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Kirill Odarenko is a junior researcher at the Institute of Chemical Biology and Fundamental Medicine, Novosibirsk, Russia. He earned an M.Sc. degree in Molecular Biology from Novosibirsk State University in 2022 and is currently pursuing a PhD in Biology. Kirill Odarenko's research focuses on tumor cell plasticity and its therapeutic targeting. He investigated how pentacyclic triterpenoid anticancer drugs affect the epithelial-mesenchymal transition (EMT) of tumor cells, a process that promotes migratory and invasive traits. One compound, soloxolone methyl (SM), was shown to inhibit EMT in lung cancer cells [1]. To improve brain permeability for glioblastoma treatment, The Novosibirsk Institute of Organic Chemistry developed a series of SM derivatives. Kirill Odarenko found that one derivative, soloxolone para-methylanilide, can inhibit the proneural-mesenchymal transition (PMT), an EMT-like process driving glioblastoma invasion [2]. In his recent work, he shifted to studying transcriptomic changes in glioblastoma cells during PMT to use the acquired information for computational drug-repurposing. Kirill Odarenko will present these findings in his oral presentation at BCADD-2025.

Literature:

1. Markov, A. V.; Odarenko, K. V.; Sen'kova, A. V.; Salomatina, O. V.; Salakhutdinov, N.F.; Zenkova, M.A. Cyano Enone-Bearing Triterpenoid Soloxolone Methyl Inhibits Epithelial-Mesenchymal Transition of Human Lung Adenocarcinoma Cells In Vitro and Metastasis of Murine Melanoma In Vivo. *Molecules* 2020, 25, 5925, doi:10.3390/MOLECULES25245925.
2. Odarenko, K. V.; Sen'kova, A. V.; Salomatina, O. V.; Markov, O. V.; Salakhutdinov, N.F.; Zenkova, M.A.; Markov, A. V Soloxolone Para-Methylanilide Effectively Suppresses Aggressive Phenotype of Glioblastoma Cells Including TGF-B1-Induced Glial-Mesenchymal Transition in Vitro and Inhibits Growth of U87 Glioblastoma Xenografts in Mice. *Front Pharmacol* 2024, 15, 1428924.