Between Sleep Disorders and the Risk of Colorectal Cancer in Patients: A Population-based Nested Case–Control Study. C.-L. LIN, T.-C. LIU, Y.-N. WANG, C.-H. CHUNG, W.-C. CHIEN (<i>Taoyuan; Taipei, Taiwan, ROC; Oxford, UK</i>)	573
Endothelial Microparticles and Vascular Endothelial Growth Factor in Patients With Head and Neck Cancer Undergoing Radiotherapy or Radiochemotherapy. E. SIERKO, M. SOBIERSKA, E. ZABROCKA, J. KRUSZEWSKA, M. MYŚLIWIEC, A. LIPSKA, P. RADZIWON, M.Z. WOJTUKIEWICZ (<i>Bialystok, Poland; Stony Brook, NY, USA</i>)	581
Postoperative Level of C-Reactive Protein Is a Prognosticator After Esophageal Cancer Surgery With Perioperative Steroid Therapy and Enhanced Recovery After Surgery Care. K. KANO, T. AOYAMA, Y. MAEZAWA, T. HAYASHI, T. YAMADA, H. TAMAGAWA, T. SATO, H. CHO, T. YOSHIKAWA, Y. RINO, M. MASUDA, T. OSHIMA, T. OGATA (<i>Kanagawa, Japan</i>)	587
Comparison of PNA Clamping-assisted Fluorescence Melting Curve Analysis and PNA Clamping in Detecting EGFR Mutations in Matched Tumor Tissue, Cell Block, Pleural Effusion and Blood of Lung Cancer Patients With Malignant Pleural Effusion. S.H. JEON, H.W. KIM, B.N. KIM, N. KANG, C.D. YEO, C.K. PARK, Y.K. KIM, Y.H. LEE, T.-J. KIM, K.Y. LEE, S.H. LEE, J.Y. PARK, M.S. PARK, H.W. YIM, S.J. KIM (<i>Seoul, Republic of Korea; Tampa, FL, USA</i>)	595
Radiation-induced Oral Mucositis in Brazilian Patients: Prevalence and Associated Factors. I.F. PEREIRA, R.T. FIRMINO, H.C. MEIRA, B.C. DO EGITO VASCONCELOS, V.R.A. DE SOUZA NORONHA, V.R. SANTOS (<i>Camaragibe; Belo Horizonte, Brazil</i>)	605

Combination of Genetic Aberration With International Staging System Classification for Stratification of Asian Multiple Myeloma Patients Undergoing Autologous Stem Cell Transplantation. J.M. BYUN, D. KIM, D.-Y. SHIN, I. KIM, Y. KOH, S.-S. YOON (<i>Seoul, Republic of Korea</i>)	611
Perioperative Management of Antiplatelet Therapy in Patients With History of Coronary Artery Disease Undergoing Surgery for Esophageal Cancer: A Single-center Experience. D. SCHIZAS, N.A. THEOCHARI, C.A. THEOCHARI, D.G. KOKKINIDIS, V. DOMI, E. MPAILI, A.K. JONNALAGADDA, A. KAPELOUZOU, A. BAKOPOULOS, T. LIAKAKOS (<i>Athens, Greece; Bronx, NY; Washington, DC, USA</i>)	621
Endothelial Microparticles and Blood Coagulation Activation in Head and Neck Cancer Patients Undergoing Radiotherapy or Radiochemotherapy. E. SIERKO, M. SOBIERSKA, E. ZABROCKA, M. MYŚLIWIEC, J. KRUSZEWSKA, A. LIPSKA, P. RADZIWON, M.Z. WOJTUKIEWICZ (<i>Bialystok, Poland; Stony Brook, NY, USA</i>)	627
Clinicopathological Characteristics of Well-differentiated Papillary Mesothelioma of the Peritoneum: A Single-institutional Experience of 12 Cases. M. KIM, H.-S. KIM (<i>Seoul, Republic of Korea</i>)	633
Palonosetron on Days 1 and 5 Versus Granisetron Daily (Days 1-5) in Germ Cell Tumour Therapy. Y. SHIMURA, K. IZUMI, S. ITAI, H. IWAMOTO, H. YAEGASHI, Y. SUGA, T. SHIMADA, A. MIZOKAMI, Y. SAI (<i>Kanazawa, Japan</i>).....	643
Clinical Implications of Mismatch Repair Status in Patients With High-risk Stage II Colon Cancer. D.W. BAEK, B.W. KANG, S.J. LEE, H.J. KIM, S.Y. PARK, J.S. PARK, G.S. CHOI, J.H. BAEK, J.G. KIM (<i>Daegu, Republic of Korea</i>)	649