

Сведения об официальном оппоненте

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Список основных публикаций по теме диссертации за последние 5 лет:

1. Mazin M.E., Perevalova A.M., Yarushkin A.A., Pustyl'nyak Y.A., Rogachev A.D., Prokopyeva E.A., Gulyaeva L.F., Pustyl'nyak V.O. Constitutive androstane receptor agonist initiates metabolic activity required for hepatocyte proliferation // *Biochem.* – 2023. – V. 88. – No. 8. – P.1061–1069.
2. Pustyl'nyak V.O., Alekseenok E.Y., Perevalova A.M., Kozlov V. V, Gulyaeva L.F. Tumor suppressor PTEN regulation by tobacco smoke in lung squamous-cell carcinoma based on bioinformatics analysis // *Heliyon.* – 2023. – V. 9. – No. 8. – Article No. e19044.
3. Savkova A., Gulyaeva L., Gerasimov A., Krasil'nikov S. Genetic analysis of multiple primary malignant tumors in women with breast and ovarian cancer // *Int. J. Mol. Sci.* – 2023. – V. 24. – No. 7. – Article No. 6705.
4. Akhmetova D.A., Kozlov V. V, Gulyaeva L.F. New insight into the role of AhR in lung carcinogenesis // *Biochem.* – 2022. – V. 87. – No. 11. – P.1219–1225.
5. Perevalova A.M., Kobelev V.S., Sisakyan V.G., Gulyaeva L.F., Pustyl'nyak V.O. Role of tumor suppressor PTEN and its regulation in malignant transformation of endometrium // *Biochem.* – 2022. – V. 87. – No. 11. – P.1310–1326.
6. Kononchuk V. V, Kopeikina E. V, Kalinina T.S., Saik O. V, Alekseenok E.Y., Kolyagina M.K., Matashova V.A., Shevchenko S.P., Gulyaeva L.F., Kushlinskii N.E. Search for new target genes of microRNA for differential diagnosis of benign and malignant neoplasms of the thyroid gland by in silico methods // *Bull. Exp. Biol. Med.* – 2022. – V. 173. – No. 2. – P.246–251.
7. Kabakov A. V, Kazakov O. V, Poveshchenko A. F., Lykov A. P., Raiter T. V, Strunkin D. N., Gulyaeva L. F., Kononkov V. I., Letyagin A. Y. Correlation between structural transformations in mesenteric lymph nodes and the levels microRNA during polychemotherapy of breast cancer // *Bull. Exp. Biol. Med.* – 2022. – V. 172. – No. 4. – P.467–471.

8. Kazakov O. V, Kabakov A. V, Poveshchenko A. F., Kononchuk V. V, Strunkin D. N., Gulyaeva L. F., Kononkov V. I. Effect of photodynamic therapy on the microRNA level in breast cancer tissues of female wistar rats // Bull. Exp. Biol. Med. – 2022. – V. 173. – No. 4. – P.444–447.
9. Kalinina T., Kononchuk V., Alekseenok E., Abdullin G., Sidorov S., Ovchinnikov V., Gulyaeva L. Associations between the levels of estradiol-, progesterone-, and testosterone-sensitive miRNAs and main clinicopathologic features of breast cancer // J. Pers. Med. – 2021. – V. 12. – No. 1. – Article No. 4.
10. Kalinina T., Kononchuk V., Klyushova L., Gulyaeva L. Effects of endocrine disruptors o,p'-dichlorodiphenyltrichloroethane, p,p'-dichlorodiphenyltrichloroethane, and endosulfan on the expression of estradiol-, progesterone-, and testosterone-responsive microRNAs and their target genes in MCF-7 cells // Toxics. – 2022. – V. 10. – No. 1. – Article No. 25.
11. Chernova G. E., Kozlov V. V., Gulyaeva L. F. Survival analysis of patients with non-small cell lung cancer in Novosibirsk region from 2015 to 2019 // Almanac of Clinical Medicine. – 2022. – V. 50. – No. 1. – P.56–64.
12. Kalinina T.S., Kononchuk V. V., Sidorov S. V., Obukhova D.A., Abdullin G.R., Gulyaeva L.F. Oxytocin receptor expression is associated with estrogen receptor status in breast tumors // Biochem. – 2021. – V. 15. – No. 4. – P.320–325.
13. Калинина Т. С., Коночнук В. В., Сидоров С. В., Обухова Д. А., Абдуллин Г. Р., Гуляева Л. Ф. Экспрессия окситоцинового рецептора ассоциирована со статусом эстрогенового рецептора в опухолях молочной железы // Биомедицинская химия. – 2021. – Т. 67. – № 4. – С. 360–365.
14. Kalinina T. S., Kononchuk V. V, Gulyaeva L. F. Expression of estrogen-, progesterone-, and androgen-responsive genes in MCF-7 and MDA-MB-231 cells treated with o,p'-DDT, p,p'-DDT, or endosulfan // J. Biochem. Mol. Toxicol. – 2021. – V. 35. – No. 6. – P.1–8.
15. Kalinina T., Kononchuk V., Alekseenok E., Obukhova D., Sidorov S., Strunkin D., Gulyaeva L. Expression of estrogen receptor- and progesterone receptor-regulating microRNAs in breast cancer // Genes. – 2021. – V. 12. – No. 4. – Article No. 582.
16. Kazakov O. V, Strunkin D. N., Poveshchenko A. F., Orlov N. B., Poveshchenko O. V, Kabakov A. V, Sultanova A. N., Raiter T. V, Lykov A. P., Gulyaeva L. F., Kononkov V. I. Influence of surgical treatment and neoadjuvant therapy of chemically induced breast cancer on correlation of cytokine concentrations in the lymph with

- structural transformations in the mesenteric lymph nodes // *Bull. Exp. Biol. Med.* – 2021. – V. 171. – No. 1. – P.68–73.
17. Chanyshev M.D., Yarushkin A.A., Koldysheva E. V, Lushnikova E.L., Gulyaeva L.F. Downregulation of *Acat1* by miR-21 may participate in liver fibrosis upon chronic DDT exposure // *Toxicol. Mech. Methods.* – 2020. – V. 30. – No. 8. – P.562–569.
18. Filippov S. V., Yarushkin A.A., Yakovleva A.K., Kozlov V. V., Gulyaeva L.F. The effect of benzo[a]pyrene on the expression of AhR-regulated microRNA in lungs of female and male rats // *Biochem.* – 2020. – V. 14. – No. 4. – P.347–355.
19. Pustyl'nyak Y.A., Gulyaeva L.F., Pustyl'nyak V.O. Noncanonical constitutive androstane receptor signaling in gene regulation // *Int. J. Mol. Sci.* – 2020. – V. 21. – No. 18. – Article No. 6735.
20. Boyarskikh U.A., Gulyaeva L.F., Avdalyan A.M., Kechin A.A., Khrapov E.A., Lazareva D.G., Kushlinskii N.E., Melkonyan A., Arakelyan A., Filipenko M.L. Spectrum of TP53 mutations in BRCA1/2 associated high-grade serous ovarian cancer // *Front. Oncol.* – 2020. – V. 10. – Article No. 1103.
21. Kalinina T.S., Kononchuk V. V., Sidorov S. V., Gulyaeva L.F. Analysis of prolactin receptor expression in breast cancer subtypes // *Biochem.* – 2020. – V. 14. – No. 3. – P.266–271.
22. Филиппов С. В. , Ярушкин А. А., Яковлева А. К., Козлов В. В., Гуляева Л. Ф. Влияние бенз[а]пирена на экспрессию AhR-регулируемых микроРНК в лёгких самок и самцов крыс // *Биомедицинская химия.* – 2020. – Т. 66. – № 3. – С. 224–232.
23. Kalinina T.S., Kononchuk V. V, Yakovleva A.K., Alekseenok E.Y., Sidorov S. V, Gulyaeva L.F. Association between lymph node status and expression levels of androgen receptor, miR-185, miR-205, and miR-21 in breast cancer subtypes // *Int. J. Breast Cancer.* – 2020. – V. 2020. – Article No. 3259393.
24. Калинина Т. С., Конончук В. В., Сидоров С. В., Гуляева Л. Ф. Анализ экспрессии рецептора пролактина в подтипах рака молочной железы // *Биомедицинская химия.* – 2020. – Т. 66. – № 1. – С. 89–94.
25. Jurisic V., Vukovic V., Obradovic J., Gulyaeva L. F., Kushlinskii N. E., Djordjević N. EGFR polymorphism and survival of NSCLC patients treated with TKIs: a systematic review and meta-analysis // *J. Oncol.* – 2020. – V. 2020. – Article No. 1973241
26. Filippov S. V, Yarushkin A. A., Kalinina T. S., Ovchinnikov V. Y., Knyazev R. A., Gulyaeva L. F. Effect of benzo(a)pyrene on the expression of miR-483-3p in hepatocyte primary culture and rat liver // *Biochem.* – 2019. – V. 84. – No. 10. – P.1197–1203.
27. Chanyshev M.D., Koval O.A., Nushtaeva A.A., Gulyaeva L.F. Effect of benzo[a]pyrene

- on the expression of miR-126, miR-190a and their target genes EGFL7, TP53INP1 and PHLPP1 in primary endometrial cells // *J. Biochem. Mol. Toxicol.* – 2019. – V. 33. – No. 6. – Article No. e22314.
28. Artymuk N., Zotova O., Gulyaeva L. Adenomyosis: genetics of estrogen metabolism // *Horm. Mol. Biol. Clin. Investig.* – 2019. – V. 37. – No. 2. – Article No. 20180069.
29. Nushtaeva A.A., Karpushina A.A., Ermakov M.S., Gulyaeva L.F., Gerasimov A. V, Sidorov S. V, Gayner T.A., Yunusova A.Y., Tkachenko A. V, Richter V.A., Koval O.A. Establishment of primary human breast cancer cell lines using “pulsed hypoxia” method and development of metastatic tumor model in immunodeficient mice // *Cancer Cell Int.* – 2019. – V. 19. – Article No. 46.