

Amir Hosein Maharati

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PERSONAL STATEMENT

A Medical Doctor and young researcher working in an Oncology Clinic where I assist in patient care and chemotherapy planning. My research focuses on non-coding RNAs as biomarkers in human tumors, and I'm deeply interested in bioinformatics, sequencing, and cancer biology. Beyond medicine, I enjoy theater and the arts, and I aspire to make a lasting difference in the lives of cancer patients

RESEARCH INTERESTS

Cancer biology

Cancer biomarkers

Mult omics

non-coding RNAs

Bioinformatics

Data analysis

EDUCATIONAL HISTORY

■ Doctor of medicine

Mashhad University of Medical Sciences

- Cumulative GPA: 3.84/4 (18.12/20)

2018- 2025

Experience

Oncologist Assistant

June 2025-now

Shafa Oncology and chemotherapy center (Dr. Allahyari)

1. Oncology Patient Management
2. Treatment Planning & Prescription
3. Evidence-Based Practice
4. Collaboration

Undergraduate Research Assistant

Jan 2020-2025

Medical Genetics Research Center (MGRC)

Supervisor: Dr. Mohammadreza Abbaszadedgan & Dr. Meysam Moghboli

5. Developing a biobank for colorectal cancer
6. Management of the colorectal projects at the research center
7. Developing collaborations with department heads for the purpose of data collection

Medical Intern

Oct 2023-2025

Imam Reza and Ghaem hospital, Mashhad, Iran

1. Practicing medicine

Post-doctoral research fellow

April 2025-now

Endoscopic and minimally invasive research center, Ghaem Hospital, Mashhad, Iran

RESEARCH EXPERIENCE

❖ Major Publications

❖ Original Articles

- ❖ Zohreh Rezaei, Kazem Dastjerdi, Abolghasem Allahyari, Soodabeh ShahidSales, Sahar Talebian, **Amirhosein Maharati**, Alireza Zangooie, Amir Sadra Zangouei, Farzad Sadri, Saman Sargazi. Plasma microRNA-195, -34c, and - 1246 as novel biomarkers for the diagnosis of trastuzumab-resistant HER2-positive breast cancer patients. Toxicology and Applied Pharmacology. [IF: 4.4]
- ❖ **Amirhosein Maharati**, Negin Taghehchian, Fatemeh Taghavinia, Alireza Golshan, Azadeh Aarabi, Mohammad Reza Abbaszadegan, Meysam Moghboli. LINC01322 may serve as a potential diagnostic marker for advanced stage tumors in renal cell carcinoma patients eligible for total nephrectomy. Biochemistry and Biophysics Reports. [IF: 2.2]
- ❖ **Amirhosein Maharati**, Mohammad javad Malekifar, Abbas Abdollahi, Negin Taghehchian, Samaneh Sharif, Azadeh AArabi, Malihe Lotfi, Mohammad Etezadpour, Mohammadreza AbbaszadeganCKAP2, miR-941, miR-548 and LINC02577 as biomarkers for early diagnosis in colorectal cancer. Scientific Reports. [IF:3.9]
- ❖ **Amirhosein Maharati**, Fatemeh Taghavinia, Alireza Golshan, Tina Azimi Kordiani, Meysam Moghboli. LINC01913 and LINC01389 as the novel diagnostic tumor markers for the early-stage renal cell carcinoma. Cancer Treatment and Research Communications. [IF:2.9]
- ❖ Negin Taghehchian, **Amirhosein Maharati**, Fatemeh Taghavinia, Alireza Golshan, Sepehr Salarzadeh, Meysam Moghboli. LINC00332 as a potential diagnostic marker for the low-grade tumors in renal cell carcinoma patients. BMC urology. [IF: 1.6]
- ❖ Mohammad Hossein Khajavirad, **Amirhosein Maharati**, Negin Taghehchian, Fatemeh Taghavinia, Meysam Moghboli. Role of VOPP1 in regulation of Paclitaxel response and EMT process during ovarian tumor progression. Molecular Biology Research Communications. [IF: 1.75]

❖ **Review Articles**

- ❖ **Maharati A**, Zanguei AS, Khalili-Tanha G, Moghbeli M. MicroRNAs as the critical regulators of tyrosine kinase inhibitors resistance in lung tumor cells. *Cell Commun Signal.* [IF: **8.41**]
- ❖ **Maharati A**, Moghbeli M. Long non-coding RNAs as the critical regulators of PI3K/AKT, TGF- β , and MAPK signaling pathways during breast tumor progression. *J Transl Med.* [IF: **8.48**]
- ❖ **Maharati A**, Moghbeli M. PI3K/AKT signaling pathway as a critical regulator of epithelial-mesenchymal transition in colorectal tumor cells. *Cell Commun Signal.* [IF: **8.41**]
- ❖ **Maharati A**, Samsami Y, Latifi H, Tolue Ghasabani F, Moghbeli M. Role of the long non-coding RNAs in regulation of Gemcitabine response in tumor cells. *Cancer Cell Int.* [IF: **6.4**]
- ❖ **Maharati A**, Moghbeli M. Forkhead box proteins as the critical regulators of cisplatin response in tumor cells. *Eur J Pharmacol.* [IF: **5.1**]
- ❖ Pooria Salehi-Sangani, **Amir Hosein Maharati**, Bahareh Payami, Mohsen Aliakbarian, Mohammad Reza Abbaszadegan, HypoxamiRs in pancreatic cancer: Master regulators of the hypoxic tumor microenvironment. *Cell Biology and Toxicology.* [IF: **5.9**]
- ❖ Iman Akhlaghipour, Arya Nasimi Shad, Vahid Reza Askari, **Amirhosein Maharati**, Vafa Baradaran Rahimi. How caffeic acid and its derivatives combat diabetes and its complications: A systematic review. *Journal of Functional Foods.* [IF: **5.2**]
- ❖ **Maharati A**, Akhlaghipour I, Taghehchian N, Farshchian Yazdi Z, Moghbeli M. Role of microRNA-494 in tumor progression. *Am J Transl Res.* [IF: **3.9**]
- ❖ **Amirhosein Maharati**, Yasamin Rajabloo, Meysam Moghbeli. Molecular mechanisms of mTOR-mediated cisplatin response in tumor cells. *Heliyon.* [IF: **3.6**]
- ❖ **Maharati A**, Moghbeli M. Role of microRNAs in regulation of doxorubicin and paclitaxel responses in lung tumor cells. *Cell Div.* [IF: **2.8**]

- ☞ **Maharati A**, Tolue Ghasaban F, Akhlaghipour I, Taghehchian N, Zangouei AS, Moghboli M. MicroRNA-495: a therapeutic and diagnostic tumor marker. *J Mol Histol.* [IF: 3.1]
 - ☞ **Amirhosein Maharati**, Meysam Moghboli. Role of microRNA-505 during tumor progression and metastasis. *Pathology-Research and Practice.* [IF: 3.2]
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- ☞ Alsadat Mahmoudian R, **Amirhosein M**, Mahmoudian P, et al. The therapeutic potential value of Cancer-testis antigens in immunotherapy of gastric cancer. *Gene.* [IF: 3.9] [co-first author]
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- ☞ Tolue Ghasaban F, **Maharati A**, Akhlaghipour I, Moghboli M. MicroRNAs as the critical regulators of autophagy-mediated cisplatin response in tumor cells. *Cancer Cell Int.* [IF: 6.4]
 - ☞ Taghehchian N, **Maharati A**, Akhlaghipour I, Zangouei AS, Moghboli M. PRC2 mediated KLF2 down regulation: a therapeutic and diagnostic axis during tumor progression. *Cancer Cell Int.* [IF: 6.4]
 - ☞ Tolue Ghasaban F, **Maharati A**, Zangouei AS, Zangoie A, Moghboli M. MicroRNAs as the pivotal regulators of cisplatin resistance in head and neck cancers. *Cancer Cell Int.* [IF: 6.4]
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- ☞ Fanoodi A, **Maharati A**, Akhlaghipour I, Rahimi HR, Moghboli M. MicroRNAs as the critical regulators of tumor angiogenesis in liver cancer. *Pathol Res Pract.* [IF: 3.3]
 - ☞ Moghboli M, Taghehchian N, Akhlaghipour I, Samsami Y, **Maharati A**. Role of forkhead box proteins in regulation of doxorubicin and paclitaxel responses in tumor cells: A comprehensive review. *Int J Biol Macromol.* [IF: 8.0]
 - ☞ Arya Nasimi Shad, Ali Fanoodi, **Amirhosein Maharati**, Iman Akhlaghipour, Amir Reza Bina, Ehsan Saburi, Fatemeh Forouzanfar, Meysam Moghboli. Role of microRNAs in tumor progression by regulation of kinesin motor proteins. *International journal of biological macromolecules.* [IF: 8.5]
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- ☞ Taghehchian N, Samsami Y, **Maharati A**, Zangouei AS, Boroumand-Noughabi S, Moghboli M. Molecular biology of microRNA-342 during tumor progression and invasion. *Pathol Res Pract.* [IF: 3.3]
 - ☞ Iman Akhlaghipour, Negin Taghehchian, Amir Sadra Zangouei, Amirhosein **Maharati**, Reihaneh Alsadat Mahmoudian, Ehsan Saburi, Meysam Moghboli. MicroRNA-377: A therapeutic and diagnostic tumor marker. *Int J Biol Macromol.* [IF: 8.0]
 - ☞ Nasimi Shad A, Fanoodi A, **Maharati A**, Akhlaghipour I, Moghboli M. Molecular mechanisms of microRNA-301a during tumor progression and metastasis. *Pathol Res Pract.* [IF: 3.3]

❖ Malihe Lotfi, **Amirhosein Maharati**, Amir Abbas Hamidi, Negin Taghehchian, Meysam Moghbeli. MicroRNA-532 as a probable diagnostic and therapeutic marker in cancer patients. Mutation Research-Fundamental and Molecular Mechanisms of Mutagenesis. [IF: 1.9]

❖ Faezeh Tolue Ghasaban, Iman Akhlaghipour, Negin Taghehchian, **Amirhosein Maharati**, Bahram Memar, Meysam Moghbeli. MicroRNA-185: A non-invasive diagnostic and prognostic tumor marker. Process Biochemistry. [IF: 4.8]

❖ Case report Articles

❖ Allahyari A, **Maharati A**, Jafari-Nozad AM, Zangooie A. Prostate cancer, chronic myelogenous leukemia and multiple myeloma in a single patient: a case report and review of the literature. *J Med Case Rep.* [co-respond author]

❖ Alireza Zangooie, Zahra Moradi, Reza Asgari, **Amirhosein Maharati**, Zahra Salehi, Abolghasem Allahyari. Essential thrombocythemia as an initial presentation of polyneuropathy, organomegaly, endocrinopathy, M-protein, skin changes syndrome with complete response to the bortezomib, cyclophosphamide, dexamethasone regimen: a case report. [IF: 0.9]

❖ Under review research projects

❖ GFPT2 as a critical regulator of CAFs-Tumor interaction in the TME of colorectal cancer (single cell)

❖ Critical regulators of CAFs-Tumor interaction through PI3K/ AKT in the TME of RCC (single cell)

OTHER EXPERIENCES

▣ **Theater Director** Jan 2019-Mar 2022

Mashhad University of Medical Sciences theater center, Mashhad, Iran

- ❖ performing 3 theaters as the director and 1 theater as an actor
- ❖ training management, team work and communication skills

▣ **Workout and fitness trainer** Oct 2022-now

Iran bodybuilding and fitness federation, Tehran, Iran

- ❖ Level 3 Certificate in Coaching

SOFTWARE DEVELOPMENT

▣ **HAVij: R package**

AWARDS & ACHIEVEMENTS

- **Annual Top Researcher of University Award** Dec 2023
Mashhad University of Medical Sciences

SKILLS & QUALIFICATIONS

- **Laboratory Skills**
 - DNA Extraction and PCR Techniques
 - RNA Extraction
 - Cell Culture
 - MTT assay
 - Western Blot Technique
 - Gram Staining
 - Working with Laboratories Devices
 - Microtome, Tissue Processing Device
- **Computer Skills**
 - Microsoft Office: Advanced
 - SPSS: Advanced
 - R Programming Language: Advanced
 - RNA-seq/ Single-cell Analysis: Advanced
 - Linux: Advanced
- **Language Skills**
 - Farsi: Fluent
 - Turkish: Fluent
 - English: Proficient

REFERENCES

- **Mohammadreza Abbaszadegan (Ph.D.)**
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- **Meysam moghbeli (Ph.D.)**
Associate Professor of Molecular Genetics, Mashhad University of Medical Sciences
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- **Abolghasem Allahyari (M.D.)**
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