

1. Mayasin, Y.P. Extracellular Matrix as a Target in Melanoma Therapy: From Hypothesis to Clinical Trials / Y.P. Mayasin, M.N. Osinnikova, C.B. Kharisova, K.V. Kitaeva, I.Y. Filin, A.V. Gorodilova, G.I. Kutovoi, V.V. Solovyeva, A.I. Golubev, **A. Rizvanov** // Cells. – 2024. – Vol.13(22):1917.  
<https://doi.org/10.3390/cells13221917> (Impact Factor 2023 = 6.0). Q1.
2. Rakhmatullina, A.R. Multicellular Cancer-Stroma Spheres (CSS) for In Vitro Assessment of CAR-T Cell-Associated Toxicity / A.R. Rakhmatullina, M.A. Zolotykh, Y.V. Filina, A.K. Valiullina, E.A. Zmievskaya, D.U. Gafurbaeva, A.R. Sagdeeva, E.R. Bulatov, **A. Rizvanov**, R.R. Miftakhova // Cells. – 2024. – Vol.13(22):1892. <https://doi.org/10.3390/cells13221892> (Impact Factor 2023 = 6.0). Q1.
3. Akhunzianov, A.A. Long-term Hypoxia Inhibits Sphere Formation on PC-3 and MDA-MB-231 Cell Line Models / A.A. Akhunzianov, J.V. Filina, M.A. Zolotykh, **A. Rizvanov**, R.R. Miftakhova // The Open Biochemistry Journal. – 2024. – <https://doi.org/10.2174/011874091X307243240513092933> (SCOPUS). Q4.
4. Hamza, Sh. Identification and validation of cross-reactivity of anti-Thailand orthohantavirus nucleocapsid peptides / Sh. Hamza, V. Shakirova, I. Khaertynova, M. Markelova, P.V. Saxena, D. Sharma, N. Kaushal, Y. Gupta, E. Garanina, V. Pavelkina, S. Khaiboullina, E. Martynova, **Rizvanov**, M. Baranwal // Human Immunology. – 2024. – Vol.85, Issue 6.  
<https://doi.org/10.1016/j.humimm.2024.111157> (Impact Factor 2023 = 3.1). Q2.
5. Китаева, К.В. Возможности генных, клеточных и фармакологических подходов для коррекции возрастных изменений / К.В. Китаева, В.В. Соловьева, И.Ю. Филин, Я.О. Мухамедшина, **А.А. Ризванов** // Казанский медицинский журнал. – 2024. – doi: <https://doi.org/10.17816/KMJ624852> (SCOPUS, Q4).
6. Mullagulova, A.I. Adeno-Associated Viral Vectors in the Treatment of Epilepsy / A.I. Mullagulova, E.E. Timechko, V.V. Solovyeva, A.M. Yakimov, A. Ibrahim, D.D. Dmitrenko, A.A. Sufianov, G.Z. Sufianova, **A. Rizvanov** // International Journal of Molecular Sciences. – 2024. – Vol.25(22):12081.  
<https://doi.org/10.3390/ijms252212081> (Impact Factor 2023 = 4.9). Q1.
7. Gorodilova, A.V. The Well-Forgotten Old: Platelet-Rich Plasma in Modern Anti-Aging Therapy / A.V. Gorodilova, C.B. Kharisova, M.N. Osinnikova, K.V. Kitaeva, I.Y. Filin, Y.P. Mayasin, V.V. Solovyeva, **A. Rizvanov** // Cells. – 2024. – Vol.13(21):1755. <https://doi.org/10.3390/cells13211755> (Impact Factor 2023 = 6.0). Q1.

8. Woodcock, C.L. The role of the ALKBH5 RNA demethylase in invasive breast cancer / C.L. Woodcock, M. Alsaleem, M.S. Toss, J. Lothion-Roy, A.E. Harris, J.N. Jeyapalan, N.Blatt, **A. Rizvanov**, R.R. Miftakhova, Y.A. Kariri, S. Madhusudan, A.R. Green, C.S. Rutland, R.G. Fray, E.A. Rakha, N.P. Mongan // Discover Oncology. – 2024. – Vol.15, 343. <https://doi.org/10.1007/s12672-024-01205-8> (Impact Factor 2023 = 2.8). Q2.
9. Kovac, M. Gene Therapy Using Plasmid DNA Encoding Bone Morphogenetic Protein 2 and Vascular Endothelial Growth Factor 164 Genes for the Treatment of Equine Proximal Suspensory Desmitis: Case Reports / M. Kovac, I.V. Berestov, A.M. Aimaletdinov, C.S. Rutland, **A. Rizvanov**, E.Yu. Zakirova // Opera Medica et Physiologica. – 2024. –Vol.11, Issue 2, P. 74-89; <https://doi.org/10.24412/2500-2295-2024-2-74-89> (SCOPUS). Q4.
10. Issa, S. Growth Factors and Their Application in the Therapy of Hereditary Neurodegenerative Diseases / S. Issa, H. Fayoud, A. Shaimardanova, A. Sufianov, G. Sufianova, V. Solovyeva, **Rizvanov** // Biomedicines. – 2024. – Vol.12(8):1906. <https://doi.org/10.3390/biomedicines12081906> (Impact Factor 2023 = 3.9). Q1.
11. Sehgal, A. Designing a Conserved Immunogenic Peptide Construct from the Nucleocapsid Protein of Puumala orthohantavirus / A. Sehgal, D. Sharma, N. Kaushal, Y. Gupta, E. Martynova, E. Kabwe, S. Chandy, **Rizvanov**, S. Khaiboullina, M. Baranwal // Viruses. – 2024. – Vol.16(7):1030. <https://doi.org/10.3390/v16071030> (Impact Factor 2023 = 3.8). Q1.
12. Sharapova, G. Mitochondrial Protein Density, Biomass, and Bioenergetics as Predictors for the Efficacy of Glioma Treatments / G. Sharapova, S. Sabirova, M. Gomzikova, A. Brichkina, N.A. Barlev, N.V. Kalacheva, **Rizvanov**, N. Markov, H-U. Simon // International Journal of Molecular Sciences. – 2024. – Vol.25(13):7038. <https://doi.org/10.3390/ijms25137038> (Impact Factor 2023 = 4.9). Q1.
13. Kzyrgalin, S. New Insight of Oncology: Cancer Concept without Tumor / S. Kzyrgalin, K. Gantsev, **Rizvanov**, S. Gantsev // Journal of Cancer Research Updates. – 2024. – Vol.13, p.6-11. <https://doi.org/10.30683/1929-2279.2024.13.02> (SCOPUS). Q4.
14. Kzyrgalin, S. Antitumor Activity of Dehydroxymethylepoxyquinomicin (DHMEQ) in Monotherapy and Combination with Cisplatin in the SKOV-3 Ovarian Cancer Model / S. Kzyrgalin, R. Yamidanov, **Rizvanov**, S. Gantsev // Journal of Cancer Research Updates. – 2024. – Vol.13, p.12-18. <https://doi.org/10.30683/1929-2279.2024.13.03> (SCOPUS). Q4.
15. Pipiya, V.V. Comparison of primary and passaged tumor cell cultures and their application in personalized medicine / V.V. Pipiya, Z.E. Gilazieva, S.S. Issa, **A. Rizvanov**, V.V. Solovyeva // Explor Target Antitumor Ther. – 2024. – Vol.5(3):581-599. <https://doi.org/10.37349/etat.2024.00237> (Scopus). Q2.
16. Shkair, L. Cross-reactivity of hantavirus antibodies after immunization with PUUV antigens / L. Shkair, D. Sharma, S. Hamza, E. Garanina, V. Shakirova, I. Khaertynova, M. Markelova, V. Pavelkina, **Rizvanov**, S. Khaiboullina, M. Baranwal, E. Martynova // Biotechnology and Applied Biochemistry – 2024. – May

23. <https://doi.org/10.1002/bab.2604> (Impact Factor 2023 = 2.8). Q2.
17. Shanazarov, N.A. Photodynamic therapy in the treatment of HPV-associated cervical cancer: mechanisms, challenges and future prospects / N.A. Shanazarov, S.V. Zinchenko, S.D. Kisikova, **A. Rizvanov**, S. Smailova, K.A. Petukhov, Zh.Zh. Salmaganbetova // Biomedical Photonics. – 2024. – Vol.13, no. 1, pp. 47-55. <https://doi.org/10.24931/2413-9432-2023-13-1-47-55> (Scopus). Q3.
18. Lisovskaya, S.A. The Repression of the Candida albicans Growth and Pseudomycelium Formation by Thiomonoterpenoid / S.A. Lisovskaya, A.A. Ksenofontov, P.S. Bocharov, E.V. Antina, G.B. Guseva, M.B. Berezin, I.R. Gilfanov, R.S. Pavelyev, M.O. Sabantsev, O.V. Ostolopovskaya, E.Y. Trizna, S.V. Pestova, E.S. Izmet'ev, S.A. Rubtsova, A.G. Izmailov, **A. Rizvanov**, L.E. Nikitina, A.R. Kayumov // Journal of Biological Regulators and Homeostatic Agents. – 2024. – Vol.38(5): 3685-3698 <https://doi.org/10.23812/j.biol.regul.homeost.agents.20243805.291> (Impact Factor 2023 = 3.2). Q4.
19. Zolotykh, M.A. Cancer of unknown primary and the «seed and soil» hypothesis / M.A. Zolotykh, L.A. Mingazova, Y.V. Filina, N.L. Blatt, A.I. Nesterova, A.G. Sabirov, **A. Rizvanov**, R.R. Miftakhova // Critical Reviews in Oncology/Hematology. – 2024. – Vol.196:104297. <https://doi.org/10.1016/j.critrevonc.2024.104297> (Impact Factor 2023 = 6.2). Q1.
20. Bilalova, A. Astrocytes in Spinal Cord Injury: Current Opportunities and Prospects for Directional Polarization / A. Bilalova, O. Tutova, Y. Mukhamedshina, A. Rizvanov // Frontiers in Bioscience (Landmark Ed). – 2024. – Vol.29(3):94. <https://doi.org/10.31083/j.fbl2903094> (Impact Factor 2023 = 3.1). Q2.
21. Rakhmatullina, A.R. Development of a novel prostate Cancer-Stroma Sphere (CSS) model for In Vitro tumor microenvironment studies / A.R. Rakhmatullina, M.A. Zolotykh, Y.V. Filina, R.N. Mingaleeva, A.R. Sagdeeva, E.A. Boulygina, D.U. Gafurbaeva, E.R. Bulatov, **A. Rizvanov**, R.R. Miftakhova // Translational Oncology. – 2024. – Vol.44:101930. <https://doi.org/10.1016/j.tranon.2024.101930> (Impact Factor 2023 = 5.0). Q1.
22. Ageeva, T. NF-κB and JAK/STAT Signaling Pathways as Crucial Regulators of Neuroinflammation and Astrocyte Modulation in Spinal Cord Injury / T. Ageeva, **Rizvanov**, Y. Mukhamedshina // Cells. – 2024. – Vol.13(7):581. <https://doi.org/10.3390/cells13070581> (Impact Factor 2023 = 6.0). Q1.
23. Ageeva, T. The Impact of Treadmill Training on Tissue Integrity, Axon Growth, and Astrocyte Modulation / T. Ageeva, D. Sabirov, A. Sufianov, E. Davletshin, E. Plotnikova, R. Shigapova, G. Sufianova, A. Timofeeva, Y. Chelyshev, **Rizvanov**, Y. Mukhamedshina // International Journal of Molecular Sciences. – 2024. – Vol.25(7):3772. <https://doi.org/10.3390/ijms25073772> (Impact Factor 2021 = 6.208). Q1.
24. Yakubova, A. Generalized Analysis of Open Genetic Databases Reveals New Associations with Migraine / A. Yakubova, **A. Rizvanov** // Current Pharmacogenomics and Personalized Medicine. – 2024. –

- <https://doi.org/10.2174/0118756921286656231219095417> (SCOPUS). Q4.
25. Chasov, V. Immunotherapy Strategy for Systemic Autoimmune Diseases: Betting on CAR-T Cells and Antibodies // V. Chasov, E. Zmievskaya, I. Ganeeva, E. Gilyazova, D. Davletshin, M. Khaliulin, E. Kabwe, Y.N. Davidyuk, A. Valiullina, **Rizvanov**, E. Bulatov // *Antibodies*. – 2024. – Vol. 13(1):10.  
<https://doi.org/10.3390/antib13010010> (Impact Factor 2023 = 4.7). Q1.
26. Shakirova, V. Rosuvastatin as a Supplemental Treatment for the Clinical Symptoms of Nephropathia Epidemica: A Pilot Clinical Study // V. Shakirova, M. Markelova, Y. Davidyuk, R.J. Stott-Marshall, T.L. Foster, S. Khaiboullina, **Rizvanov**, E. Martynova / *Viruses*. – 2024. – Vol. 16(2):306.  
<https://doi.org/10.3390/v16020306> (Impact Factor 2021 = 6.208). Q1.
27. Gabdoulkhakova, A.G. Immunology of SARS-CoV-2 Infection // A.G. Gabdoulkhakova, R.N. Mingaleeva, A.M. Romozanova, A.R. Sagdeeva, Y.V. Filina, **A. Rizvanov**, R.R. Miftakhova / *Biochemistry (Moscow)*. – 2024. – Vol. 89, No. 1, pp. 65-83 <https://doi.org/10.1134/S0006297924010048> (Impact Factor 2022 = 2.8). Q2.
28. Kitaeva, K.V. Eternal Youth: A Comprehensive Exploration of Gene, Cellular, and Pharmacological Anti-Aging Strategies / K.V. Kitaeva, V.V. Solovyeva, N.L. Blatt, **A. Rizvanov** // *International Journal of Molecular Sciences*. – 2024. – Vol. 25(1):643. <https://doi.org/10.3390/ijms25010643> (Impact Factor 2021 = 6.208). Q1.
29. Shaimardanova, A.A. Increasing  $\beta$ -hexosaminidase A activity using genetically modified mesenchymal stem cells / A.A. Shaimardanova, D.S. Chulpanova, V.V. Solovyeva, S.S. Issa, A.I. Mullagulova, A.A. Titova, Y.O. Mukhamedshina, A.V. Timofeeva, A.M. Aimaletdinov, I.R. Nigmatzyanov, **A. Rizvanov** // *Neural Regeneration Research*. – 2024. – Vol. 19(1):212-219.  
<https://doi.org/10.4103/1673-5374.375328> (Impact Factor 2022 = 6.1). Q2.
30. Usenko, T. Altered Sphingolipid Hydrolase Activities and Alpha-Synuclein Level in Late-Onset Schizophrenia / T. Usenko, A. Bezrukova, K. Basharova, G. Baydakova, E. Shagimardanova, N. Blatt, **Rizvanov**, O. Limankin, M. Novitsky, N. Shnayder, A. Izyumchenko, M. Nikolaev, A. Zabortina, A. Lavrinova, D. Kulabukhova, R. Nasyrova, E. Palchikova, N. Zalutskaya, I. Miliukhina, Y. Barbitoff, O. Glotov, A. Glotov, A. Taraskina, N. Neznanov, E. Zakharova, S. Pchelina // *Metabolites*. – 2024. – Vol. 14(1):30. <https://doi.org/10.3390/metabo14010030> (Impact Factor 2022 = 4.1). Q2.
31. Ravilov, R. Efficient delivery of the immunodominant genes of African swine fever virus by adeno-associated virus serotype 2 // R. Ravilov, A. Galeeva, G. Frolov, M. Efimova, E. Zakirova, **Rizvanov**, A. Hisamutdinov, L. Garipov, D. Mingaleev / *Veterinary World*. – 2023. – 16(12): 2425–2430  
<https://doi.org/10.14202/vetworld.2023.2425-2430> (Impact Factor 2022 = 1.6). Q2.

32. Akhmetzyanova, E.R. Current methods for the microglia isolation: Overview and comparative analysis of approaches / E.R. Akhmetzyanova, **A. Rizvanov**, Y.O. Mukhamedshina // Cell and Tissue Research. – 2023. – Dec 15. <https://doi.org/10.1007/s00441-023-03853-8> (Impact Factor 2022 = 3.6). Q1.
33. Aleksandrova, N.M. Features of Induction of In Vitro Osteodifferentiation of Adipose-Derived Mesenchymal Stem Cells / N.M. Aleksandrova, A.M. Aimaletdinov, A.G. Malanyeva, M.A. Tambovskii, **A. Rizvanov**, E.Yu. Zakirova // Applied Biochemistry and Microbiology. – 2023. – Vol. 59, 1071–1077. <https://doi.org/10.1134/S0003683823080021> (Impact Factor 2022 = 0.8). Q3.
34. Rakhmatullina, A.R. Adipose-Derived Mesenchymal Stem Cell (MSC) Immortalization by Modulation of hTERT and TP53 Expression Levels / A.R. Rakhmatullina, R.N. Mingaleeva, D.U. Gafurbaeva, O.N. Glazunova, A.R. Sagdeeva, E.R. Bulatov, **A. Rizvanov**, R.R. Miftakhova // Journal of Personalized Medicine. – 2023. – Vol. 13(11):1621. <https://doi.org/10.3390/jpm13111621> (Impact Factor 2022 = 3.4). Q2.
35. Valiullina, A.K. Cytotoxic effect of CAR-T cells against modified MCF-7 breast cancer cell line / A.K. Valiullina, E.A. Zmievskaia, I.A. Ganeeva, M.N. Zhuravleva, E.E. Garanina, **A. Rizvanov**, A.V. Petukhov, E.R. Bulatov // Molecular Biology Research Communications. – 2023. – Vol. 12(4):139-148. doi: 10.22099/mbrc.2023.47125.1820. (Impact Factor 2022 = 1.64). Q3.
36. Gorodilova, A.V. The Potential of Dendritic Cell Subsets in the Development of Personalized Immunotherapy for Cancer Treatment / A.V. Gorodilova, K.V. Kitaeva, I.Y. Filin, Y.P. Mayasin, C.B. Kharisova, S.S. Issa, V.V. Solovyeva, **A. Rizvanov** // Current Issues in Molecular Biology. – 2023. – Vol. 45(10):8053-8070. <https://doi.org/10.3390/cimb45100509> (Impact Factor 2022 = 3.1). Q2.
37. Sabirov, D. Comparative Analysis of Cytokine Profiles in Cerebrospinal Fluid and Blood Serum in Patients with Acute and Subacute Spinal Cord Injury / D. Sabirov, S. Ogurcov, I. Shulman, I. Kabdesh, E. Garanina, A. Sufianov, **Rizvanov**, Y. Mukhamedshina // Biomedicines. – 2023. – Vol. 11(10):2641. <https://doi.org/10.3390/biomedicines11102641> (Impact Factor 2022 = 4.7). Q1.
38. Filin, I.Y. T-Lymphocytes Activated by Dendritic Cells Loaded by Tumor-Derived Vesicles Decrease Viability of Melanoma Cells In Vitro / I.Y. Filin, Y.P. Mayasin, C.B. Kharisova, A.V. Gorodilova, D.S. Chulpanova, K.V. Kitaeva, A.A. Rizvanov, V.V. Solovyeva // Current Issues in Molecular Biology. – 2023. – Vol. 45(10):7827-7841. <https://doi.org/10.3390/cimb45100493> (Impact Factor 2022 = 3.1). Q2.
39. Verma, J. Identification of conserved immunogenic peptides of SARS-CoV-2 nucleocapsid protein / J. Verma, N. Kaushal, M. Manish, N. Subbarao, V. Shakirova, E. Martynova, R. Liu, S. Hamza, **A. Rizvanov**, S.F. Khaiboullina, M. Baranwal // Journal of Biomolecular Structure and Dynamics. – 2023. – Vol. 26:1-17. <https://doi.org/10.1080/07391102.2023.2260484> (Impact Factor 2022 = 5.235). Q2.



40. Ponomarev, A.S. Emerging Gene Therapy Approaches in the Management of Spinal Muscular Atrophy (SMA): An Overview of Clinical Trials and Patent Landscape / A.S. Ponomarev, D.S. Chulpanova, L.M. Yanygina, V.V. Solovyeva, **A. Rizvanov** // International Journal of Molecular Sciences. – 2023. – Vol. 24(18):13743. <https://doi.org/10.3390/ijms241813743> (Impact Factor 2021 = 6.208). Q1.
41. Salafutdinov, I.I. A Biosafety Study of Human Umbilical Cord Blood Mononuclear Cells Transduced with Adenoviral Vector Carrying Human Vascular Endothelial Growth Factor cDNA In Vitro / I.I. Salafutdinov, D.Z. Gatina, M.I. Markelova, E.E. Garanina, S.Y. Malanin, I.M. Gazizov, A.A. Izmailov, **A. Rizvanov**, R.R. Islamov, A Palotás, Z.Z. Safiulloev // Biomedicines. – 2023. – Vol. 11(7):2020. <https://doi.org/10.3390/biomedicines11072020> (Impact Factor 2022 = 4.7). Q1
42. Akhunzianov, A.A. Unravelling the Therapeutic Potential of Antibiotics in Hypoxia in a Breast Cancer MCF-7 Cell Line Model / A.A. Akhunzianov, A.I. Nesterova, S. Wanrooij, Y.V. Filina, **A. Rizvanov**, R.R. Miftakhova // International Journal of Molecular Sciences. – 2023. – Vol. 24(14):11540. <https://doi.org/10.3390/ijms241411540> (Impact Factor 2021 = 6.208). Q1.
43. Mullagulova, A. Safety and Efficacy of Intravenous and Intrathecal Delivery of AAV9-Mediated ARSA in Minipigs / A. Mullagulova, A. Shaimardanova, V. Solovyeva, Y. Mukhamedshina, D. Chulpanova, A. Kostennikov, S. Issa, **Rizvanov** // International Journal of Molecular Sciences. – 2023. – Vol. 24(11):9204. <https://doi.org/10.3390/ijms24119204> (Impact Factor 2021 = 6.208). Q1.
44. Alatrash, R. Genetically Engineered Artificial Microvesicles Carrying Nerve Growth Factor Restrains the Progression of Autoimmune Encephalomyelitis in an Experimental Mouse Model / R. Alatrash, M. Golubenko, E. Martynova, E. Garanina, Y. Mukhamedshina, S. Khaiboullina, **Rizvanov**, I. Salafutdinov, S. Arkhipova // International Journal of Molecular Sciences. – 2023. – Vol.24(9):8332. <https://doi.org/10.3390/ijms24098332> (Impact Factor 2021 = 6.208). Q1.
45. Akhmetzyanova, E.R. Severity- and Time-Dependent Activation of Microglia in Spinal Cord Injury / E.R. Akhmetzyanova, M.N. Zhuravleva, A.V. Timofeeva, L.G. Tazetdinova, E.E. Garanina, **A. Rizvanov**, Y.O. Mukhamedshina // International Journal of Molecular Sciences. – 2023. – Vol.24(9):8294. <https://doi.org/10.3390/ijms24098294> (Impact Factor 2021 = 6.208). Q1.
46. Syromiatnikova, V. Engineered GO-Silk Fibroin-Based Hydrogel for the Promotion of Collagen Synthesis in Full-Thickness Skin Defect / V. Syromiatnikova, S. Gupta, M. Zhuravleva, G. Masgutova, E. Zakirova, A. Aimaletdinov, **Rizvanov**, I. Salafutdinov, E. Naumenko, A. Bit // Journal of Composites Science. – 2023. – Vol.7(5):186. <https://doi.org/10.3390/jcs7050186> (Scopus). Q2.
47. Shulman, I. Intrathecal Injection of Autologous Mesenchymal Stem-Cell-Derived Extracellular Vesicles in Spinal Cord Injury: A Feasibility Study in Pigs / I. Shulman, T. Ageeva, A. Kostennikov, S. Ogurcov, L. Tazetdinova, I. Kabdesh, A. Rogozhin, I. Ganiev, **Rizvanov**, Y. Mukhamedshina // International Journal of Molecular Sciences. – 2023. – Vol.24(9):8240.

- <https://doi.org/10.3390/ijms24098240> (Impact Factor 2021 = 6.208). Q1.
48. Kurbangaleeva, S.V. Increased Yield of Extracellular Vesicles after Cytochalasin B Treatment and Vortexing / S.V. Kurbangaleeva, V.Y. Syromiatnikova, A.E. Prokopeva, A.M. Rogov, A.A. Khannanov, A.A. Rizvanov, M.O. Gomzikova // *Current Issues in Molecular Biology*. – 2023. – Vol.45(3):2431-2443.  
<https://doi.org/10.3390/cimb45030158> (Impact Factor 2021 = 2.976). Q2.
49. Valiullina, A.K. Evaluation of CAR-T Cells' Cytotoxicity against Modified Solid Tumor Cell Lines / A.K. Valiullina, E.A. Zmievskaya, I.A. Ganeeva, M.N. Zhuravleva, E.E. Garanina, A.A. Rizvanov, A.V. Petukhov, E.R. Bulatov // *Biomedicines*. – 2023. – Vol.11(2):626.  
<https://doi.org/10.3390/biomedicines11020626> (Impact Factor 2021 = 4.757) Q1.
50. Issa, S.S. Various AAV Serotypes and Their Applications in Gene Therapy: An Overview / S.S. Issa, A.A. Shaimardanova, V.V. Solovyeva, **A. Rizvanov** // *Cells*. – 2023. – Vol.12(5):785. <https://doi.org/10.3390/cells12050785> (Impact Factor 2021 = 7.666). Q1.
51. Gatina, D.Z. Induction of Angiogenesis by Genetically Modified Human Umbilical Cord Blood Mononuclear Cells / D.Z. Gatina, I.M. Gazizov, M.N. Zhuravleva, S.S. Arkhipova, M.A. Golubenko, M.O. Gomzikova, E.E. Garanina, R.R. Islamov, **A. Rizvanov**, I.I. Salafutdinov // *International Journal of Molecular Sciences*. – 2023. – Vol.24(5):4396. <https://doi.org/10.3390/ijms24054396> (Impact Factor 2021 = 6.208). Q1.
52. Sehgal, A. Hemorrhagic Fever with Renal Syndrome in Asia: History, Pathogenesis, Diagnosis, Treatment, and Prevention / A. Sehgal, S. Mehta, K. Sahay, E. Martynova, **Rizvanov**, M. Baranwal, S. Chandy, S. Khaiboullina, E. Kabwe, Y. Davidyuk // *Viruses*. – 2023. – Vol.15(2):561.  
<https://doi.org/10.3390/v15020561> (Impact Factor 2021 = 5.818). Q1.
53. Shaimardanova, A.A. Gene Therapy of Sphingolipid Metabolic Disorders. / A.A. Shaimardanova, V.V. Solovyeva, S.S. Issa, **A. Rizvanov** // *International Journal of Molecular Sciences*. – 2023. – Vol.24(4):3627.  
<https://doi.org/10.3390/ijms24043627> (Impact Factor 2021 = 6.208). Q1.
54. Martynova, E. Seasonal Changes in Serum Metabolites in Multiple Sclerosis Relapse / E. Martynova, T. Khaibullin, I. Salafutdinov, M. Markelova, A. Laikov, L. Lopukhov, R. Liu, K. Sahay, M. Goyal, M. Baranwal, **A. Rizvanov**, S. Khaiboullina // *International Journal of Molecular Sciences*. – 2023. – Vol.24(4):3542.  
<https://doi.org/10.3390/ijms24043542> (Impact Factor 2021 = 6.208). Q1.
55. Filin, I.Y. Cell Immunotherapy against Melanoma: Clinical Trials Review / I.Y. Filin, Y.P. Mayasin, C.B. Kharisova, A.V. Gorodilova, K.V. Kitaeva, D.S. Chulpanova, V.V. Solovyeva, **A. Rizvanov** // *International Journal of Molecular Sciences*. – 2023. – Vol.24(3):2413. <https://doi.org/10.3390/ijms24032413> (Impact Factor 2021 = 6.208). Q1.
56. Chulpanova, D.S. Cytochalasin B-Induced Membrane Vesicles from TRAIL-Overexpressing Mesenchymal Stem Cells Induce Extrinsic Pathway of Apoptosis in Breast Cancer Mouse Model / D.S. Chulpanova, T.V. Pukhalskaia, Z.E. Gilazieva,

- Y.V. Filina, M.N. Mansurova, **A. Rizvanov**, V.V. Solovyeva // Current Issues in Molecular Biology. – 2023. – Vol.45(1):571-592.  
<https://doi.org/10.3390/cimb45010038> (Impact Factor 2021 = 2.976). Q2.
57. Kabwe, E. Puumala Orthohantavirus Reassortant Genome Variants Likely Emerging in the Watershed Forests / E. Kabwe, A.F. Shamsutdinov, S. Suleimanova, E.V. Martynova, R.K. Ismagilova, V.G. Shakirova, T.A. Savitskaya, G.S. Isaeva, **A. Rizvanov**, S.F. Khaiboullina, S.P. Morzunov, Y.N. Davidyuk // International Journal of Molecular Sciences. – 2023. – Vol.24(2):1018.  
<https://doi.org/10.3390/ijms24021018> (Impact Factor 2021 = 6.208). Q1.
58. Chulpanova, D.S. The Role of Cancer Stem Cells and Their Extracellular Vesicles in the Modulation of the Antitumor Immunity / D.S. Chulpanova, **A. Rizvanov**, V.V. Solovyeva // International Journal of Molecular Sciences. – 2023. – Vol.24(1):395. <https://doi.org/10.3390/ijms24010395> (Impact Factor 2021 = 6.208). Q1.
59. **Rizvanov, A.A.** Biomarkers and Pathogenesis of Infectious and Autoimmune Diseases / **A. Rizvanov** // Pathogens. – 2022. – Vol.12(1):14.  
<https://doi.org/10.3390/pathogens12010014> (Impact Factor 2021 = 4.531). Q2.
60. Davletshin, E. Combined Approaches Leading to Synergistic Therapeutic Effects in Spinal Cord Injury: State of the Art / E. Davletshin, D. Sabirov, **Rizvanov**, Ya. Mukhamedshina // Frontiers in Bioscience (Landmark Ed). – 2022. – Vol.27(12), 334. <https://doi.org/10.31083/j.fbl2712334> (Impact Factor 2021 = 3.115). Q2.
61. Kostennikov, A. A Comparative Study of Mesenchymal Stem Cell-Derived Extracellular Vesicles' Local and Systemic Dose-Dependent Administration in Rat Spinal Cord Injury / A. Kostennikov, I. Kabdesh, D. Sabirov, A. Timofeeva, A. Rogozhin, I. Shulman, **Rizvanov**, Y. Mukhamedshina // Biology. – 2022. – Vol.11(12):1853. <https://doi.org/10.3390/biology11121853> (Impact Factor 2021 = 5.168). Q1.
62. Simpson, S. Canine osteosarcoma in comparative oncology: Molecular mechanisms through to treatment discovery / S. Simpson, **A. Rizvanov**, J.N. Jeyapalan, S. de Brot, C.S. Rutland // Frontiers in Veterinary Science. – 2022. – Vol.9:965391. <https://doi.org/10.3389/fvets.2022.965391> (Impact Factor 2021 = 3.471). Q1.
63. Malisheni, M.M. SARS-CoV-2 Antibody Effectiveness Is Influenced by Non-Epitope Mutation/Binding-Induced Denaturation of the Epitope 3D Architecture / M.M. Malisheni, M. Bates, **A. Rizvanov**, P.A. MacAry // Pathogens. – 2022. – Vol.11(12):1437. <https://doi.org/10.3390/pathogens11121437> (Impact Factor 2021 = 4.531). Q2.
64. Kitaeva, K.V. Characteristics and Resistance to Cisplatin of Human Neuroblastoma Cells Co-Cultivated with Immune and Stromal Cells / K.V. Kitaeva, D.S. Chulpanova, M.N. Zhuravleva, I.Y. Filin, R.M. Deviatiiarov, A.C. Ballard-Reisch, **A. Rizvanov**, V.V. Solovyeva // Bioengineering. – 2022. – Vol.9(11):655.  
<https://doi.org/10.3390/bioengineering9110655>



(Impact Factor 2021 = 5.046). Q2.

65. Filin, I.Y. Tumor-Derived Membrane Vesicles from the IL-2 Overexpression Melanoma Cells Affect on the Expression of Surface Markers of Human Peripheral Blood Mononuclear Cells In Vitro / I.Y. Filin, K.V. Kitaeva, D.S. Chulpanova, **A. Rizvanov**, E.R. Akhmetzyanova, V.V. Solovyeva // BioNanoScience. – 2022. – <https://doi.org/10.1007/s12668-022-01044-3> (Scopus, Q3).
66. Gilazieva, Z. Comparative Analysis of Natural and Cytochalasin B-Induced Membrane Vesicles from Tumor Cells and Mesenchymal Stem Cells / Z. Gilazieva, D. Chulpanova, A. Ponomarev, I. Filin, E. Garanina, **Rizvanov**, V. Solovyeva // Current Issues in Molecular Biology. – 2022. – Vol.44(11):5363-5378. <https://doi.org/10.3390/cimb44110363> (Impact Factor 2021 = 2.976). Q2.
67. Aimaletdinov, A. Isolation, culturing and 3D bioprinting equine myoblasts / A. Aimaletdinov, M. Abyzova, I. Kurilov, A. Yuferova, C. Rutland, **Rizvanov**, E. Zakirova // Biological Communications. – 2022. – 67(3), 152–159. <https://doi.org/10.21638/spbu03.2022.302> (SCOPUS). Q3.
68. Liu, R. Autoreactive lymphocytes in multiple sclerosis: Pathogenesis and treatment target / R. Liu, S. Du, L. Zhao, S. Jain, K. Sahay, **Rizvanov**, V. Lezhnyova, T. Khaibullin, E. Martynova, S. Khaiboullina, M. Baranwal // Frontiers in Immunology. – 2022. – Sep 23;13:996469. doi: 10.3389/fimmu.2022.996469. (Impact Factor 2021 = 8.786). Q1.
69. Sabirov, D. Molecular diagnostics in neurotrauma: Are there reliable biomarkers and effective methods for their detection? / D. Sabirov, S. Ogurcov, I. Baichurina, N. Blatt, **Rizvanov**, Y. Mukhamedshina // Frontiers Molecular Biosciences. – 2022. – 9:1017916. doi: 10.3389/fmolb.2022.1017916 (Impact Factor 2021 = 4.615). Q1.
70. Tezcan, G. Azithromycin and Ceftriaxone Differentially Activate NLRP3 in LPS Primed Cancer Cells / G. Tezcan, M. Alsaadi, S. Hamza, E.E. Garanina, E.V. Martynova, G.R. Ziganshina, E.R. Farukshina, **A. Rizvanov**, S.F. Khaiboullina // International Journal of Molecular Sciences. – 2022. – Vol.23(16):9484. [0.3390/ijms23169484](https://doi.org/10.3390/ijms23169484) (Impact Factor 2021 = 6.208). Q1.
71. Zakirova, E. Artificial microvesicles: new perspective on healing tendon wounds / E. Zakirova, A. Aimaletdinov, M. Mansurova, A. Titova, I. Kurilov, C.S. Rutland, A. Malanyeva, **Rizvanov** // Cells Tissues Organs. – 2022. – Sep 1. doi: 10.1159/000526845 (Impact Factor 2020 = 2.208). Q2.
72. Filina, Y.V. Mechanisms of ERK phosphorylation triggered via mouse formyl peptide receptor 2 / Y.V. Filina, I.V. Tikhonova, A.G. Gabdoulkhakova, **A. Rizvanov**, V.G. Safronova // Biochimica et Biophysica Acta - Molecular Cell Research. – 2022. – Sep 7:119356. doi: 10.1016/j.bbamcr.2022.119356. Epub ahead of print. (Impact Factor 2020 = 5.011). Q2.

73. Chulpanova, D.S. Contribution of tumor-derived extracellular vesicles to malignant transformation of normal cells / D.S. Chulpanova, T.V. Pukhalskaia, **A. Rizvanov**, V.V. Solovyeva // Bioengineering (Basel). – 2022. – Vol. 9 (6). – Article ID 245. doi: 10.3390/bioengineering9060245. (CiteScore = 6.1, Q2).
74. Gilazieva, Z. The Dual Role of Mesenchymal Stromal Cells and Their Extracellular Vesicles in Carcinogenesis / Z. Gilazieva, A. Ponomarev, **Rizvanov**, V. Solovyeva // Biology. – 2022. Vol. 11. – P. 1-24. <https://doi.org/10.3390/biology11060813> (Impact Factor = 5,079). Q1.
75. Shaimardanova, A.A. Gene and Cell Therapy for Epilepsy: A Mini Review / A.A. Shaimardanova, D.S. Chulpanova, A.I. Mullagulova, Z. Afawi, R.G. Gamirova, V.V. Solovyeva, **A. Rizvanov** // Frontiers in Molecular Neuroscience. – 2022. – Vol. 15. – Art.ID 868531. DOI=10.3389/fnmol.2022.868531. (Impact Factor 2020 = 5.639). Q1.
76. Garanina, E. Antibody and T Cell Immune Responses to SARS-CoV-2 Peptides in COVID-19 Convalescent Patients / E. Garanina, S. Hamza, R.J. Stott-Marshall, E. Martynova, M. Markelova, Y. Davidyuk, V. Shakirova, N. Kaushal, M. Baranwal, I.M. Khaertynova, **Rizvanov**, T.L. Foster, S. Khaiboullina // Frontiers in Microbiology. – 2022. – Vol. 13:842232. doi: 10.3389/fmicb.2022.842232. (Impact Factor 2020 = 5.640). Q1.
77. Chulpanova, D.S. Current Strategies for the Gene Therapy of Autosomal Recessive Congenital Ichthyosis and Other Types of Inherited Ichthyosis / D.S. Chulpanova, A.A. Shaimardanova, A.S. Ponomarev, S. Elsheikh, **A. Rizvanov**, V.V. Solovyeva // International Journal Molecular Sciences. – 2022. – Vol. 23(5):2506. doi: 10.3390/ijms23052506 (Impact Factor 2021 = 6.208). Q1.
78. Martynova, E. Inflammasome Contribution to the Activation of Th1, Th2, and Th17 Immune Responses / E. Martynova, **Rizvanov**, R.A. Urbanowicz, S. Khaiboullina // Frontiers in Microbiology. – 2022. – Vol. 13, Art. 851835. doi: 10.3389/fmicb.2022.851835 (Impact Factor 2020 = 5.640). Q1.
79. Ravilov, R. Kh. Viral Vector Vaccines Against ASF: Problems and Prospectives / R. Kh. Ravilov, **A. Rizvanov**, D.N. Mingaleev, A.G. Galeeva, E.Yu. Zakirova, E.A. Shuralev, C.S. Rutland, N.I. Khammadoxov, M.A. Efimova // Frontiers in Veterinary. – 2022. – Vol. 9. DOI: 10.3389/fvets.2022.830244 (Impact Factor 2020 = 3.412). Q1.
80. Zhdanova, D. Intranasal Administration of Microvesicles in the Brain of Mice with Induced Model of Alzheimer's Type of Neurodegeneration / D. Zhdanova, M. Gomzikova, N. Bobkova, I. Starostina, V. Kovalev, **Rizvanov** // BioNanoScience. – 2022. – Vol. 12(2). – P. 685–692. <https://doi.org/10.1007/s12668-022-00972-4> (Scopus, Q3).
81. Martynova, E. Immunogenic SARS-CoV-2 S and N Protein Peptide and Cytokine Combinations as Biomarkers for Early Prediction of Fatal COVID-19 / E. Martynova, Sh. Hamza, M. Markelova, E. Garanina, Yu. Davidyuk, V. Shakirova, N. Kaushal, M. Baranwal, R.J. Stott-Marshall, T.L. Foster, **Rizvanov**, S. Khaiboullina // Frontiers in Immunology. – 2022. – Vol. 13. – Art.ID 830715

- doi: 10.3389/fimmu.2022.830715 (Impact Factor 2020 = 7.561). Q1.
82. Kabwe, E. Analysis of Puumala orthohantavirus Genome Variants Identified in the Territories of Volga Federal District / E. Kabwe, W. Al Sheikh, A.F. Shamsutdinov, R.K. Ismagilova, E.V. Martynova, O.V. Ohlopkova, Y.A. Yurchenko, T.A. Savitskaya, G.S. Isaeva, S.F. Khaiboullina, **A. Rizvanov**, S.P. Morzunov, Y.N. Davidyuk // Tropical Medicine and Infectious Disease. - 2022. - Vol. 7, № 3: 46. doi: 10.3390/tropicalmed7030046 (Scopus). Q1.
83. Klapan, K. Autophagy and Skin Diseases / K. Klapan, D. Simon, A. Karaulov, M. Gomzikova, **Rizvanov**, Sh. Yousefi, H.-U. Simon // Frontiers in Pharmacology. - 2022. - Vol. 13. doi: 10.3389/fphar.2022.844756 (Impact Factor 2020 = 5.810). Q1.
84. Akhmetzyanova, E.R. Increasing Severity of Spinal Cord Injury Results in Microglia/Macrophages With Annular-Shaped Morphology and No Change in Expression of CD40 and Tumor Growth Factor- $\beta$  During the Chronic Post-injury Stage / E.R. Akhmetzyanova, A.V. Timofeeva, D.K. Sabirov, A.A. Kostennikov, A.A. Rogozhin, V. James, S.S. Arkhipova, **A. Rizvanov**, Y.O. Mukhamedshina // Frontiers in Molecular Neuroscience. - 2022. - Vol. 14. - Art.ID 802558. doi: 10.3389/fnmol.2021.802558. (Impact Factor 2020 = 5.639). Q1.
85. Issa, Sh.S. Mesenchymal Stem Cell-Based Therapy for Lysosomal Storage Diseases and Other Neurodegenerative Disorders / Sh.S. Issa, A.A. Shaimardanova, V.V. Valiullin, **A. Rizvanov**, V.V. Solovyeva // Frontiers in Pharmacology. - 2022. - Vol. 13. - Art.ID 859516. DOI=10.3389/fphar.2022.859516 (Impact Factor 2020 = 5.810). Q1.
86. Ponomarev, A. Intrinsic and extrinsic factors impacting cancer stemness and tumor progression / A. Ponomarev, Z. Gilazieva, V. Solovyeva, C. Allegrucci, **Rizvanov** // Cancers. - 2022. - Vol. 14 (4). - Article ID 970. doi: 10.3390/cancers14040970 (IF WoS 2020 = 6.639, Q1/CiteScore = 4.4, Q1)
87. Titov, A. Knowns and Unknowns about CAR-T Cell Dysfunction / A. Titov, Ya. Kaminskiy, I. Ganeeva, E. Zmievsckaya, A. Valiullina, A. Rakhmatullina, A. Petukhov, R. Miftakhova, **Rizvanov**, E. Bulatov // Cancers. - 2022. - Vol. 14 (4). - Article ID 1078. <https://doi.org/10.3390/cancers14041078> (IF WoS 2020 = 6.639, Q1/CiteScore = 4.4, Q1)
88. Stojkov, D. Physiological and Pathophysiological Roles of Metabolic Pathways for NET Formation and Other Neutrophil Functions / Stojkov D., Gigon L., Peng Sh., Lukowski R., Ruth P., Karaulov A., **Rizvanov A.**, Barlev N. A., Yousefi Sh., Simon H.-U. // Frontiers in Immunology. - 2022. - Vol.13. - Art.ID 826515DOI: 10.3389/fimmu.2022.826515 (Impact Factor 2020 = 7.561). Q1.

89. Kabdesh, I.M. Cellular and Molecular Gradients in the Ventral Horns With Increasing Distance From the Injury Site After Spinal Cord Contusion / I.M. Kabdesh, Y.O. Mukhamedshina, S.S. Arkhipova, D.K. Sabirov, M.S. Kuznecov, A.B. Vyshtakalyuk, **Rizvanov**, V. James, Yu.A. Chelyshev // *Frontiers in Cellular Neuroscience*. – 2022. – Vol.16 DOI: 10.3389/fncel.2022.817752 (Impact Factor 2020 = 5.505). Q1.
90. Vrana, N.E. From 3D printing to 3D bioprinting: the material properties of polymeric material and its derived bioink for achieving tissue specific architectures / N.E. Vrana, S. Gupta, K. Mitra, **A. Rizvanov**, V.V. Solovyeva, E. Antmen, M. Salehi, A. Ehterami, L. Pourchet, J. Barthes, C.A. Marquette, M. von Unge, C.-Y. Wang, P.-L. Lai, A. Bit // *Cell and Tissue Banking*. – 2022. doi: 10.1007/s10561-021-09975-z. (Impact Factor 2020 = 1.522, Q4/CiteScore = 2.7, Q3)
91. Yakubova, A. Genomic Screening of Chronic Migraine Patients Identified Genes Linked to Drug and Endogenous Substances Metabolism / A. Yakubova, E. Shagimardanova, T. Grigoryeva, E. Boulygina, L. Shigapova, M. Siniagina, N.L. Blatt, R. Giniatullin, **A. Rizvanov** // *BioNanoScience*. – 2022. – <https://doi.org/10.1007/s12668-021-00934-2> (SCOPUS, Q3).
92. Shkair, L. Immunogenic Properties of MVs Containing Structural Hantaviral Proteins: An Original Study / L. Shkair, E.E. Garanina, E.V. Martynova, A.I. Kolesnikova, S.S. Arkhipova, A.A. Titova, **A. Rizvanov**, S.F. Khaiboullina // *Pharmaceutics*. – 2022. – Vol. 14, 93. <https://doi.org/10.3390/pharmaceutics14010093> (Impact Factor 2020 = 6.321). Q1.
93. Shakirova, V. Serum Cytokine Alterations Associated with Age of Patients with Nephropathia Epidemica / V. Shakirova, I. Khaertynova, M. Markelova, R. Tarlinton, J. Behnke, E. Martynova, E. Garanina, **Rizvanov**, S. Khaiboullina // *BioMed Research International*. – 2022. – Vol. 2022, Article ID 4685288 <https://doi.org/10.1155/2022/4685288> (Impact Factor 2020 = 3.411). Q2.
94. Baichurina, I. The Study of Cerebrospinal Fluid microRNAs in Spinal Cord Injury and Neurodegenerative Diseases: Methodological Problems and Possible Solutions / I. Baichurina, V. Valiullin, V. James, **Rizvanov**, Y. Mukhamedshina // *International Journal of Molecular Sciences*. – 2022. – Vol. 23(1):114. <https://doi.org/10.3390/ijms23010114> (Impact Factor 2021 = 6.208). Q1.
95. Idrisova, K.F. Application of neurotrophic and proangiogenic factors as therapy after peripheral nervous system injury / K.F. Idrisova, A.K. Zeinalova, G.A. Masgutova, A.A. Bogov, C. Allegrucci, V.Y. Syromiatnikova, I.I. Salafutdinov, E.E. Garanina, D.I. Andreeva, A.A. Kadyrov, **A. Rizvanov**, R.F. Masgutov // *Neural Regeneration Research*. – 2022. – Vol. 17. – Issue 6. – P. 1240-1247. doi: 10.4103/1673-5374.327329. (Impact Factor 2020 = 3.171). Q2.

96. Shaimardanova, A.A. Functionality of a bicistronic construction containing HEXA and HEXB genes encoding  $\beta$ -hexosaminidase A for cell-mediated therapy of GM2 gangliosidoses / A.A. Shaimardanova, D.S. Chulpanova, V.V. Solovyeva, A.M. Aimaletdinov, **A. Rizvanov** // Neural Regeneration Research. – 2022. – Vol. 17. – Issue 1. – P. 122-129. doi: 10.4103/1673-5374.314310 (Impact Factor 2020 = 3.171). Q2.
97. Solovyeva, V.V. Analysis of the Interaction of Human Neuroblastoma Cell-Derived Cytochalasin B Induced Membrane Vesicles with Mesenchymal Stem Cells Using Imaging Flow Cytometry / V.V. Solovyeva, K.V. Kitaeva, D.S. Chulpanova, S. Arkhipova, I.Yu. Filin, **A.A. Rizvanov** // BioNanoScience. – 2022. – doi: 10.1007/s12668-021-00931-5 (SCOPUS, Q3).
98. Chulpanova, D.S. In Vivo Visualization of Stable Neuroblastoma Cell Lines with Overexpression of Firefly Luciferase or Far-Red Fluorescent Protein / D.S. Chulpanova, L.G. Tazetdinova, S.S. Arkhipova, M.O. Mavlikeev, A.I. Mullagulova, **A. Rizvanov**, V.V. Solovyeva // BioNanoScience. – 2022. – Vol.12. – P. 662–669. – DOI: 10.1007/s12668-022-00967-1 (SCOPUS, Q3).
99. Zakirova, E. Application of Mesenchymal Stem Cells Derived Artificial Microvesicles for the Treatment of Canine Skin Wound / E. Zakirova, A. Valeeva, S. Sofronova, M. Tambovsky, C. Rutland, **Rizvanov**, M. Gomzikova // BioNanoScience. – 2022. – Vol.12. – P. 83–88. – DOI: 10.1007/s12668-021-00928-0 (SCOPUS, Q3).
100. Magid, E. Automating pandemic mitigation / E. Magid, A. Zakiev, T. Tsoy, R. Lavrenov, **Rizvanov** // Advanced Robotics. – 2021. – Vol. 35. – [Is. 9](#). – P. 572-589. DOI: 10.1080/01691864.2021.1905059 (Impact Factor 2020 = 1.699). Q4.
101. Filina, Yu.V. MAP kinases in regulation of NOX activity stimulated through two types of formyl peptide receptors in murine bone marrow granulocytes / Yu.V. Filina, A.G. Gabdoulkhakova, **A. Rizvanov**, V.G. Safronova // Cellular Signalling. – 2021. – Vol. 90. – Art.110205. <https://doi.org/10.1016/j.cellsig.2021.110205>. (Impact Factor 2020 = 4.315). Q3.
102. Martynova, E. Long Term Immune Response Produced by the SputnikV Vaccine // E. Martynova, S. Hamza, E.E. Garanina, E. Kabwe, M. Markelova, V. Shakirova, I.M. Khaertynova, N. Kaushal, M. Baranwal, **A. Rizvanov**, R.A. Urbanowicz, S.F. Khaiboullina / International Journal of Molecular Sciences. – 2021. – Vol. 22. – Art. 11211. <https://doi.org/10.3390/ijms222011211> (Impact Factor 2021 = 6.208). Q1.
103. Şenkal, S. Human ESC-derived Neuromesodermal Progenitors (NMPs) Successfully Differentiate into Mesenchymal Stem Cells (MSCs) / Şenkal S., Hayal T.B., Sağraç D., Şişli B., Asutay A.B., Kıratlı B., Sümer E., **Rizvanov A.A.**, Şahin F., Doğan A. // Stem Cell Reviews and Reports. – 2021. – <https://doi.org/10.1007/s12015-021-10281-0> (Impact Factor 2020 = 5.739). Q2.



104. Chulpanova, D.S. Cytochalasin B-induced membrane vesicles from human mesenchymal stem cells overexpressing TRAIL, PTEN and IFN- $\beta$ 1 can kill carcinoma cancer cells / D.S. Chulpanova, Z.E. Gilazieva, E.R. Akhmetzyanova, S.K. Kletukhina, **A. Rizvanov**, V.V. Solovyeva // Tissue and Cell. – 2021. – Vol. 73. – Art. 101664. <https://doi.org/10.1016/j.tice.2021.101664> (Impact Factor 2020 = 2.466). Q2.
105. Ryman-Tubb, T. Comparative pathology of dog and human prostate cancer / T. Ryman-Tubb, J.H. Lothion-Roy, V.M. Metzler, A.E. Harris, B.D. Robinson, **A. Rizvanov**, J.N. Jeyapalan, V.H. James, G. England, C.S. Rutland, J.L. Persson, L. Kenner, M.A. Rubin, N.P. Mongan, S. de Brot // Veterinary Medicine and Science. – 2021. – P. 1-11. <https://doi.org/10.1002/vms3.642> (Impact Factor 2020 = 1.95). Q2.
106. Shaimardanova, A.A. Serum Cytokine Profile, Beta-Hexosaminidase A Enzymatic Activity and GM2 Ganglioside Levels in the Plasma of a Tay-Sachs Disease Patient after Cord Blood Cell Transplantation and Curcumin Administration: A Case Report / A.A. Shaimardanova, D.S. Chulpanova, V.V. Solovyeva, E.E. Garanina, I.I. Salafutdinov, A.V. Laikov, V.V. Kursenko, L. Chakrabarti, E.Y. Zakharova, T.M. Bukina, G.V. Baydakova, **A. Rizvanov** // Life. – 2021. – Vol. 11, Art. 1007. <https://doi.org/10.3390/life11101007> (Impact Factor 2020 = 3.817). Q2.
107. Ivan, Y. Recent Advances in Experimental Dendritic Cell Vaccines for Cancer / Y. Ivan, K.V. Kitaeva, C.S. Rutland, **A. Rizvanov**, V.V. Solovyeva // Frontiers in Oncology. – 2021. – Vol. 11. – Art. 730824. doi: 10.3389/fonc.2021.730824 (Impact Factor 2020 = 6.244) Q1.
108. Davidyuk, Y.N. The Distribution of Puumala orthohantavirus Genome Variants Correlates with the Regional Landscapes in the Trans-Kama Area of the Republic of Tatarstan / Y.N. Davidyuk, E. Kabwe, A.F. Shamsutdinov, A.V. Knyazeva, E.V. Martynova, R.K. Ismagilova, V.A. Trifonov, T.A. Savitskaya, G.S. Isaeva, R.A. Urbanowicz, S.F. Khaiboullina, **A. Rizvanov**, S.P. Morzunov // Pathogens. – 2021. – Vol. 10. – Art. 1169. <https://doi.org/10.3390/pathogens10091169> (Impact Factor 2019 = 3.492) Q1.
109. Alsaadi, M. Doxycycline Attenuates Cancer Cell Growth by Suppressing NLRP3-Mediated Inflammation / M. Alsaadi, G. Tezcan, E.E. Garanina, S. Hamza, A. McIntyre, **A. Rizvanov**, S.F. Khaiboullina // Pharmaceuticals. – 2021. – Vol. 14. – Art. 852. <https://doi.org/10.3390/ph14090852> (Impact Factor 2020 = 5.863). Q1.
110. Ataei, A. Filtering of the Gene Signature as the Predictors of Cisplatin-Resistance in Ovarian Cancer / A. Ataei, S. Arab, J. Zahiri, A. Rajabpour, K. Kletenkov, **Rizvanov** // Iranian Journal of Biotechnology. – 2021. – Vol.19(3). – P. 48-59. doi: 10.30498/ijb.2021.209370.2643. (Impact Factor 2020 = 0.973). Q4.

111. Chasov, V. Promising New Tools for Targeting p53 Mutant Cancers: Humoral and Cell-Based Immunotherapies / V. Chasov, M. Zaripov, R. Mirgayazova, R. Khadiullina, E. Zmievskaya, I. Ganeeva, A. Valiullina, **Rizvanov**, E. Bulatov // *Frontiers in Immunology*. – 2021. – Vol. 12. – Art.707734. doi: 10.3389/fimmu.2021.707734 (Impact Factor 2020 = 7.561). Q1.
112. Gening, S.O. The Detection of Stem-Like Circulating Tumor Cells Could Increase the Clinical Applicability of Liquid Biopsy in Ovarian Cancer / S.O. Gening, T.V. Abakumova, D.U. Gafurbaeva, **A. Rizvanov**, I.I. Antoneeva, R.R. Miftakhova, A.B. Peskov, T.P. Gening // *Life*. – 2021. – Vol. 11. – Issue 8. – Art. 815. doi: 10.3390/life11080815 (Impact Factor 2020 = 3.817). Q2.
113. Rutland, C.S. Immunohistochemical Characterisation of GLUT1, MMP3 and NRF2 in Osteosarcoma / C.S. Rutland, J.M. Cockcroft, J. Lothion-Roy, A.E. Harris, J.N. Jeyapalan, S. Simpson, A. Alibhai, C. Bailey, A.C. Ballard-Reisch, **A. Rizvanov**, M.D. Dunning, S. de Brot, N.P. Mongan // *Frontiers Veterinary Science*. – 2021. – Vol. 8. – Ar. ID 704598. – 10 pages. doi: 10.3389/fvets.2021.704598 (Impact Factor 2020 = 3.412) Q1.
114. Халирахманов, А.Ф. Патогенез, диагностика и лечение гемостатических нарушений у пациентов с COVID-19 / А.Ф. Халирахманов, К.Ф. Идрисова, Р.Ф. Гайфуллина, С.В. Зинченко, Р.И. Литвинов, А.З. Шарафеев, А.П. Киясов, А.А. Ризванов // *Acta Naturae*. – 2021. – Том 13, № 2(49). – С. 79-84. doi: 10.32607/actanaturae.11182 (Impact Factor 2020 = 3.171).
115. Ataei, A. Topological Analysis of Regulatory Networks Reveals Functionally Key Genes and miRNAs Involved in the Differentiation of Mesenchymal Stem Cells / A. Ataei, M. Poorebrahim, A. Rajabpour, **Rizvanov**, S. Arab // *Iranian Journal of Biotechnology*. – 2021. – Vol. 19(1). – P. 9-21. doi: 10.30498/IJB.2021.2565. (Impact Factor 2020 = 0.973). Q4.
116. Kabdesh, I.M. The Function of NG2/CSPG4-expressing Cells in the Rat Spinal Cord Injury: An Immunoelectron Microscopy Study / I.M. Kabdesh, S.S. Arkhipova, Y.O. Mukhamedshina, V. James, **A. Rizvanov**, Y.A. Chelyshev // *Neuroscience*. – 2021. – Vol. 467. – P. 142-149. doi: 10.1016/j.neuroscience.2021.05.031 (Impact Factor 2020 = 3.056). Q2.
117. Gatina, D.Z. Proangiogenic Effect of 2A-Peptide Based Multicistronic Recombinant Constructs Encoding VEGF and FGF2 Growth Factors / D.Z. Gatina, E.E. Garanina, M.N. Zhuravleva, G.E. Synbulatova, A.F. Mullakhmetova, V.V. Solovyeva, A.P. Kiyasov, C.S. Rutland, **A. Rizvanov**, I.I. Salafutdinov // *International Journal of Molecular Sciences*. – 2021. – Vol. 22(11):5922. doi: 10.3390/ijms22115922 (Impact Factor 2021 = 6.208). Q1.

118. Kletukhina, S.K. Storage stability and delivery potential of cytochalasin B induced membrane vesicles / S.K. Kletukhina, O.A. Neustroeva, S.V. Kurbangaleeva, I.I. Salafutdinov, A.M. Rogov, V. James, **A. Rizvanov**, M.O. Gomzikova // Biotechnology Reports. – 2021. – Vol. 30. – e00616. doi: 10.1016/j.btre.2021.e00616. Q1.
119. Gomzikova, M.O. Mitochondria Donation by Mesenchymal Stem Cells: Current Understanding and Mitochondria Transplantation Strategies / M.O. Gomzikova, V. James, **A. Rizvanov** // Front Cell Dev Biol. – 2021. – Vol. 9. – Ar.ID 653322. doi: 10.3389/fcell.2021.653322 (Impact Factor 2019 = 5.201) Q1.
120. Martynova, E. Cytokine, Chemokine, and Metalloprotease Activation in the Serum of Patients with Nephropathia Epidemica from the Republic of Tatarstan and the Republic of Mordovia, Russia / E. Martynova, Y. Davidyuk, E. Kabwe, E.E. Garanina, V. Shakirova, V. Pavelkina, Y. Uskova, R.J. Stott, T.L. Foster, M. Markelova, M. Goyal, A. Gupta, M. Bhola, V. Kumar, M. Baranwal, **A. Rizvanov**, S.F. Khaiboullina // Pathogens. – 2021. – Vol. 10. – Is. 5. – Ar.ID 527. doi: 10.3390/pathogens10050527 (Impact Factor 2019 = 3.018) Q1.
121. Sadeghi, L. Proteomic profiling of the rat hippocampus from the kindling and pilocarpine models of epilepsy: potential targets in calcium regulatory network / L. Sadeghi, **A. Rizvanov**, B. Dabirmanesh, I.I. Salafutdinov, M. Sayyah, A. Shojaei, J. Zahiri, J. Mirnajafi-Zadeh, B. Khorsand, K. Khajeh, Y. Fathollahi. // Scientific Reports. – 2021. – Vol. 11. – Is. 1. – ArID 8252. doi: 10.1038/s41598-021-87555-7 (Impact Factor 2019 = 1.341) Q1.
122. Zakirova, E.Y. Development of the New Method for the Therapy of Animal Burns / E.Y. Zakirova, A.N. Valeeva, A.M. Aimaletdinov, V.Y. Syromiatnikova, E.A. Naumenko, **A. Rizvanov** // BioNanoScience. – 2021. – Vol. 11. – Is. 1. – P. 232-237. doi: 10.1007/s12668-020-00810-5 (SCOPUS, Q3).
123. Ogurcov, S. Blood serum cytokines in patients with subacute spinal cord injury: A pilot study to search for biomarkers of injury severity / S. Ogurcov, I. Shulman, E. Garanina, D. Sabirov, I. Baichurina, M. Kuznetsov, G. Masgutova, A. Kostennikov, **Rizvanov**, V. James, Y. Mukhamedshina // Brain Sciences. – 2021. – Vol. 11. – Is. 3. – Ar.ID 322. – P. 1-12. doi: [10.3390/brainsci11030322](https://doi.org/10.3390/brainsci11030322) (Impact Factor 2019 = 0.999) Q3.
124. Ganiev, I. The treatment of articular cartilage injuries with mesenchymal stem cells in different animal species / I. Ganiev, N. Alexandrova, A. Aimaletdinov, C. Rutland, A. Malanyeva, **Rizvanov**, E. Zakirova // Open Veterinary Journal. – 2021. – Vol. 11. – Is. 1. – P. 128-134. doi: [10.4314/ovj.v11i1.19](https://doi.org/10.4314/ovj.v11i1.19) (Impact Factor 2019 = 0.793) Q2

125. Mukhamedshina, Y. Improving culture conditions, proliferation, and migration of porcine mesenchymal stem cells on spinal cord contusion injury model in vitro / Y. Mukhamedshina, M. Zhuravleva, M. Sergeev, E. Zakirova, O. Gracheva, D. Mukhutdinova, **Rizvanov** // Cells Tissues Organs. – 2020. – Vol. 209. – Is. 4-6. – P. 236-247. doi: 10.1159/000511865 (Impact Factor 2019 = 2.366).
126. Filin, I.Y. Current trends in cancer immunotherapy // I.Y. Filin, V.V. Solovyeva, K.V. Kitaeva, C.S. Rutland, **A. Rizvanov** // Biomedicines. – 2020. – Vol. 8. – Is. 12. – P. 1-36. - Ar.ID 621. doi: [10.3390/biomedicines8120621](https://doi.org/10.3390/biomedicines8120621) (Impact Factor 2019 = 4.717) Q1.
127. Aimaletdinov, A. Application of gene therapy in the treatment of superficial digital flexor tendon injury in horses / A. Aimaletdinov, G. Mindubaeva, S. Khalikova, E. Kabwe, A. Salmakova, N. Alexandrova, C. Rutland, **Rizvanov**, E. Zakirova // Open Veterinary Journal. – 2020. – Vol. 10. – Is. 3. – P. 261-266. doi: [10.4314/ovj.v10i3.3](https://doi.org/10.4314/ovj.v10i3.3) (Impact Factor 2019 = 0.793) Q2.
128. Martynova, E. Serum and cerebrospinal fluid cytokine biomarkers for diagnosis of multiple sclerosis / E. Martynova, M. Goyal, S. Johri, V. Kumar, T. Khaibullin, **A. Rizvanov**, S. Verma, S.F. Khaiboullina, M. Baranwal // Mediators of Inflammation. – 2020. – Vol. 2020. – Ar.ID 2727042. doi: 10.1155/2020/2727042 (Impact Factor 2019 = 3.758) Q2.
129. Salafutdinov, I.I. Influence of Recombinant Codon-Optimized Plasmid DNA Encoding VEGF and FGF2 on Co-Induction of Angiogenesis / I.I. Salafutdinov, I.M. Gazizov, D.K. Gatina, R.I. Mullin, A.A. Bogov, R.R. Islamov, A.P. Kiassov, R.F. Masgutov, **A. Rizvanov** // Cells 2021. – Vol. 10. – Is. 2. – Art. 432. doi: 10.3390/cells10020432 (Impact Factor 2019 = 4,366).
130. Titov, A. Adoptive Immunotherapy beyond CAR T-Cells / A. Titov, E. Zmievskaia, I. Ganeeva, A. Valiullina, A. Petukhov, A. Rakhmatullina, R. Miftakhova, M. Fainshtein, **Rizvanov**, E. Bulatov // Cancers. – 2021. – Vol. 13 (4). – Art. 743. doi: 10.3390/cancers13040743 (Impact Factor 2019 = 6,126) Q1.
131. Chulpanova, D.S. Cytochalasin B-Induced Membrane Vesicles from Human Mesenchymal Stem Cells Overexpressing IL2 Are Able to Stimulate CD8+ T-Killers to Kill Human Triple Negative Breast Cancer Cells / D.S. Chulpanova, Zarema E.G., S.K. Kletukhina, A.M. Aimaletdinov, E.E. Garanina, V. James, **A. Rizvanov**, V.V. Solovyeva // Biology. – 2021. – Vol. 10. – Art. 141. doi: 10.3390/biology10020141 (Impact Factor 2019 = [3,796](https://doi.org/10.3390/biology10020141)) Q1.
132. Tezcan, G. Therapeutic Potential of Pharmacological Targeting NLRP3 Inflammasome Complex in Cancer / G. Tezcan, E.E. Garanina, M. Alsaadi, Z.E. Gilazieva, E.V. Martinova, M.I. Markelova, S.S. Arkhipova, S. Hamza, A. McIntyre, **A. Rizvanov**, S.F. Khaiboullina // Frontiers in Immunology. – 2021. – Vol. 11. – Art. 607881. <https://doi.org/10.3389/fimmu.2020.607881> (Impact Factor 2018 = 4,53) Q1.
133. Masgutov, R. Angiogenesis and nerve regeneration induced by local administration of plasmid pBud-coVEGF165-coFGF2 into the intact rat sciatic nerve / R. Masgutov, A. Zeinalova, A. Bogov, G. Masgutova, I. Salafutdinov, E.

- Garanina, V. Syromiatnikova, K. Idrisova, A. Mullakhmetova, D. Andreeva, L. Mukhametova, A. Kadyrov, I. Pankov, **Rizvanov** // Neural Regeneration Research. – 2021. – Vol. 16, Issue 9. – P. 1882-1889. doi: 10.4103/1673-5374.306090. PMID: 33510097. (Impact Factor 2019 = 3,171) Q1
134. Shkair, L. Membrane Microvesicles as Potential Vaccine Candidates / L. Shkair, E.E. Garanina, R.J. Stott, T.L. Foster, **A. Rizvanov**, S.F. Khaiboullina // International Journal of Molecular Sciences. – 2021. – Vol. 22, Issue 3. – Ar.ID 1142. doi: 10.3390/ijms22031142. PMID: 33498909 (Impact Factor 2021 = 6.208). Q1.
135. Shulman, I. Application of Autologous Peripheral Blood Mononuclear Cells into the Area of Spinal Cord Injury in a Subacute Period: A Feasibility Study in Pigs / I. Shulman, S. Ogurcov, A. Kostennikov, A. Rogozin, E. Garanina, G. Masgutova, M. Sergeev, **Rizvanov**, Y. Mukhamedshina // Biology (Basel). – 2021. – Vol. 10, Issue 2. – P. 87. doi: 10.3390/biology10020087. PMID: 33498942.
136. Zmievskaia, E. Application of CAR-T Cell Therapy beyond Oncology: Autoimmune Diseases and Viral Infections / E. Zmievskaia, A. Valiullina, I. Ganeeva, A. Petukhov, **Rizvanov**, E. Bulatov // Biomedicines. – 2021. – Vol. 9, Issue 1. – Ar.ID E59. doi: 10.3390/biomedicines9010059. (Impact Factor 2019 = 4,717) Q1.
137. Ataei, A. Prediction of chemoresistance trait of cancer cell lines using machine learning algorithms and systems biology analysis / A. Ataei, N.S. Majidi, J. Zahiri, M. Rostami, S.Sh. Arab, **A. Rizvanov** // Journal of Big Data. – 2021. – Vol. 8, 97. <https://doi.org/10.1186/s40537-021-00477-z> (Impact Factor 2021 = 2,16) Q1
138. Jain, S. Structural and Functional Aspects of Ebola Virus Proteins / S. Jain, E. Martynova, **A. Rizvanov**, S. Khaiboullina, M. Baranwal // Pathogens. – 2021. – Vol. 10(10):1330. <https://doi.org/10.3390/pathogens10101330>