

TOP 1

1. ALEXANDROV, A. V., M. KOHRMANN, L. SOINNE, G. TSIVGOULIS, et al. Safety and efficacy of sonothrombolysis for acute ischaemic stroke: a multicentre, double-blind, phase 3, randomised controlled trial. *Lancet Neurology*, Apr 2019a, 18(4), 338-347.

TOP 5

2. HEALEY, J. S., D. J. GLADSTONE, B. SWAMINATHAN, J. ECKSTEIN, et al. Recurrent Stroke With Rivaroxaban Compared With Aspirin According to Predictors of Atrial Fibrillation Secondary Analysis of the NAVIGATE ESUS Randomized Clinical Trial. *Jama Neurology*, Jul 2019, 76(7), 764-773.
3. CHMELAR, J., J. MRAZEK, M. HERMANNOVA, L. KUBALA, et al. Biodegradable free-standing films from lauroyl derivatives of hyaluronan. *Carbohydrate Polymers*, Nov 2019, 224, 7.
4. MIKULIK, R., A. M. PENN, S. B. COUTTS, S. BAL, et al. Rate and Prognosis of Brain Ischemia in Patients With Lower-Risk Transient or Persistent Minor Neurologic Events. *Jama Neurology*, Dec 2019a, 76(12), 1439-1445.
5. JACKSON, R., A. AL-HUSSAINI, S. JOSEPH, G. VAN SOEST, et al. Spontaneous Coronary Artery Dissection Pathophysiological Insights From Optical Coherence Tomography. *Jacc-Cardiovascular Imaging*, Dec 2019, 12(12), 2475-2488.
6. KOKKONEN, P., D. BEDNAR, G. PINTO, Z. PROKOP, et al. Engineering enzyme access tunnels. *Biotechnology Advances*, Nov 2019, 37(6), 13.
7. MARK, D. B., K. J. ANSTROM, S. B. SHENG, J. P. PICCINI, et al. Effect of Catheter Ablation vs Medical Therapy on Quality of Life Among Patients With Atrial Fibrillation The CABANA Randomized Clinical Trial. *Jama-Journal of the American Medical Association*, Apr 2019, 321(13), 1275-1285.
8. OLIVER-DE LA CRUZ, J., G. NARDONE, J. VRBSKY, A. POMPEIANO, et al. Substrate mechanics controls adipogenesis through YAP phosphorylation by dictating cell spreading. *Biomaterials*, Jun 2019, 205, 64-80.
9. OPPEDAL, K., D. FERREIRA, L. CAVALLIN, A. W. LEMSTRA, et al. A signature pattern of cortical atrophy in dementia with Lewy bodies: A study on 333 patients from the European DLB consortium. *Alzheimers & Dementia*, Mar 2019, 15(3), 400-409.
10. SEDLAKOVA, V., M. KLOUCKOVA, Z. GARLIKHOVA, K. VASICKOVA, et al. Options for modeling the respiratory system: inserts, scaffolds and microfluidic chips. *Drug Discovery Today*, Apr 2019, 24(4), 971-982.
11. SIMEK, M., M. HERMANNOVA, D. SMEJKALOVA, T. FOGLOVA, et al. LC-MS/MS study of in vivo fate of hyaluronan polymeric micelles carrying doxorubicin. *Carbohydrate Polymers*, Apr 2019, 209, 181-189.
12. STOURAC, J., O. VAVRA, P. KOKKONEN, J. FILIPOVIC, et al. Caver Web 1.0: identification of tunnels and channels in proteins and analysis of ligand transport. *Nucleic Acids Research*, Jul 2019, 47(W1), W414-W422.

TOP 10

13. BEIER, A., J. DAMBORSKY AND Z. PROKOP Transhalogenation Catalysed by Haloalkane Dehalogenases Engineered to Stop Natural Pathway at Intermediate. *Advanced Synthesis & Catalysis*, Jun 2019, 361(11), 2438-2442.
14. BOUDNY, M., J. ZEMANOVA, P. KHIRSARIYA, M. BORSKY, et al. Novel CHK1 inhibitor MU380 exhibits significant single-agent activity in TP53-mutated chronic lymphocytic leukemia cells. *Haematologica*, Dec 2019, 104(12), 2443-2455.
15. BURYSKA, T., M. VASINA, F. GIELEN, P. VANACEK, et al. Controlled Oil/Water Partitioning of Hydrophobic Substrates Extending the Bioanalytical Applications of Droplet-Based Microfluidics. *Analytical Chemistry*, Aug 2019, 91(15), 10008-10015.
16. CALUORI, G., J. PRIBYL, M. PESL, S. JELINKOVA, et al. Non-invasive electromechanical cell-based biosensors for improved investigation of 3D cardiac models. *Biosensors & Bioelectronics*, Jan 2019b, 124, 129-135.
17. COORAY, C., M. MAZYA, R. MIKULIK, L. JURAK, et al. Safety and Outcome of Intravenous Thrombolysis in Stroke Patients on Prophylactic Doses of Low Molecular Weight Heparins at Stroke Onset. *Stroke*, May 2019, 50(5), 1149-1155.
18. GUNDUZ, C., O. K. BASOGLU, J. HEDNER, M. R. BONSIGNORE, et al. Hyperlipidaemia prevalence and cholesterol control in obstructive sleep apnoea: Data from the European sleep apnea database (ESADA). *Journal of Internal Medicine*, Dec 2019, 286(6), 676-688.
19. CHALOUPKOVA, R., V. LISKOVA, M. TOUL, K. MARKOVA, et al. Light-Emitting Dehalogenases: Reconstruction of Multifunctional Biocatalysts. *Acs Catalysis*, Jun 2019, 9(6), 4810-4823.
20. KLIMES, P., J. CIMBALNIK, M. BRAZDIL, J. HALL, et al. NREM sleep is the state of vigilance that best identifies the epileptogenic zone in the interictal electroencephalogram. *Epilepsia*, Dec 2019, 60(12), 2404-2415.
21. MACHALKOVA, M., B. PAVLATOVSKA, J. MICHALEK, A. PRUSKA, et al. Drug Penetration Analysis in 3D Cell Cultures Using Fiducial-Based Semiautomatic Coregistration of MALDI MSI and Immunofluorescence Images. *Analytical Chemistry*, Nov 2019, 91(21), 13475-13484.
22. MENDONCA, F., S. S. MOSTAFA, A. G. RAVELO-GARCIA, F. MORGADO-DIAS, et al. A Review of Obstructive Sleep Apnea Detection Approaches. *Ieee Journal of Biomedical and Health Informatics*, Mar 2019, 23(2), 825-837.
23. MUSIL, M., H. KONEGGER, J. HONG, D. BEDNAR, et al. Computational Design of Stable and Soluble Biocatalysts. *Acs Catalysis*, Feb 2019, 9(2), 1033-1054.
24. NEMEC, V., M. HYLSOVA, L. MAIER, J. FLEGEL, et al. Furo 3,2-b pyridine: A Privileged Scaffold for Highly Selective Kinase Inhibitors and Effective Modulators of the Hedgehog Pathway. *Angewandte Chemie-International Edition*, Jan 2019, 58(4), 1062-1066.
25. PATAKA, A., M. R. BONSIGNORE, S. RYAN, R. L. RIHA, et al. Cancer prevalence is increased in females with sleep apnoea: data from the ESADA study. *European Respiratory Journal*, Jun 2019, 53(6), 5.
26. SKODA, J., K. BORANKOVA, P. J. JANSSON, M. L. H. HUANG, et al. Pharmacological targeting of mitochondria in cancer stem cells: An ancient organelle at the crossroad of novel anti-cancer therapies. *Pharmacological Research*, Jan 2019, 139, 298-313.

27. TESAR, A., R. MATEJ, J. KUKAL, S. JOHANIDESOVA, et al. Clinical Variability in P102L Gerstmann-Straussler-Scheinker Syndrome. *Annals of Neurology*, Nov 2019, 86(5), 643-652.
28. VAVRA, O., J. FILIPOVIC, J. PLHAK, D. BEDNAR, et al. CaverDock: a molecular docking-based tool to analyse ligand transport through protein tunnels and channels. *Bioinformatics*, Dec 2019, 35(23), 4986-4993.

Q1

29. ALEXANDROV, A. V., G. TSIVGOULIS, M. KOHRMANN, A. H. KATSANOS, et al. Endovascular equipoise shift in a phase III randomized clinical trial of sonothrombolysis for acute ischemic stroke. *Therapeutic Advances in Neurological Disorders*, Jul 2019b, 12, 12.
30. ANDEL, R., A. L. DAVILA-ROMAN, C. GROTZ, B. J. SMALL, et al. Complexity of Work and Incident Cognitive Impairment in Puerto Rican Older Adults. *Journals of Gerontology Series B-Psychological Sciences and Social Sciences*, Jul 2019, 74(5), 785-795.
31. ANGELUCCI, F., K. CECHOVA, M. VALIS, K. KUCA, et al. MicroRNAs in Alzheimer's Disease: Diagnostic Markers or Therapeutic Agents? *Frontiers in Pharmacology*, Jun 2019b, 10, 9.
32. BERESHCHENKO, O., O. LO RE, F. NIKULENKO, S. FLAMINI, et al. Deficiency and haploinsufficiency of histone macroH2A1.1 in mice recapitulate hematopoietic defects of human myelodysplastic syndrome. *Clinical Epigenetics*, Aug 2019, 11(1), 14.
33. BOSAKOVA, M. K., A. NITA, T. GREGOR, M. VARECHA, et al. Fibroblast growth factor receptor influences primary cilium length through an interaction with intestinal cell kinase. *Proceedings of the National Academy of Sciences of the United States of America*, Mar 2019, 116(10), 4316-4325.
34. DEULOFEU, M., L. KOLAROVA, V. SALVADO, E. M. PENA-MENDEZ, et al. Rapid discrimination of multiple myeloma patients by artificial neural networks coupled with mass spectrometry of peripheral blood plasma. *Scientific Reports*, May 2019, 9, 7.
35. FARRA, R., M. MARUNA, F. PERRONE, M. GRASSI, et al. Strategies for Delivery of siRNAs to Ovarian Cancer Cells. *Pharmaceutics*, Oct 2019, 11(10), 31.
36. GIALLONGO, S., O. LO RE AND M. VINCIGUERRA Macro Histone Variants: Emerging Rheostats of Gastrointestinal Cancers. *Cancers*, May 2019, 11(5), 16.
37. GOMES, S., L. RAIMUNDO, J. SOARES, J. B. LOUREIRO, et al. New inhibitor of the TAp73 interaction with MDM2 and mutant p53 with promising antitumor activity against neuroblastoma. *Cancer Letters*, 2019b, 446, 90-102.
38. HANDING, E. P., B. J. SMALL, R. ANDEL, C. L. MCEVOY, et al. Can Nutrition or Inflammation Moderate the Age-Cognition Association Among Older Adults? *Journals of Gerontology Series B-Psychological Sciences and Social Sciences*, Feb 2019, 74(2), 193-201.
39. JEZ, J., G. CALUORI, T. JADCZYK, F. LEHAR, et al. Remotely Navigated Ablations in Ventricles Myocardium Result in Acute Lesion Size Comparable to Force-Sensing Manual Navigation. *Circulation-Arrhythmia and Electrophysiology*, Oct 2019, 12(10), 3.
40. JINDAL, G., K. SLANSKA, V. KOLEV, J. DAMBORSKY, et al. Exploring the challenges of computational enzyme design by rebuilding the active site of a dehalogenase. *Proceedings of the National Academy of Sciences of the United States of America*, Jan 2019, 116(2), 389-394.
41. KOHUTOVA, A., J. RASKA, M. KRUTA, M. SENEKLOVA, et al. Ligase 3-mediated end-joining maintains genome stability of human embryonic stem cells. *Faseb Journal*, Jun 2019, 33(6), 6778-6788.
42. KOLEDOVA, Z., J. SUMBAL, A. RABATA, G. DE LA BOURDONNAYE, et al. Fibroblast Growth Factor 2 Protein Stability Provides Decreased Dependence on Heparin for Induction of FGFR Signaling and Alters ERK Signaling Dynamics. *Frontiers in Cell and Developmental Biology*, Dec 2019, 7, 15.

43. KOSZTYU, P., I. SLANINOVA, B. VALCIKOVA, A. VERLANDE, et al. A Single Conserved Amino Acid Residue as a Critical Context-Specific Determinant of the Differential Ability of Mdm2 and MdmX RING Domains to Dimerize. *Frontiers in Physiology*, Apr 2019, 10, 14.
44. KOVACOVICOVA, K. AND M. VINCIGUERRA Isolation of senescent cells by iodixanol (OptiPrep) density gradient-based separation. *Cell Proliferation*, Nov 2019, 52(6), 9.
45. KRELL-ROESCH, J., M. VASSILAKI, M. M. MIELKE, W. K. KREMERS, et al. Cortical beta-amyloid burden, neuropsychiatric symptoms, and cognitive status: the Mayo Clinic Study of Aging. *Translational Psychiatry*, Mar 2019, 9, 8.
46. KUCIREK, M., A. J. BAGHERPOOR, J. JAROS, A. HAMPL, et al. HMGB2 is a negative regulator of telomerase activity in human embryonic stem and progenitor cells. *Faseb Journal*, Dec 2019, 33(12), 14307-14324.
47. LO RE, O., A. MAUGERI, J. HRUSKOVA, J. JAKUBIK, et al. Obesity-induced nucleosome release predicts poor cardio-metabolic health. *Clinical Epigenetics*, Dec 2019, 12(1), 14.
48. MANAVALAN, A. P. C., K. PILAROVA, M. KLUGE, K. BARTHOLOMEEUSEN, et al. CDK12 controls G1/S progression by regulating RNAPII processivity at core DNA replication genes. *Embo Reports*, Sep 2019, 20(9), 29.
49. MARRELLA, A., A. DONDERO, M. AIELLO, B. CASU, et al. Cell-Laden Hydrogel as a Clinical-Relevant 3D Model for Analyzing Neuroblastoma Growth, Immunophenotype, and Susceptibility to Therapies. *Frontiers in Immunology*, Aug 2019, 10, 15.
50. MAUGERI, A., J. HRUSKOVA, J. JAKUBIK, M. BARCHITTA, et al. Independent Effects of Hypertension and Obesity on Left Ventricular Mass and Geometry: Evidence from the Cardiovision 2030 Study. *Journal of Clinical Medicine*, Mar 2019a, 8(3), 11.
51. MAUGERI, A., J. HRUSKOVA, J. JAKUBIK, O. HLINOMAZ, et al. How dietary patterns affect left ventricular structure, function and remodelling: evidence from the Kardiovize Brno 2030 study. *Scientific Reports*, Dec 2019b, 9, 10.
52. MAUGERI, A., J. HRUSKOVA, J. JAKUBIK, S. KUNZOVA, et al. Dietary antioxidant intake decreases carotid intima media thickness in women but not in men: A cross-sectional assessment in the Kardiovize study. *Free Radical Biology and Medicine*, Feb 2019c, 131, 274-281.
53. MAZZOCOLI, G., L. MIELE, G. MARRONE, T. MAZZA, et al. A Role for the Biological Clock in Liver Cancer. *Cancers*, Nov 2019, 11(11), 13.
54. MICAN, J., M. TOUL, D. BEDNAR AND J. DAMBORSKY Structural Biology and Protein Engineering of Thrombolytics. *Computational and Structural Biotechnology Journal*, 2019, 17, 917-938.
55. NEJEDLY, P., V. KREMEN, V. SLADKY, J. CIMBALNIK, et al. Exploiting Graphoelements and Convolutional Neural Networks with Long Short Term Memory for Classification of the Human Electroencephalogram. *Scientific Reports*, Aug 2019b, 9, 9.
56. NEJEDLY, P., V. KREMEN, V. SLADKY, M. NASSERI, et al. Deep-learning for seizure forecasting in canines with epilepsy. *Journal of Neural Engineering*, Jun 2019c, 16(3), 10.
57. NEVOLOVA, S., E. MANASKOVA, S. MAZURENKO, J. DAMBORSKY, et al. Development of Fluorescent Assay for Monitoring of Dehalogenase Activity. *Biotechnology Journal*, Mar 2019, 14(3), 6.
58. PAOLICELLI, G., A. DE LUCA, S. S. JOSE, M. ANTONINI, et al. Using Lung Organoids to Investigate Epithelial Barrier Complexity and IL-17 Signaling During Respiratory Infection. *Frontiers in Immunology*, Feb 2019, 10, 6.

59. PEARSON, A. D. J., N. SCOBIE, K. NORGA, F. LIGAS, et al. ACCELERATE and European Medicine Agency Paediatric Strategy Forum for medicinal product development for mature B-cell malignancies in children. *European Journal of Cancer*, Mar 2019, 110, 74-85.
60. PETROKOVA, H., J. MASEK, M. KUCHAR, A. V. WUNSCHOVA, et al. Targeting Human Thrombus by Liposomes Modified with Anti-Fibrin Protein Binders. *Pharmaceutics*, Dec 2019, 11(12), 21.
61. PROCHAZKA, A., S. GULATI, S. HOLINKA AND D. SMUTEK Patch-based classification of thyroid nodules in ultrasound images using direction independent features extracted by two-threshold binary decomposition. *Computerized Medical Imaging and Graphics*, Jan 2019b, 71, 9-18.
62. RANJHA, L., M. LEVIKOVA, V. ALTMANOVA, L. KREJCI, et al. Sumoylation regulates the stability and nuclease activity of *Saccharomyces cerevisiae* Dna2. *Communications Biology*, May 2019, 2, 12.
63. SAEIDIFARD, F., J. R. MEDINA-INOJOSA, C. P. WEST, T. P. OLSON, et al. The association of resistance training with mortality: A systematic review and meta-analysis. *European Journal of Preventive Cardiology*, Oct 2019, 26(15), 1647-1665.
64. SIMECKOVA, S., Z. KAHOUNOVA, R. FEDR, J. REMSIK, et al. High Skp2 expression is associated with a mesenchymal phenotype and increased tumorigenic potential of prostate cancer cells. *Scientific Reports*, Apr 2019, 9, 10.
65. SINOVA, R., J. KUDOVA, K. NESPOROVA, S. KAREL, et al. Opioid receptors and opioid peptides in the cardiomyogenesis of mouse embryonic stem cells. *Journal of Cellular Physiology*, Aug 2019, 234(8), 13209-13219.
66. VALIS, M., D. HERMAN, N. VANOVÁ, J. MASOPUST, et al. The Concentration of Memantine in the Cerebrospinal Fluid of Alzheimer's Disease Patients and Its Consequence to Oxidative Stress Biomarkers. *Frontiers in Pharmacology*, Aug 2019, 10, 8.
67. VANOVÁ, T., J. RASKA, P. BABICA, I. SOVADINOVA, et al. Freshwater Cyanotoxin Cylindrospermopsin Has Detrimental Stage-specific Effects on Hepatic Differentiation From Human Embryonic Stem Cells. *Toxicological Sciences*, Mar 2019, 168(1), 241-251.
68. VEAUTHIER, C., J. RYCZEWSKI, S. MANSOW-MODEL, K. OTTE, et al. Contactless recording of sleep apnea and periodic leg movements by nocturnal 3-D-video and subsequent visual perceptive computing. *Scientific Reports*, Nov 2019, 9, 11.
69. VISONE, R., G. S. UGOLINI, V. VINARSKY, M. PENATI, et al. A Simple Vacuum-Based Microfluidic Technique to Establish High-Throughput Organs-On-Chip and 3D Cell Cultures at the Microscale. *Advanced Materials Technologies*, Jan 2019, 4(1), 8.
70. VOLODKO, N., T. GUTOR, O. PETRONCHAK, R. HULEY, et al. Low infiltration of tumor-associated macrophages in high c-Myb-expressing breast tumors. *Scientific Reports*, Aug 2019, 9, 9.
71. WAWRZYNIAK, R., A. Y. MPANGA, W. STRUCK-LEWICKA, M. KORDALEWSKA, et al. Untargeted Metabolomics Provides insight into the Mechanisms Underlying Resistant Hypertension. *Current Medicinal Chemistry*, 2019, 26(1), 232-243.
72. XIN, Z., Y. SUN, W. P. LI, B. LIU, et al. Characterization of white matter changes along fibers by automated fiber quantification in the early stages of Alzheimer's disease. *Neuroimage-Clinical*, 2019, 22, 16.

Q2

73. ANGELUCCI, F., K. CECHOVA, R. PRUSA AND J. HORT Amyloid beta soluble forms and plasminogen activation system in Alzheimer's disease: Consequences on extracellular maturation of brain-derived neurotrophic factor and therapeutic implications. *Cns Neuroscience & Therapeutics*, Mar 2019a, 25(3), 303-313.
74. BEDNARIK, A., M. MACHALKOVA, E. MOSKOVETS, K. COUFALIKOVA, et al. MALDI MS Imaging at Acquisition Rates Exceeding 100 Pixels per Second. *Journal of the American Society for Mass Spectrometry*, Feb 2019, 30(2), 289-298.
75. BORGmann-STAUDT, A., M. KUNSTREICH, R. SCHILLING, M. BALCEREK, et al. Fertility knowledge and associated empowerment following an educational intervention for adolescent cancer patients. *Psycho-Oncology*, Nov 2019, 28(11), 2218-2225.
76. BRAT, K., N. STASTNA, Z. MERTA, L. J. OLSON, et al. Cardiopulmonary exercise testing for identification of patients with hyperventilation syndrome. *Plos One*, Apr 2019, 14(4), 13.
77. BYSKA, J., T. TRAUTNER, S. M. MARQUES, J. DAMBORSKY, et al. Analysis of Long Molecular Dynamics Simulations Using Interactive Focus plus Context Visualization. *Computer Graphics Forum*, Jun 2019, 38(3), 441-453.
78. CADONI, E., P. VANHARA, E. VALLETTA, E. PINNA, et al. Mass spectrometric discrimination of phospholipid patterns in cisplatin-resistant and -sensitive cancer cells. *Rapid Communications in Mass Spectrometry*, Jan 2019, 33(1), 97-106.
79. CERNY, J., P. BOZIKOVA, A. BALIK, S. M. MARQUES, et al. NMDA Receptor Opening and Closing-Transitions of a Molecular Machine Revealed by Molecular Dynamics. *Biomolecules*, Oct 2019, 9(10), 17.
80. CIMBALNIK, J., P. KLIMES, V. SLADKY, P. NEJEDLY, et al. Multi-feature localization of epileptic foci from interictal, intracranial EEG. *Clinical Neurophysiology*, Oct 2019, 130(10), 1945-1953.
81. CROMBERG, L. E., T. M. M. SAEZ, M. G. OTERO, E. TOMASELLA, et al. Neuronal KIF5b deletion induces striatum-dependent locomotor impairments and defects in membrane presentation of dopamine D2 receptors. *Journal of Neurochemistry*, May 2019, 149(3), 362-380.
82. DIELTJENS, M., J. A. VERBRAECKEN, J. HEDNER, O. M. VANDERVEKEN, et al. Use of the Clinical Global Impression scale in sleep apnea patients - Results from the ESADA database. *Sleep Medicine*, Jul 2019, 59, 56-65.
83. DOBROTKOVA, V., P. CHLAPEK, M. JEZOVA, K. ADAMKOVA, et al. Prediction of neuroblastoma cell response to treatment with natural or synthetic retinoids using selected protein biomarkers. *Plos One*, Jun 2019, 14(6), 18.
84. FAKTOR, J., L. KNOPFOVA, P. LAPCIK, L. JANACOVA, et al. Proteomics Identification and Validation of Desmocollin-1 and Catechol-O-Methyltransferase as Proteins Associated with Breast Cancer Cell Migration and Metastasis. *Proteomics*, Nov 2019, 19(21-22), 11.
85. FEDOROVA, L., P. MUDRY, K. PILATOVA, I. SELINGEROVA, et al. Assessment of Immune Response Following Dendritic Cell-Based Immunotherapy in Pediatric Patients With Relapsing Sarcoma. *Frontiers in Oncology*, Nov 2019, 9, 12.
86. HALAMEK, J., P. LEINVEBER, I. VISCOR, R. SMISEK, et al. The relationship between ECG predictors of cardiac resynchronization therapy benefit. *Plos One*, May 2019, 14(5), 10.

87. HEROUT, V., M. HEROUTOVA, Z. MERTA, I. CUNDRLE, et al. Transbronchial biopsy from the upper pulmonary lobes is associated with increased risk of pneumothorax - a retrospective study. *Bmc Pulmonary Medicine*, Mar 2019, 19, 6.
88. HORT, J., M. VALIS, K. KUCA AND F. ANGELUCCI Vascular Cognitive Impairment: Information from Animal Models on the Pathogenic Mechanisms of Cognitive Deficits. *International Journal of Molecular Sciences*, May 2019, 20(10), 17.
89. HORVATH, P., P. SEBEJ, D. KOVAR, J. DAMBORSKY, et al. Fluorescent pH Indicators for Neutral to Near-Alkaline Conditions Based on 9-Iminopyronin Derivatives. *Acs Omega*, Mar 2019, 4(3), 5479-5485.
90. CHRAST, L., K. TRATSIAK, J. PLANAS-IGLESIAS, L. DANIEL, et al. Deciphering the Structural Basis of High Thermostability of Dehalogenase from Psychrophilic Bacterium *Marinobacter* sp. ELB17. *Microorganisms*, Nov 2019, 7(11), 20.
91. JELINKOVA, S., P. FOJTIK, A. KOHUTOVA, A. VILOTIC, et al. Dystrophin Deficiency Leads to Genomic Instability in Human Pluripotent Stem Cells via NO Synthase-Induced Oxidative Stress. *Cells*, Jan 2019a, 8(1), 22.
92. JELINKOVA, S., L. MARKOVA, M. PESL, I. VALASKOVA, et al. Generation of two Duchenne muscular dystrophy patient-specific induced pluripotent stem cell lines DMD02 and DMD03 (MUNLi001-A and MUNLi003-A). *Stem Cell Research*, Oct 2019b, 40, 5.
93. KAHOUNOVA, Z., E. SLABAKOVA, L. BINO, J. REMSIK, et al. Generation of human iPSCs from fetal prostate fibroblasts HPrF. *Stem Cell Research*, Mar 2019, 35, 5.
94. KLIMOVA, B., K. KUCA, M. VALIS AND J. HORT Traditional Chinese Medicine as an Effective Complementary Non-Pharmacological Approach to Mild Cognitive Impairment: A Call for Collaboration. *Journal of Alzheimers Disease*, 2019a, 68(3), 1185-1192.
95. KYR, M., K. POLASKOVA, Z. KUTTNEROVA, T. MERTA, et al. Individualization of Treatment Improves the Survival of Children With High-Risk Solid Tumors: Comparative Patient Series Analysis in a Real-Life Scenario. *Frontiers in Oncology*, Jul 2019, 9, 11.
96. MALDONADO, A. C. M., E. L. WINKLER, M. RAINERI, A. T. CORDOVA, et al. Free-Radical Formation by the Peroxidase-Like Catalytic Activity of MFe₂O₄ (M = Fe, Ni, and Mn) Nanoparticles. *Journal of Physical Chemistry C*, Aug 2019, 123(33), 20617-20627.
97. MANDAL, G., P. VANHARA AND J. HAVEL Laser ablation synthesis of carbon-phosphides from graphene/nanodiamond-phosphorus composite precursors: Laser desorption ionisation time-of-flight mass spectrometry. *Rapid Communications in Mass Spectrometry*, Mar 2019, 33(5), 520-526.
98. MARKOVA, H., T. NIKOLAI, A. F. MAZANCOVA, K. CECHOVA, et al. Differences in Subjective Cognitive Complaints Between Non-Demented Older Adults from a Memory Clinic and the Community. *Journal of Alzheimers Disease*, 2019, 70(1), 61-73.
99. MARQUES, S. M., D. BEDNAR AND J. DAMBORSKY Computational Study of Protein-Ligand Unbinding for Enzyme Engineering. *Frontiers in Chemistry*, Jan 2019, 6, 15.
100. MICHALEK, J., K. STEPKA, M. KOZUBEK, J. NAVRATILOVA, et al. Quantitative Assessment of Anti-Cancer Drug Efficacy From Coregistered Mass Spectrometry and Fluorescence Microscopy Images of Multicellular Tumor Spheroids. *Microscopy and Microanalysis*, Dec 2019, 25(6), 1311-1322.
101. MORAN, L., T. PIVETTA, S. MASURI, K. VASICKOVA, et al. Mixed copper(ii)-phenanthroline complexes induce cell death of ovarian cancer cells by evoking the unfolded protein response. *Metallooms*, Sep 2019, 11(9), 1481-1489.

102. MOVSISYAN, N. K., V. PETROSYAN, G. ABELYAN, O. SOCHOR, et al. Learning to assist smokers through encounters with standardized patients: An innovative training for physicians in an Eastern European country. *Plos One*, Sep 2019, 14(9), 8.
103. MRKVOVA, Z., S. ULDRIJAN, A. POMBINHO, P. BARTUNEK, et al. Benzimidazoles Downregulate Mdm2 and MdmX and Activate p53 in MdmX Overexpressing Tumor Cells. *Molecules*, Jun 2019, 24(11), 14.
104. NEJEDLY, P., J. CIMBALNIK, P. KLIMES, F. PLESINGER, et al. Intracerebral EEG Artifact Identification Using Convolutional Neural Networks. *Neuroinformatics*, Apr 2019a, 17(2), 225-234.
105. NILSEN, C., R. ANDEL, A. DARIN-MATTSSON AND I. KAREHOLT Psychosocial working conditions across working life may predict late-life physical function: a follow-up cohort study. *Bmc Public Health*, Aug 2019, 19(1), 9.
106. PANOVSKY, R., M. PESL, T. HOLECEK, J. MACHAL, et al. Cardiac profile of the Czech population of Duchenne muscular dystrophy patients: a cardiovascular magnetic resonance study with T1 mapping. *Orphanet Journal of Rare Diseases*, Jan 2019, 14, 10.
107. PAPPAS, C., B. J. SMALL, R. ANDEL, J. LACZO, et al. Blood Glucose Levels May Exacerbate Executive Function Deficits in Older Adults with Cognitive Impairment. *Journal of Alzheimers Disease*, 2019, 67(1), 81-89.
108. PECINKA, L., L. PROKES AND J. HAVEL Gallium selenide clusters generated via laser desorption ionisation quadrupole ion trap time-of-flight mass spectrometry. *Rapid Communications in Mass Spectrometry*, Apr 2019, 33(7), 719-726.
109. PESKOVA, L., V. VINARSKY, T. BARTA AND A. HAMPL Human Embryonic Stem Cells Acquire Responsiveness to TRAIL upon Exposure to Cisplatin. *Stem Cells International*, Jan 2019, 2019, 11.
110. PINTO, G. P., O. VAVRA, J. FILIPOVIC, J. STOURAC, et al. Fast Screening of Inhibitor Binding/Unbinding Using Novel Software Tool CaverDock. *Frontiers in Chemistry*, Oct 2019, 7, 14.
111. PRUDNIKOVA, T., B. KASCAKOVA, J. R. MESTERS, P. GRINKEVICH, et al. Crystallization and Crystallographic Analysis of a Bradyrhizobium Elkanii USDA94 Haloalkane Dehalogenase Variant with an Eliminated Halide-Binding Site. *Crystals*, Jul 2019, 9(7), 12.
112. QING, Z., X. ZHANG, M. P. YE, S. C. WU, et al. The Impact of Spatial Normalization Strategies on the Temporal Features of the Resting-State Functional MRI: Spatial Normalization Before rs-fMRI Features Calculation May Reduce the Reliability. *Frontiers in Neuroscience*, Nov 2019, 13, 10.
113. REHULKA, P., J. CIMBALNIK, M. PAIL, J. CHRASTINA, et al. Hippocampal high frequency oscillations in unilateral and bilateral mesial temporal lobe epilepsy. *Clinical Neurophysiology*, Jul 2019, 130(7), 1151-1159.
114. ROBLEK, M., D. PROTSYUK, P. F. BECKER, C. STEFANESCU, et al. CCL2 Is a Vascular Permeability Factor Inducing CCR2-Dependent Endothelial Retraction during Lung Metastasis. *Molecular Cancer Research*, Mar 2019, 17(3), 783-793.
115. SABIL, A., M. GLOS, A. GUNTHER, C. SCHOBEL, et al. Comparison of Apnea Detection Using Oronasal Thermal Airflow Sensor, Nasal Pressure Transducer, Respiratory Inductance Plethysmography and Tracheal Sound Sensor. *Journal of Clinical Sleep Medicine*, 2019a, 15(2), 285-292.
116. SALVATORELLI, L., L. PUZZO, G. BARTOLONI, S. PALMUCCI, et al. Immunoexpression of Macroh2a in Uveal Melanoma. *Applied Sciences-Basel*, Aug 2019, 9(16), 10.

117. SHEARDOVA, K., M. VYHNALEK, Z. NEDELSKA, J. LACZO, et al. Czech Brain Aging Study (CBAS): prospective multicentre cohort study on risk and protective factors for dementia in the Czech Republic. *Bmj Open*, Dec 2019, 9(12), 8.
118. TETLOW, A. M., R. ANDEL AND F. J. INFURNA Is Memory Decline Associated With Inflammatory Response? *Journal of Aging and Health*, Jun 2019, 31(5), 783-792.
119. TICHY, M., L. KNOPFOVA, J. JARKOVSKY, P. VLCEK, et al. High c-Myb Expression Associates with Good Prognosis in Colorectal Carcinoma. *Journal of Cancer*, 2019, 10(6), 1393-1397.
120. VESELSKA, R., M. JEZOVA, M. KYR, P. MAZANEK, et al. Comparative Analysis of Putative Prognostic and Predictive Markers in Neuroblastomas: High Expression of PBX1 Is Associated With a Poor Response to Induction Therapy. *Frontiers in Oncology*, Nov 2019, 9, 12.
121. VESELY, P., T. STRACINA, M. HLAVACOVA, J. HALAMEK, et al. Haloperidol affects coupling between QT and RR intervals in guinea pig isolated heart. *Journal of Pharmacological Sciences*, Jan 2019, 139(1), 23-28.
122. VICAR, T., J. BALVAN, J. JAROS, F. JUG, et al. Cell segmentation methods for label-free contrast microscopy: review and comprehensive comparison. *Bmc Bioinformatics*, Jun 2019, 20, 25.
123. VYHNALEK, M., H. MARKOVA, J. LACZO, R. DE BENI, et al. Assessment of Memory Impairment in Early Diagnosis of Alzheimer's Disease. *Current Alzheimer Research*, 2019, 16(11), 975-985.
124. WONG, A. Y. W., J. FRIC AND T. ZELANTE Learning to control tissue damage while fighting Aspergillus. *Medical Mycology*, Apr 2019, 57, S189-S195.
125. YOGENDRAKUMAR, V., F. AL-AJLAN, M. NAJM, J. PUIG, et al. Clot Burden Score and Early Ischemia Predict Intracranial Hemorrhage following Endovascular Therapy. *American Journal of Neuroradiology*, Apr 2019, 40(4), 655-660.

Q3

126. ANTTALAINEN, U., L. GROTE, I. FIETZE, R. L. RIHA, et al. Insomnia symptoms combined with nocturnal hypoxia associate with cardiovascular comorbidity in the European sleep apnea cohort (ESADA). *Sleep and Breathing*, Sep 2019, 23(3), 805-814.
127. BEDNAROVA, V., V. KINCL, M. KAMINEK, J. VASINA, et al. The prognostic value of ultra low-dose thallium myocardial perfusion protocol using CZT SPECT. *International Journal of Cardiovascular Imaging*, Jun 2019, 35(6), 1163-1167.
128. CALUORI, G., J. PRIBYL, V. CMIEL, M. PESL, et al. Simultaneous study of mechanobiology and calcium dynamics on hESC-derived cardiomyocytes clusters. *Journal of Molecular Recognition*, Feb 2019a, 32(2), 9.
129. COCKOVA, Z., H. UJCIKOVA, P. TELENSKY AND J. NOVOTNY Protein profiling of SH-SY5Y neuroblastoma cells: The effect of rhein. *Journal of Biosciences*, Sep 2019, 44(4), 16.
130. CUNDRLE, I., L. J. OLSON AND B. D. JOHNSON Pulmonary Limitations in Heart Failure. *Clinics in Chest Medicine*, Jun 2019, 40(2), 439-+.
131. FISCHER, C. AND T. PENZEL Continuous non-invasive determination of nocturnal blood pressure variation using photoplethysmographic pulse wave signals: comparison of pulse propagation time, pulse transit time and RR-interval. *Physiological Measurement*, Jan 2019, 40(1), 14.
132. HAVEL, M., P. KORANDA, V. KINCL, L. QUINN, et al. Additional value of the coronary artery calcium score in patients for whom myocardial perfusion imaging is challenging. *Kardiologia Polska*, 2019, 77(4), 458-464.
133. CHOBOLA, M., P. HOMOLKA, M. BENEJ, Z. CHOVARNEC, et al. Ventilatory Efficiency Identifies Patients Prone to Hypoxemia During One-Lung Ventilation. *Journal of Cardiothoracic and Vascular Anesthesia*, Jul 2019, 33(7), 1956-1962.
134. JIRIK, R., T. TAXT, O. MACICEK, M. BARTOS, et al. Blind deconvolution estimation of an arterial input function for small animal DCE-MRI. *Magnetic Resonance Imaging*, Oct 2019, 62, 46-56.
135. MACHAL, J. AND O. HLINOMAZ Efficacy of P2Y12 Receptor Blockers After Myocardial Infarction and Genetic Variability of their Metabolic Pathways. *Current Vascular Pharmacology*, 2019, 17(1), 35-40.
136. OSPEL, J. M., O. VOLNY, M. JAYARAMAN, R. MCTAGGART, et al. Optimizing fast first pass complete reperfusion in acute ischemic stroke - the BADDASS approach (BALloon guiDe with large bore Distal Access catheter with dual aspiration with Stent-retriever as Standard approach). *Expert Review of Medical Devices*, Nov 2019, 16(11), 955-963.
137. SABIL, A., C. SCHOBEL, M. GLOS, A. GUNTHER, et al. Apnea and hypopnea characterization using esophageal pressure, respiratory inductance plethysmography, and suprasternal pressure: a comparative study. *Sleep and Breathing*, Dec 2019b, 23(4), 1169-1176.
138. SOUKUP, L., J. HRUSKOVA, P. JURAK, J. HALAMEK, et al. Comparison of noninvasive pulse transit time determined from Doppler aortic flow and multichannel bioimpedance plethysmography. *Medical & Biological Engineering & Computing*, May 2019, 57(5), 1151-1158.
139. SZADVARI, I., S. HUDECJAVA, B. CHOVARNOVA, M. MATUSKOVA, et al. Sodium/calcium exchanger is involved in apoptosis induced by H2S in tumor cells through decreased levels of intracellular pH. *Nitric Oxide-Biology and Chemistry*, Jun 2019, 87, 1-9.

140. TAFFON, C., I. GIOVANNONI, P. MOZETIC, G. T. CAPOLUPO, et al. Seriate cytology vs molecular analysis of peritoneal washing to improve gastric cancer cells detection. *Diagnostic Cytopathology*, Jul 2019, 47(7), 670-674.

Q4

141. CALUORI, G., A. WOJTASZCZYK, O. YASIN, M. PESL, et al. Comparing the incidence of ventricular arrhythmias during epicardial ablation in swine versus canine models. *Pace-Pacing and Clinical Electrophysiology*, Jul 2019c, 42(7), 862-867.
142. CUTA, M., K. BARICOVA, D. CERNY AND O. SOCHOR NORMAL-WEIGHT OBESITY FREQUENCY IN THE CENTRAL EUROPEAN URBAN ADULT FEMALE POPULATION OF BRNO, CZECH REPUBLIC. *Central European Journal of Public Health*, Jun 2019, 27(2), 131-134.
143. HLOZKOVA, J., V. JURACKOVA, P. SUCHY, P. SCHEER, et al. Brief analysis of the frequency of use and spectrum of animal models in stroke research. *Ceska a Slovenska Neurologie a Neurochirurgie*, 2019, 82(3), 274-278.
144. HOLES, D., J. KRÁL, M. CABAL, D. VACLAVIK, et al. Inter-rater reliability between paramedics and neurologists in the assessment of severe hemiparesis in acute stroke. *Ceska a Slovenska Neurologie a Neurochirurgie*, 2019, 82(4), 391-395.
145. JADCZYK, T., T. FRANCUZ, W. GARCZORZ, M. KIMSA-FURDZIK, et al. Serum Concentrations of Osteogenesis/Osteolysis-Related Factors and Micro-RNA Expression in ST-Elevation Myocardial Infarction. *Cardiology Research and Practice*, 2019, 2019, 7.
146. KEC, D., J. BEDNARIK, O. LUDKA, V. HAMERNIKOVA, et al. Treatment of insomnia in the context of neuropathic pain. *Ceska a Slovenska Neurologie a Neurochirurgie*, 2019, 82(5), 513-517.
147. KLIMOVA, B., M. VALIS, J. HORT AND K. KUCA Selected rare paediatric communication neurological disorders. *Journal of Applied Biomedicine*, 2019b, 17(1), 29-33.
148. KREPELKOVÁ, I., T. MRACKOVÁ, J. IZAKOVÁ, B. DVORAKOVÁ, et al. Evaluation of miRNA detection methods for the analytical characteristics necessary for clinical utilization. *Biotechniques*, Jun 2019, 66(6), 277-284.
149. LOUCKY, J., S. BELASKOVA, R. PRUSA AND K. KOTASKA The Effect of Inhibin A on Prenatal Screening Results for Down Syndrome in the High Risk Czech Pregnant Women. *Clinical Laboratory*, 2019, 65(5), 707-716.
150. MARCINIÁK, R., K. SHEARDOVÁ, T. SEDLAKOVÁ, M. VYHNÁLEK, et al. Religiosity, spirituality and old age: Theory and research. *Ceskoslovenska Psychologie*, 2019, 63(6), 644-663.
151. MESTANÍK, M., A. MESTANÍKOVA, P. LANGER, M. GRENDAR, et al. Respiratory sinus arrhythmia - testing the method of choice for evaluation of cardiovagal regulation. *Respiratory Physiology & Neurobiology*, Jan 2019, 259, 86-92.
152. MIKULIK, R., L. VONDRAČKOVÁ, H. POKORNA, V. SVOBODOVÁ, et al. Feasibility and efficacy of an educational programme to increase awareness of stroke and heart attack in children. *Health Education Journal*, Nov 2019b, 78(7), 812-823.
153. PAPIEZ, A., K. ODEHNALOVÁ, V. SRAMEK AND P. SUK Comparison of Active Substance Losses and Total Weight Losses of Tablets Administered Via Feeding Tube. *Pharmacology*, 2019, 103(5-6), 246-249.
154. POSPISOLOVÁ, V., M. ESNER, I. CERVENKOVA, R. FEDR, et al. The frequency and consequences of multipolar mitoses in undifferentiated embryonic stem cells. *Journal of Applied Biomedicine*, 2019, 17(4), 209-217.

155. PROCHAZKA, A., S. GULATI, S. HOLINKA AND D. SMUTEK Classification of Thyroid Nodules in Ultrasound Images Using Direction-Independent Features Extracted by Two-Threshold Binary Decomposition. *Technology in Cancer Research & Treatment*, Feb 2019a, 18, 8.
156. PSYCHOGIOS, K., O. KARGIOTIS, A. SAFOURIS, G. MAGOUFIS, et al. Tenecteplase Averting Mechanical Thrombectomy in Emergent Large Vessel Occlusion. *Neurologist*, Nov 2019, 24(6), 180-182.
157. RUMPIK, D., T. RUMPIKOVA, M. POHANKA, P. VENTRUBA, et al. Gestational surrogacy in the Czech Republic. *Biomedical Papers-Olomouc*, Jun 2019, 163(2), 155-160.
158. TRATSIAK, K., T. PRUDNIKOVA, I. DRIENOVSKA, J. DAMBORSKY, et al. Crystal structure of the cold-adapted haloalkane dehalogenase DpcA from Psychrobacter cryohalolentis K5. *Acta Crystallographica Section F-Structural Biology Communications*, May 2019, 75, 324-331.
159. VANICEK, J., P. CIMFLOVA, M. BULIK, J. JARKOVSKY, et al. Single-Centre Experience with Patients Selection for Mechanical Thrombectomy Based on Automated Computed Tomography Perfusion Analysis-A Comparison with Computed TomographyCT Perfusion Thrombectomy Trials. *Journal of Stroke & Cerebrovascular Diseases*, Apr 2019, 28(4), 1085-1092.
160. ZITEK, H., A. HEJCL, F. CIHLAR, A. SEJKOROVA, et al. Anterior choroidal artery aneurysm. *Ceska a Slovenska Neurologie a Neurochirurgie*, 2019, 82(3), 350-351.

N/A

161. AHMED, N., H. AUDEBERT, G. TURC, C. CORDONNIER, et al. Consensus statements and recommendations from the ESO-Karolinska Stroke Update Conference, Stockholm 11-13 November 2018. *European Stroke Journal*, Dec 2019, 4(4), 307-317.
162. CLEMENS, E., A. J. M. MEIJER, L. BROER, T. LANGER, et al. Genetic Determinants of Ototoxicity During and After Childhood Cancer Treatment: Protocol for the PanCareLIFE Study. *Jmir Research Protocols*, Mar 2019, 8(3), 11.
163. GLOS, M., A. SABIL, K. S. JELAVIC, G. BAFFET, et al. Tracheal sound analysis for detection of sleep disordered breathing: A comparison to detection using anoronasal thermistor. *Somnologie*, Jun 2019, 23(2), 80-85.
164. GOMES, C. P. D., B. AGG, A. ANDOVA, S. ARSLAN, et al. Catalyzing Transcriptomics Research in Cardiovascular Disease: The CardioRNA COST Action CA17129. *Non-Coding Rna*, Jun 2019a, 5(2), 13.
165. JENSEN, M. K., L. FABER, M. LIEBREGTS, J. JANUSKA, et al. Effect of impaired cardiac conduction after alcohol septal ablation on clinical outcomes: insights from the Euro-ASA registry. *European Heart Journal-Quality of Care and Clinical Outcomes*, Jul 2019, 5(3), 252-258.
166. LUKES, M., M. HELAN, V. SRAMEK, J. PAVLIKOVÁ, et al. Impact of contralateral carotid stenosis on brain tissue oxygenation during carotid endarterectomy. *Cor Et Vasa*, Aug-Sep 2019, 61(4), 420-425.
167. SRAMEK, V., I. CUNDRLE, P. SUK, M. HELAN, et al. Important publications in intensive care in 2018/2019. *Anesteziologie a Intenzivni Medicina*, 2019, 30(6), 271-280.