



مشخصات فردی

نام و نام خانوادگی: مطهره مرتضوی

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Academic education

1. **Ph.D by research.** Pharmacology, Medicinal and Natural Products Chemistry Research Center, Shiraz University of Medical Sciences, Shiraz, Iran.

Thesis: "Assessment of the effect of different synthesized anticancer compounds including MET receptor small molecule inhibitors on cancer cell proliferation and induction of apoptosis *in vitro* by using SRB and Annexin V-PI assays".

Supervisors: **Dr. Omidreza Firuzi, Dr. Najmeh Edraki**

2. **MSc.** Developmental Biology, Razi University, Kermanshah, Iran.
3. **BSc.** General Biology, Shiraz University, Shiraz, Iran.

Publications

1. Mohammadi, S., **Mortazavi, M.**, Poustforoosh, A., Moosavi, F., Saso, L., Edraki, N., Firuzi, O. Novel spiroisatin-pyranopyrazole hybrids as anticancer agents with TrkC inhibitory potential . *J Biomol Struct Dyn.* 1-14 (2025) (ISI, IF: 2.4, Q1)
2. Nazari, S., Mosaffa, F., Poustforoosh, A., **Mortazavi, M.**, Saso, L., Firuzi, O., Moosavi, F. "Foretinib, a c-MET receptor tyrosine kinase inhibitor, tackles multidrug resistance in cancer cells by inhibiting ABCB1 and ABCG2 transporters. *Toxicol. Appl. Pharmacol.* 15:116866 (2024) (ISI, IF: 3.3, Q2).
3. **Mortazavi, M.**, Eskandari, M., Moosavi, F., Damghani, T., Khoshneviszadeh, M., Pirhadi, S., Saso, L., Edraki, N., Firuzi, O. Novel quinazoline-1,2,3-triazole hybrids with anticancer and MET kinase targeting properties. *Sci. Rep.* 13:1468 (2023) (ISI, IF: 3.8, Q1).
4. **Mortazavi, M.**, Raufi, E., Damghani, T., Khoshneviszadeh, M., Edraki, N., Eskandari, M., Giovannetti, E., Peters, G.J., Pirhadi, S., Firuzi, O. Discovery of anticancer agents with c-Met inhibitory potential by virtual and experimental screening of a chemical library. *Eur. J. Pharmacol.* 938:75395 (2023) (ISI, IF: 4.2, Q1).

5. **Mortazavi, M.**, Divar, M., Damghani, T., Moosavi, F., Saso, L., Pirhadi, S., Khoshneviszadeh, M., Edraki, N., Firuzi, O. Study of the anticancer effect of new quinazolinone hydrazine derivatives as receptor tyrosine kinase inhibitors. *Front. Chem.* 10:969559 (2022) (ISI, IF: 3.8, Q1).
6. **Mortazavi, M.**, Moosavi, F., Martini, M., Giovannetti, E., Firuzi, O. Prospects of targeting PI3K/AKT/mTOR pathway in pancreatic cancer. *Crit. Rev. Oncol. Hematol.* 176:103749 (2022) (ISI, IF: 5.5, Q1).
7. Damghani, T., Moosavi, F., Khoshneviszadeh, M., **Mortazavi, M.**, Pirhadi, S., Kayani, Z., Saso, L., Edraki, N., Firuzi, O. Imidazopyridine hydrazine derivatives exert antiproliferative effect on lung and pancreatic cancer cells and potentially inhibit receptor tyrosine kinases including c-Met. *Sci. Rep.* 11:3644 (2021) (ISI, IF: 3.8, Q1).
8. Moosavi, F., Ebadi, A., Mohabbati, M., Damghani, T., **Mortazavi, M.**, Miri, R., Firuzi, O. Antiproliferative effect, alteration of cancer cell cycle progression and potential MET kinase inhibition induced by 3,4-dihydropyrimidin-2(1H)-one C5 amide derivatives. *Eur. J. Pharmacol.* 894:173850 (2021) (ISI, IF: 4.2, Q1).
9. Roushandeh, AM., Salehi, I., **Mortazavi, M.* (Corresponding author)**. Protective Effects of Restricted Diet and Antioxidants on Testis Tissue in Rats. *Iran. Biomed. J.* 19(2):96-101 (2015) (PubMed, Q3).
10. Azarifar, Z., **Mortazavi, M.**, Farhadian, R. and Parvari, S. Cytotoxicity effects of aqueous extract of *Purtulaca oleracea* on HeLa cell line. *Pharm. Sci.* 21(1):41-45 (2015) (ESCI(ISI), IF: 1.4, Q2).
11. Abbasalipourkabir, R., Moradi, H., Zarei, S., Asadi, S., Salehzadeh, A., Ghafourikhosroshahi, A., **Mortazavi, M.** and Ziamajidi, N. Toxicity of zinc oxide nanoparticles on adult male Wistar rats. *Food. Chem. Toxicol.* 84:154-160 (2015) (ISI, IF: 3.9, Q1).
12. Ansari, S., BROUKI, M.P., Mohammadnejad, D., Delazar, A., **Mortazavi, M.** and Roushandeh, AM. Effects of *Polygonum avicular* extract on histological changes of mouse seminiferous tubules after electromagnetic field exposure. *Pharm. Sci.* 19(4):139-144 (2014) (ESCI(ISI), IF: 1.4, Q2).
13. **Mortazavi, M.**, Salehi, I., Alizadeh, Z., Vahabian, M., Roushandeh, AM. Protective effects of antioxidants on sperm parameters and seminiferous tubules epithelium in high fat-fed rats. *J. Reprod. Infertil.* 15(1):22–28 (2014) (PubMed, Q3).
14. **Mortazavi, M.**, Roudkenar, MH., Delazar, A., Halabian, R., Ansari, S., Alizadeh, Z., Roushandeh, AM., Anticancerous effects of *Polygonum avicular* exert through Fas ligand and Bcl2. *Basic clin. Cancer. res.* 4(1&2):11-15 (2012) (DOAJ).

Presentations

1. 2023. “Novel quinazoline-1,2,3-triazole hybrids with anticancer and MET kinase targeting properties”. The 24th national and 10th International Annual Research and Technology Congress of Iranian Medical Sciences Students, Tehran, Iran.
2. 2023. “Spiroisatin Pyranopyrazole Hybrids as Novel Anticancer agents with TrkC Inhibitory Potential; Design, Synthesis, Biological Activity Evaluation”. The 24th national and 10th International Annual Research and Technology Congress of Iranian Medical Sciences Students, Tehran, Iran.
3. 2023. “Spiroisatin pyranopyrimide derivatives as targeted anticancer agents”. The 24th national and 10th International Annual Research and Technology Congress of Iranian Medical Sciences Students,

Tehran, Iran.

4. 2023. "Novel spiroindoline quinazolinone derivatives as targeted anticancer agents and potential FLT3 kinase inhibitors". The 24th national and 10th International Annual Research and Technology Congress of Iranian Medical Sciences Students, Tehran, Iran.
5. 2015. "Effect of $1\alpha,25(\text{OH})_2\text{D}_3$ on osteogenic differentiation of stem cells from dental pulp of exfoliated deciduous teeth". The Royan 11th Congress on Stem Cell Biology and Technology, Tehran, Iran.
6. 2015. "Preconditioning of Mesenchymal Stem Cells with Hydrogen Peroxide and Serum Deprivation". The Royan 11th Congress on Stem Cell Biology and Technology, Tehran, Iran.
7. 2015. "Cytotoxic Effects of 3Mix Antibiotic on Human Primary Dental Pulp Mesenchymal Stem Cells". The Royan 11th Congress on Stem Cell Biology and Technology, Tehran, Iran.
8. 2014. "Effects of antioxidants on seminiferous tubules epithelium after high fat diet in Rat". 1th Microscopic Studies Congress of Shiraz. Shiraz, Iran.
9. 2013. "Preparation of testicular cell conditioned medium". 14th Royan International Twin Congress on Reproductive Biomedicine. Tehran, Iran.
10. 2012. "Effect of Polygonum Avicular extraction on MCF-7 cell lineage". 10th Iranian Anatomical Sciences Congress Guilan University of Medical Sciences. Tehran, Iran.
11. 2012. "Effect of antioxidants (E, C, Astaxanthin Vitamins) on sperm parameters with restricted high fat diet in rats". The 13th Royan International Congress on reproductive Biomedicine, Tehran, Iran.
12. 2012. "Effects of Cinnamomum Verum on sperm parameters with high fructose diet rats". 13th Royan International Twin Congress on Reproductive Biomedicine. Tehran, Iran.
13. 2012. "Effects of Curcuma Longa extract on sperm parameters with high fructose diet rats". 13th Royan International Twin Congress on Reproductive Biomedicine. Tehran, Iran.
14. 2012. "Effects of antioxidants (Vitamins E, C and Astaxanthin) on sperm parameters in rats with high fat diet". 13th Royan International Twin Congress on Reproductive Biomedicine. Tehran, Iran.
15. 2012. Effects of Garlic on sperm parameters in rats with high fat diet". 13th Royan International Twin Congress on Reproductive Biomedicine. Tehran, Iran.
16. 2011. "Parthenogenetic activation of mouse oocytes by hydrostatic pressure". 4th Yazd International Congress and Student Award in Reproductive Medicine. Yazd, Iran.
17. 2011. "The effect of hydrostatic pressure on parthenogenetic activation of mouse oocytes driven from in vitro grown ovarian follicles". 12th Royan International Twin Congress on Reproductive Biomedicine. Tehran, Iran.

Honor:

Top student in M.Sc degree

Teaching Experiences

2009-2011: Azad University, Behbahan Branch, Khuzistan, Iran.

Technical Experience

Experimental techniques of stem cell and cancer cell lines cell culture:

- Cell viability assays such as MTT, SRB and trypan blue staining
- Cell apoptosis analysis like annexin V-PI assay and Hoechst staining
- Cell cycle analysis by PI staining

Experimental techniques of molecular studies:

- Gel electrophoresis
- Western blot assay

Experimental techniques of enzymatic studies:

- HTRF (Homogeneous Time Resolved Fluorescence) assay

Other experimental techniques such as IVM & IVF, sperm analysis, oocyte and follicle isolation and culture