

# Department of Regulation of Cell Proliferation and Apoptosis

## Publications 2023

### Статті / Manuscripts:

1. **Kit Yu.** Elevation of truncated (48 kDa) form of unconventional myosin 1c in blood serum correlates with severe Covid-19 / **Yu. Kit, M. Starykovych, N. Manko, A. Orfin, T. Alexanyan, S. Tkachuk, A. Starodub, T. Luchyshyn, L. Bozhko, T. Turchyna, O. Kit, A. Sibirny, S. Souchelnytskyi, R. Stoika** // *Journal of Immunological Methods*. - 2023. – Vol. 514. – artN. 113437. Doi: <https://doi.org/10.1016/j.jim.2023.113437> (IF 2,185, Q2)

2. Paryzhak S. Silver doping of clinoptilolite particles enhances their effects on immunocompetent mammalian cells and inhibition of *Candida albicans* fungi / S. Paryzhak, T. Dumych, **O. Klyuchivska, N. Manko, G. Gryshchouk, V. Vasylechko, R. Stoika** // *Applied Nanoscience (Switzerland)*. - 2023, – Vol. 13. – P. 4817–4826, Doi: <https://doi.org/10.1007/s13204-022-02624-1> (IF 3,674, Q2)

3. Wang L. Isoliquiritigenin induces neurodevelopmental-toxicity and anxiety-like behavior in zebrafish larvae / L. Wang, L. Mou, S. Guan, A. Sik, **R. Stoika, K. Liu, M. Jin** // *Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology*, - 2023. – Vol. 266. – artN. 109555 Doi: <https://doi.org/10.1016/j.cbpc.2023.109555> (IF 4,52, Q1)

4. **Ivasechko I.** Molecular design, synthesis and anticancer activity of new thiopyrano[2,3-d]thiazoles based on 5-hydroxy-1,4-naphthoquinone (juglone) / **I. Ivasechko, A. Lozynskyi, J. Senkiv, P. Roszczenko, Y. Kozak, N. Finiuk, O. Klyuchivska, N. Kashchak, N. Manko, Z. Maslyak, D. Lesyk, A. Karkhut, S. Polovkovych, R. Czarnomysy, O. Szewczyk, A. Kozytskiy, O. Karpenko, D. Khyluk, A. Gzella, K. Bielawski, A. Bielawska, P. Dzubak, S. Gurska, M. Hajduch, R. Stoika, R. Lesyk** // *Eur J Med Chem.* – 2023. – Vol. 252. – artN. 115304. Doi: <https://doi.org/10.1016/j.ejmech.2023.115304> (IF 7,088, Q1)

5. Pokhodylo N. Bioisosteric replacement of 1H-1,2,3-triazole with 1H-tetrazole ring enhances anti-leukemic activity of (5-benzylthiazol-2-yl)benzamides / N. Pokhodylo, **N. Finiuk, O. Klyuchivska, R. Stoika, V. Matiychuk, M. Obushak** // *Eur J Med Chem.* – 2023. – Vol. 250. – artN. 115126. Doi: <https://doi.org/10.1016/j.ejmech.2023.115126> (IF 7,088, Q1)

6. Kropyvko S. Tristetraprolin expression levels and methylation status in breast cancer / S. Kropyvko A. Hubiernatorova, O. Mankovska, K. Lavrynenko, L. Syvak, N. Verovkina, S. Lyalkin, **I. Ivasechko, R. Stoika, A. Ryndtch** // *Gene Reports*. – 2023. – Vol. 30. – artN. 101718 Doi: <https://doi.org/10.1016/j.genrep.2022.101718> (IF 1,39, Q4)

7. **Panchuk R.** Cannabimimetic N-stearoylethanolamine as "double-edged sword" in anticancer chemotherapy: proapoptotic effect on tumor cells and suppression of tumor growth versus its bio-protective actions in complex with polymeric carrier on general toxicity of doxorubicin *in vivo* / **R. Panchuk, N. Skorokhyd, V. Chumak, L. Lehka, H. Kosiakova, T. Horid'ko, I. Hudz, N. Hula, A. Riabtseva, N. Mitina, A. Zaichenko, P. Heffeter, W. Berger, R. Stoika** // *Pharmaceutics*. – 2023. - Vol. 15, – N. 3. – artN. 835. Doi: <https://doi.org/10.3390/pharmaceutics15030835> (IF 6,56, Q1)

8. Gao X. Neuroprotective effect of chlorogenic acid on Parkinson's disease like symptoms through boosting the autophagy in zebrafish / X. Gao, B. Zhang, Yu. Zheng, X. Liu, **R. Panchuk**, N. Finiuk, A. Sik, **R. Stoika**, K. Liu, M. Jin // *European Journal of Pharmacology*. – 2023. - Vol. 956, – N. 5. – artN. 175950 Doi: <https://doi.org/10.1016/j.ejphar.2023.175950> (IF 5,23, Q1)

9. Datsyuk V. Multipurpose composites with switched surface functionality and morphology based on oligoperoxide-modified electrospun nanofiber / V. Datsyuk, N. Mitina, A. Zaichenko, S. Trotsenko, O. Balaban, K. Harhay, M. Teucher, O. Izhyk, I. Grygorchak, L. Sygellou, O. Trotsenko, **R. Stoika**, O. Klyuchivska // *Applied Nanoscience (Switzerland)*, - 2023. Doi: <https://doi.org/10.1007/s13204-023-02882-7> (IF 3,869, Q2)

10. Paryzhak S. Improvement of hemocompatibility of  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> nanoparticles via their covering with complex poly(N,N-dimethylacrylamide) and SiO<sub>2</sub> shell / S. Paryzhak, T. Dumych, B. Zasońska, J. Svoboda, **O. Klyuchivska**, N. Skorokhyd, Yu. Kozak, D. Horák, **R. Stoika** // *Applied Nanoscience (Switzerland)*. – 2023. Doi: <https://doi.org/10.1007/s13204-023-02905-3> (IF 3,869, Q2)

11. Finiuk N. Pyrrolidinedione-thiazolidinone hybrid molecules with potent cytotoxic effect in squamous cell carcinoma SCC-15 cells / N. Finiuk, E. Kaleniuk, S. Holota, **R. Stoika**, R. Lesyk, K. Szycowski // *Bioorganic & Medicinal Chemistry*. - 2023. - Vol. 92, – N 7. – artN. 117442. Doi: <https://doi.org/10.1016/j.bmc.2023.117442> (IF 3,461, Q2)

12. Antonyuk V. Substances of milky juice of genus lactarius fungi: chemical and toxicological characteristics / V. Antonyuk, L. Panchak, M. Tsivinska, **R. Stoika** // *Venoms and Toxins*. – 2023. - Vol. 3, – artN. e220822207860. Doi: <https://doi.org/10.2174/2666121702666220822125947>

13. Zhang MX, Active compounds from Calendula officinalis flowers act via PI3K and ERK signaling pathways to offer neuroprotective effects against Parkinson's disease / MX Zhang, Wang Rong Chun, N. Finiuk, **R. Stoika**, Franklin, W. Xue, M. Jin // *Food Science & Nutrition*. 2023. Manuscript ID FSN3-2023-06-1108 (IF 3,553, Q4)

14. Hodovanyi O. Comparative study of biotolerance characteristics of different gels composed of benzidamine and flavonoids that were developed for treatment of periodontal diseases in orthodontic patients / O. Hodovanyi, N. Chukhray, O. Martovlos, **O. Klyuchivska**, **Rostyslav Stoika** // *Wiadomosci Liekarskie*. - 2023. – Vol. LXXVI, - N 9. (IF 0,36, Q4)

15. Finiuk N. Study of the anticancer activity of N-(5-methyl-[1,3,4]thiadiazol-2-yl)-propionamide toward human tumor cells *in vitro* / N. Finiuk, I. Drapak, B. Zimenkovsky, **R. Stoika** // *Biopolymers and Cell*. – 2023. - Vol. 39, - N 1. – P. 33–41. Doi: <http://dx.doi.org/10.7124/bc.000A86> (Q4)

16. Senkiv J. Novel putative ligands of cannabinoid receptors: synthesis and effects on cell signaling and neuronal functions / J. Senkiv, A. Kryshchyshyn-Dylevych, D. Khlyuk, M. Wujec, **R. Stoika**, A.J. Irving, R. Lesyk // *Ukrainian Biochemical Journal*. – 2023. - Vol. 95, - N 1. – P. 31–43. Doi: <https://doi.org/10.15407/ubj95.01.031> (Q4)

17. Hodovanyi O. Study of cytocompatibility of different supplements in gel compositions used for the treatment of periodontal diseases in orthodontic patients via exploration of mechanisms of their cytopathic and cytoprotective effects in cultured

human and mouse cells. O. Hodovanyi, N. Chukhray, O. Martovlos, **O. Klyuchivska, I. Ivasechko, R. Stoika** // *Proceedings of the Shevchenko Scientific Society. Medical Sciences.* -2023. - Vol. 71, - N 1. – P. 33–41. Doi: <https://doi.org/10.25040/ntsh> ( Q4)

**Монографії (розділи в монографіях) / Monographs (chapters in monographs):**

«Похідні піролу в біології і медицині: синтез, протизапальна і протипухлинна дія» (за редакцією В. К. Рибальченка і Р. С. Стойки). К.: ВПЦ "Київський університет", 2023. – 279 с.

4 співробітники відділу (**Стойка Р. С., Луцик М.Д., Фінюк Н.С. і Ключівська О.Ю.**) є співавторами розділів монографії.

**Розділи у монографії / Chapters in monographs:**

**1.4. Стойка Р. С., Луцик М.Д. Імунна система і канцерогенез С. 70-100**

**3.1 Стойка Р. С., Фінюк Н.С. і Ключівська О.Ю. Антипроліферативна дія МІ-1 їндукування ним апоптозу в пухлинних клітинах *in vitro* С. 159-167**

У 2023 співробітники відділу опублікували **17 - наукових статей**, у т.ч. **14 статей** у міжнародних журналах із сумарним імпакт-фактором (IF) **52,847**.