

# in vivo

International Journal of Experimental and Clinical Pathophysiology and Drug Research

Volume 33, Number 3, May-June 2019

## Contents

### Reviews

The Role of ARID1A in Endometrial Cancer and the Molecular Pathways Associated With Pathogenesis and Cancer Progression. C. TOUMPEKI, A. LIBERIS, I. TSIRKAS, T. TSIRKA, S. KALAGASIDOU, L. INAGAMOVA, X. ANTHOULAKI, G. TSATSARIS, E.N. KONTOMANOLIS (Alexandroupolis; Thessaloniki; Ptolemaida, Greece)..... 659

Enhanced Recovery After Surgery: Is It Time to Change Our Strategy Regarding Laparoscopic Colectomy? N. GARMPI, D. DIMITROULIS, A. GARMPI, E. DIAMANTIS, E. SPARTALIS, D. SCHIZAS, A. ANGELOU, G.-A. MARGONIS, P. FARMAKI, E.A. ANTONIOU, D. MANTAS, K. MARKATOS, K. KONTZOGLU, C. DAMASKOS (Athens, Greece; Baltimore, MD, USA) ..... 669

### Experimental Studies

Amelioration of Amyotrophic Lateral Sclerosis in SOD1<sup>G93A</sup> Mice by M<sub>2</sub> Microglia from Transplanted Marrow. M.W. EPPERLY, R. FISHER, L. RIGATTI, S. WATKINS, X. ZHANG, W. HOU, D. SHIELDS, D. FRANICOLA, H. BAYIR, H. WANG, S. THERMOZIER, A. HENDERSON, C. DONNELLY, P. WIPF, J.S. GREENBERGER (Pittsburgh, PA, USA)..... 675

The Influence of an Ultrasonic Cleaning Protocol for CAD/CAM Abutment Surfaces on Cell Viability and Inflammatory Response *In Vitro*. P. GEHRKE, R. SMEETS, M. GOSAU, R.E. FRIEDRICH, E. MADANI, D. DUDDECK, C. FISCHER, F. TEBBEL, R. SADER, P. HARTJEN (Frankfurt; Hamburg; Berlin; Heddesheim, Germany) ..... 689

A Simple and Easily Reproducible Model of Reversible Obstructive Jaundice in Rats. S. HIRATANI, R. MORI, Y. OTA, R. MATSUYAMA, T. KUMAMOTO, Y. NAGASHIMA, D. MORIOKA, I. ENDO (Yokohama, Japan)..... 699

Contents continued on the back cover

Inhibitory Effect of Olive Leaf Extract on Obesity in High-fat Diet-induced Mice. Y.-C. JUNG, H.W. KIM, B.K. MIN, J.Y. CHO, H.J. SON, J.Y. LEE, J.-Y. KIM, S.-B. KWON, Q. LI, H.-W. LEE ( <i>Seongnam; Seoul, Republic of Korea</i> ) .....	707
Pedicle Periosteum as a Barrier for Guided Bone Regeneration in the Rabbit Frontal Bone. A. HASUIKE, H. UJIIIE, M. SENOO, M. FURUHATA, M. KISHIDA, H. AKUTAGAWA, S. SATO ( <i>Tokyo, Japan</i> ) .....	717
The Influence of Haemostatic Dressing Prototypes for the Emergency Services on the Histopathological Parameters of Porcine Muscle. P. HOLAK, Z. ADAMIAK, I. BABINSKA, M. JALYNSKI, P. JASTRZEBSKI, L. GRABARCZYK, M. BRZEZINSKI, J. BORYS, A. TOBOLSKA, J. GLODEK ( <i>Olsztyn; Gdańsk; Białystok, Poland</i> ) .....	723
DNA Adduct Assessment During Antihormonal Treatment of Perianal Gland Tumors With Tamoxifen in Male Dogs. A. BRODZKI, M.R. TATARA, P. BRODZKI, I. BALICKI ( <i>Lublin, Poland</i> ).....	731
DAB2IP Expression in Abdominal Aortic Aneurysm: EZH2 and mir-363-3p as Potential Mediators. E. LEGAKI, C. KLONARIS, D. ATHANASIADIS, N. PATELIS, A. SIOZIOU, T. LIAKAKOS, M. GAZOULI ( <i>Athens, Greece</i> ) .....	737
Mast Cells as an Indicator and Prognostic Marker in Molecular Subtypes of Breast Cancer. E. CARPENCO, R.A. CEAUȘU, A.M. CIMPEAN, P.N. GAJE, L. ȘAPTEFRAȚI, V. FULGA, V. DAVID, M. RAICA ( <i>Chișinău, Republic of Moldova; Timișoara, Romania</i> ).....	743
Protective Role of Peroxiredoxin I in Heat-Killed <i>Staphylococcus Aureus</i> -infected Mice. H.-N. SUN, Y. LIU, J.-N. WANG, C. WANG, R. LIU, L.-Z. KONG, X. ZHEN, N. CHANDIMALI, Y.-D. CUI, S.-U. KIM, D.-S. LEE, D.-Y. YU, J.-S. KIM, D.K. JEONG, T. KWON, Y.-H. HAN ( <i>Daqing, PR China; Jeju; Chungcheongbuk-do; Daegu; Daejeon; Jeonbuk, Republic of Korea</i> ).....	749
Production and Characterization of Porous Fibroin Scaffolds for Regenerative Medical Application. A. KOPP, R. SMEETS, M. GOSAU, R.E. FRIEDRICH, S. FUEST, M. BEHBAHANI, M. BARBECK, R. RUTKOWSKI, S. BURG, L. KLUWE, A. HENNINGSSEN ( <i>Aachen; Hamburg; Jülich, Germany</i> ) .....	757
Efficacy of Ozone and Selenium Therapy for Alcoholic Liver Injury: An Experimental Model. Y. ADALI, H.A. EROĞLU, M. MAKAV, G.F. GUVENDI ( <i>Hanakkale; Kars; Rize, Turkey</i> ).....	763
Co-localization of Coagulation Factor X and its Inhibitory System, PZ/ZPI, in Human Endometrial Cancer Tissue. E. SIERKO, E. ZABROCKA, K. OSTROWSKA-CICHOCKA, P. TOKAJUK, L. ZIMNOCH, M.Z. WOJTUKIEWICZ ( <i>Białystok, Poland; Stony Brook, NY, USA</i> ).....	771
shRNA-WT1 Potentiates Anticancer Effects of Gemcitabine and Cisplatin Against B16F10 Lung Metastases <i>In Vitro</i> and <i>In Vivo</i> . P. ZAPATA-BENAVIDES, F.G. THOMPSON-ARMENDARIZ, M. ARELLANO-RODRÍGUEZ, M.A. FRANCO-MOLINA, E. MENDOZA-GAMBOA, S. SAAVEDRA-ALONSO, J.L. ZACARIAS-HERNÁNDEZ, L.M. TREJO-AVILA, C. RODRÍGUEZ-PADILLA ( <i>San Nicolas de los Garza, Mexico</i> ) .....	777
Characteristics of Coronary Artery Disease Patients Who Have a Polymorphism in the Cholesterol Ester Transfer Protein ( <i>CETP</i> ) Gene. G.D. ARIKAN, S. İSBİR, S.G. YILMAZ, T. İSBİR ( <i>Istanbul, Turkey</i> ) ...	787
CCL21 Induces mTOR-dependent MALAT1 Expression, Leading to Cell Migration in Cutaneous T-Cell Lymphoma. C.-H. HONG, S.-H. LIN, C.-H. LEE ( <i>Kaohsiung; Taipei, Taiwan, ROC</i> ).....	793

Fistein Suppresses Human Osteosarcoma U-2 OS Cell Migration and Invasion via Affecting FAK, uPA and NF-κB Signaling Pathway <i>In Vitro</i> . J.-K. CHEN, S.-F. PENG, K.C. LAI, H.-C. LIU, Y.-P. HUANG, C.-C. LIN, A.-C. HUANG, F.-S. CHUEH, J.-G. CHUNG ( <i>Changhua; Taichung; Tainan; Yunlin; Yilan, Taiwan, ROC</i> ).....	801
The Evaluation of Glutathione Reductase and Malondialdehyde Levels in Patients With Lumbar Disc Degeneration Disease. S.D. BAKIREZER, C.K. YALTIRIK, A.H. KAYA, S.G. YILMAZ, S. OZDOGAN, D. BILLUR, T. ISBIR ( <i>Istanbul, Turkey</i> ) .....	811
Combined EGFR/ALK Expression Analysis in Laryngeal Squamous Cell Carcinoma. A. POLITI, E. TSIAMBAS, N.S. MASTRONIKOLIS, D. PESCHOS, I. ASPROUDIS, E. KYRODIMOS, I.E. ARMATA, A. CHRYSOVERGIS, A. ASIMAKOPOULOS, V.S. PAPANIKOLAOU, A. BATISTATOU, V. RAGOS ( <i>Ioannina; Athens; Patras, Greece; Cambridge, UK; Luxembourg, Luxembourg</i> ).....	815
Naloxone Counteracts the Promoting Tumor Growth Effects Induced by Morphine in an Animal Model of Triple-negative Breast Cancer. S. BIMONTE, A. BARBIERI, M. CASCELLA, D. REA, G. PALMA, A. LUCIANO, C.A. FORTE, A. CUOMO, C. ARRA ( <i>Naples, Italy</i> ) .....	821
<i>Clinical Studies</i>	
Reconstruction of Spinal Soft Tissue Defects With Perforator Flaps From the Paraspinal Region. P.G. DI SUMMA, R.D. LARGO, T. ISMAIL, M. TREMP, A. LUNGER, R. WETTSTEIN, S.M. KRÄHENBÜHL, S. GIORDANO, D.J. SCHAEFER, S. SCHAEAREN, D.F. KALBERMATTEN ( <i>Lausanne; Basel, Switzerland; Turku, Finland</i> ) .....	827
A 30-Year Single-center Experience of Cementless Total Hip Arthroplasty With Spongy Metal Structured Implants: A Follow-up of a Previous Report. F. LENZE, C. SCHEELE, P. KÖSTERS, L. GERDESMEYER, I. LASIC, F. POHLIG, H. MÜHLHOFER, U. LENZE, R. VON EISENHART-ROTHER, N. HARRASSER ( <i>Munich; Kiel, Germany</i> ) .....	833
Three-dimensional Assessment of the Breast: Validation of a Novel, Simple and Inexpensive Scanning Process. C.M. ORANGES, S. MADDURI, P. BRANTNER, B. MSALLEM, S. GIORDANO, B. BENITEZ, D.F. KALBERMATTEN, D.J. SCHAEFER, F.M. THIERINGER ( <i>Basel; Allschwil, Switzerland; Turku, Finland</i> ).....	839
Carboplatin and Docetaxel in Patients With Salivary Gland Carcinoma: A Retrospective Study. T. OKADA, T. SAOTOME, T. NAGAO, T. MASUBUCHI, C. FUSHIMI, T. MATSUKI, H. TAKAHASHI, K. MIURA, K. TSUKAHARA, Y. TADA ( <i>Tokyo; Chiba, Japan</i> ).....	843
Perioperative Management in Patients With Undergoing Direct Oral Anticoagulant Therapy in Oral Surgery – A Multicentric Questionnaire Survey. C. PRECHT, Y. DEMIREL, A.T. ASSAF, H.O. PINNSCHMIDT, C. KNIPFER, H. HANKEN, R.E. FRIEDRICH, J. WIKNER ( <i>Hamburg, Germany</i> ).....	855
Bevacizumab Efficacy and Recurrence Pattern of Persistent and Metastatic Cervical Cancer. N. LEE, S.I. KIM, M. LEE, H.S. KIM, J.W. KIM, N.H. PARK, Y.S. SONG ( <i>Seoul, Republic of Korea</i> ) .....	863
Efficacy and Safety of Imatinib in Paediatric CML – A Single Centre Study. C. SMEDING, A. SZYDŁO, K. PIELUSZCZAK, K. GRZESZKIEWICZ, K. PAWELEC ( <i>Warsaw, Poland</i> ).....	869

Effectiveness of Synthetic Polymer-coated Peripherally Inserted Central Catheter in Patients With Advanced Cancer. Y. TAKEZAWA, K. IZUMI, T. KAMIJIMA, K. MACHIOKA, T. SHIMA, H. IWAMOTO, T. NOHARA, K. SHIGEHARA, Y. KADONO, C. SETO, A. MIZOKAMI ( <i>Toyama; Kanazawa, Japan</i> ) .....	877
Effectiveness of a 12-month Exercise Intervention on Physical Activity and Quality of Life of Breast Cancer Survivors; Five-year Results of the BREX-study. H. PENTTINEN, M. UTRIAINEN, P.-L. KELLOKUMPU-LEHTINEN, J. RAITANEN, H. SIEVÄNEN, R. NIKANDER, C. BLOMQVIST, R. HUOVINEN, L. VEHMANEN, T. SAARTO ( <i>Helsinki; Tampere; Turku, Finland</i> ) .....	881
Prognostic Value of Serum Tumor Markers in Patients With Stage III NSCLC Treated With Chemoradiotherapy. T. TOKITO, K. AZUMA, K. YAMADA, Y. NAITO, N. MATSUO, H. ISHII, H. NATORI, T. KINOSHITA, T. HOSHINO ( <i>Kurume, Japan</i> ) .....	889
Early Second Round Targeted Biopsy of PI-RADS Score 3 or 4 in 256 Men With Persistent Suspicion of Prostate Cancer. P. PEPE, A. GARUFI, G.D. PRIOLO, M. PENNISI, F. FRAGGETTA ( <i>Catania, Italy</i> ) .....	897
Does Decision-making in End-of-life Care Differ Between Graduating Medical Students and Experienced Physicians? A. ALMINOJA, R.P. PIILI, H. HINKKA, R. METSÄNOJA, O. HIRVONEN, K. TYYNELÄ-KORHONEN, J. KALEVA-KEROLA, T. SAARTO, P.-L.I. KELLOKUMPU-LEHTINEN, J.T. LEHTO ( <i>Tampere; Kangasala; Turku; Kuopio; Kemi; Helsinki, Finland</i> ) .....	903
The Choice of Drainage Device in Complicated Glaucomas: Comparing Ahmed and Baerveldt Implants. M.M. MOSCHOS, E. NITODA, N. GOULIOPOULOS, C. DAMASKOS, K. LAIOS, E. BAGKLI, N. GARMPIIS, G. KITSOS ( <i>Athens; Ioannina, Greece</i> ) .....	911
Impact of <i>MDM2</i> , <i>TP53</i> and <i>P14ARF</i> Polymorphisms on Endometrial Cancer Risk and Onset. W. WUJCICKA, A. ZAJĄC, G. STACHOWIAK ( <i>Lodz, Poland</i> ) .....	917
Definitive Radiotherapy for Older Patients Aged $\geq 75$ Years With Localized Esophageal Cancer. G. SUZUKI, H. YAMAZAKI, N. AIBE, K. MASUI, T. KIMOTO, D. SHIMIZU, T. NISHIMURA, A. NAKASHIMA, K. MACHIDA, K. KAWABATA, Y. OTA, H. FUJIWARA, T. ISHIKAWA, K. YAMADA ( <i>Kyoto, Japan</i> ) .....	925
A Phase I Study of Napabucasin Plus Paclitaxel for Japanese Patients With Advanced/Recurrent Gastric Cancer. K. SHITARA, Y. YODO, S. IINO ( <i>Chiba; Osaka, Japan</i> ) .....	933
Invasion of Adjacent Lumbar Vertebral Body from Renal Pelvis Carcinoma: Associated With Bone Metastasis but Easily Overlooked on Initial CT Scan. T.-Y. LIAO, C.-C. LIAW, K.-H. TSUI, Y.-H. JUAN ( <i>Taoyuan, Taiwan, ROC</i> ) .....	939
Comparison of PANAMutyper and PNAClamp for Detecting KRAS Mutations from Patients With Malignant Pleural Effusion. S.Y. CHOI, H.W. KIM, S.H. JEON, B.N. KIM, N. KANG, C.D. YEO, C.K. PARK, Y.K. KIM, Y.H. LEE, 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> ) .....	945
Combined Chemoradiotherapy-induced Weight Loss Decreases Survival in Locally Advanced Non-small Cell Lung Cancer Patients. Y.-J. KIM, C. SONG, K.-Y. EOM, I.A. KIM, J.-S. KIM ( <i>Seongnam-si; Seoul, Republic of Korea</i> ) .....	955

Contents continued

<i>TCF4</i> and <i>COL8A2</i> Gene Polymorphism Screening in a Greek Population of Late-onset Fuchs Endothelial Corneal Dystrophy. M.M. MOSCHOS, A. DIAMANTOPOULOU, N. GOULIOPOULOS, K. DROUTSAS, E. BAGLI, K. CHATZISTEFANOU, G. KITSOS, C. KROUPIS ( <i>Athens; Ioannina, Greece</i> ).....	963
Ultrasonography for Detecting Adhesions: Aspirin Continuation for Lung Resection Patients. M. YASUKAWA, R. TAJI, N. MARUGAMI, T. KAWAGUCHI, N. KAWAI, N. SAWABATA, T. TOJO, J. TAKAHAMA, N. HAMAZAKI, T. HIRAI, S. TANIGUCHI ( <i>Nara, Japan</i> ).....	973
Malnutrition and Survival – Bioimpedance Data in Head Neck Cancer Patients. J. BÜNTZEL, O. MICKE, K. KISTERS, J. BÜNTZEL, R. MÜCKE ( <i>Göttingen; Bielefeld; Nordhausen, Germany</i> ).....	979