



Mohieddin Barzegar

Personal Information

- * *Date of Birth* *22 October 1989*
- * *Marital Status* *Single*
- * *Address* *Hematology and Blood banking department, School of allied medicine, Shahid Beheshti University of medical science, Tehran, Iran.*
- * *Department of Laboratory Science, School of Paramedical medicine Kurdistan University of medical science. Iran.*

- * *Telephone* *+989188885440*
- * *Email* *m.barzegar@sbmu.ac.ir ; m.barzegar8@yahoo.com*

Academic Background

2021-Now Ph.D. of Laboratory Hematology and Blood Banking School of allied medicine, Shahid Beheshti University of medical science, Tehran, Iran.

Thesis Project: Evaluation of extracellular vesicles (EVs) as a diagnostic tool in acute promyelocytic leukemia patients and their leukemogenic effects on normal hematopoietic stem cells

2012-2014 M.Sc. of Laboratory Hematology and Blood transfusion, Mashhad University of Medical Sciences, Mashhad, Iran.

Thesis Project: Comparison of KIBRA expression gene in acute leukemias patient and control group

2008 – 2012: B.Sc. Medical Laboratory Sciences. Kermanshah University of Medical Sciences, Kermanshah, Iran

Honors and Awards:

- ❖ Ranked first position in the Ph.D. entrance exam (2016)
- ❖ Introducing as a top and talent student (2017)
- ❖ Top ranking student award, Master of Science degree program, Mashhad University of Medical Sciences (MUMS)

Research Interests:

- ❖ Extracellular Vesicles
- ❖ Leukemia
- ❖ Molecular hematology
- ❖ Hematopoietic stem cell
- ❖ Stem cell transplantation and cell therapy

- ❖ Minimal residual disease
- ❖ Immunohematology
- ❖ Blood components preparation
- ❖ Blood film & Bone marrow hemat morphology reports

Publications

1. Karegar Y, Amiri V, **Barzegar M**, Mohammadi M H, Keshavarz A, Allahbakhshian Farsani M. Effect of AML Derived EVs on the BM-MSCs: Particularly Alteration in the Expression of Poor Prognosis Genes. Archives of Medical Research. 2023
2. **Barzegar M**, Allahbakhshian Farsani M, Rafiee M, Amiri V, Parkhihdeh S, Mohammadi M H. Acute promyelocytic leukemia derived Extracellular vesicles conserve PML-RAR α transcript from storage-inflicted degradation; a stable diagnosis tool in APL patients. Annal of hematology. 2020
3. **Barzegar M**, Allahbakhshian Farsani M, Amiri V, Mohammadi S, Shahsavan S, Mirzaeian A, Mohammadi M H. AML-derived Extracellular vesicles confer de novo chemoresistance to leukemic myeloblast cells by promoting drug export genes expression and ROS inhibition. Iranian Journal of Pharmaceutical Research. 2020
4. Mohammad Rafiee Mohammad Abbasi Hassan Rafieemehr Amin Mirzaeian **Mohieddin Barzegar** Vahid Amiri Shaghayegh Shahsavan Mohammad Hossein Mohammadi A concise review on factors influencing the hematopoietic stem cell transplantation main outcomes, Received: 30 September 2020 Revised: 5 February 2021 Accepted: 11 April 2021, Health and science reports.
5. Afshin Karami, Maryam Hamzeloo-Moghadam, Amir Yami, **Mohyedin Barzegar**, Pargol Mashati & Ahmad Gharehbaghian. Antiproliferative Effect of Gaillardin from Inula oculus-christi in Human Leukemic Cells. Nutrition and cancer 72 (6), 1043-1056. 2020
6. Afshin Karami, Maryam Hamzeloo-Moghadam, Amir Yami, **Mohyedin Barzegar**, Pargol Mashati, Ahmad Gharehbaghian The Effect of Gaillardin on Proliferation and Apoptosis of Acute Lymphoblastic Leukemia Cell Line (Nalm-6). Journal of Medicinal Plants. 2020

7. Amir Yami, Maryam Hamzeloo-Moghadam, Afshin Karami, **Mohyedin Barzegar**, Vahid Amiri, Ahmad Gharehbaghian The apoptotic potential of ergolide to induce apoptosis in molt4 cell lines. Journal of Medicinal Plants. 2020
8. Mehdi Zolfaghari, **Mohyedin Barzegar**, Vahid Amiri, Mehdi Allahbakhshian Farsani, Shaboo Jesri, Abdollah Kiani Harchegani, Mohammad Hossein Mohammadi. Standardization of Plasma Rich in Growth Factors (PRGF) and its effects on androgenic hair loss. Journal of Cosmetic and Laser Therapy. 2020
9. Hengamehsadat Razavi Ali Asgharzadeh, Shaban Alizadeh, Mohammad Reza Keramati, Masoud Soleimani, **Mohyedin Barzegar**, Amir Atashi, Mahdi Edalati Fathabad, Zahra Kashani Khatib, Mohammad Rafiee. Upregulation of miR-210 promotes differentiation of mesenchymal stem cells (MSCs) into osteoblasts. bosnian journal of basic medical sciences. 2018
10. Hossein Ayatollahi, Ali Asgharzadeh, Mohammad Rafiee, Mohammad Reza Keramati, **Mohyedin Barzegar**, Vahid Amiri, Mahdi Balali-Mood, Mohammad-Hadi Sadeghian. Effect of Sulfur Mustard Toxicity on FLT3-ITD Gene Mutation in Sulfur Mustard Veterans. Iranian Journal of Toxicology Volume. 2018
11. Hossien Ayatollahi, Aref Keshavarzi, Behnaz Shams, **Mohyedin Barzegar**, Mojgan Amirpour, Maryam Sheikhi, Nafise Amini, Mohammad Hadi Sadeghian. Relationship Between SOX17 Gene Expression and Prognosis in Acute Myeloid Leukemia. Iranian Journal of Pediatric Hematology and Oncology. 2018
12. THE PREVALENCE OF ANTI HCV INFECTION AND ITS RELATED FACTORS IN PATIENTS WITH BETA-THALASSEMIA IN SHIRAZ-IRAN. Mostafa Sadeghi, Maryam Soltani, Koorosh Etemad, Maliheh Abdollahi, Mohammad Sayyadi, **Mohyedin Barzegar**, Cirruse Salehnasab, Zahra Rahmatinejad, Mehran Rezaei, Tannaz Valadbeigi, Mahmoud Hajipour. PHARMACOPHORE. 2018
13. Hossein Ayatollahi, **Mohyedin Barzegar**, Hossein Rahimi, Maryam Sheikhi, Alireza Khiabani. Epidemiology evaluation of common mutations in JAK2 exon 12 protein in patients with Idiopathic Erythrocythosis. Navid No. 2016
14. Mohammad Rafiee, Mohammad Reza Keramati, Hosein Ayatollahi, Mohammad Hadi Sadeghian, **Mohyedin Barzegar**, Ali Asgharzadeh, Mohsen Alinejad. Down-Regulation of Ribosomal S6 kinase RPS6KA6 in Acute Myeloid Leukemia Patients. CELL JOURNAL. 2015

Published books

1. *Clinical Guide to Cancer Genetics. Volume 1 .2013*

Conference abstracts

1. Altered expression of tumor growth factor beta (TGF- β) signaling pathway components contributes to acute myeloid leukemia (AML). **Mohyedin Barzegar**, naser shagerdi esmaeli, Mehdi Allahbakhshian.

19th Annual Conference and the 2nd International Conference on Pathology and Laboratory Medicine. 2017

2. Expression evaluation of cell cycle regulatory genes (P27, P21, P14) in AML patient. *naser shagerdi esmaeli, Mohyedin Barzegar, Mehdi allahbakhshian mohammadhossein mohammadi . 19th Annual Conference and the 2nd International Conference on Pathology and Laboratory Medicine. 2017*

3. **Barzegar M.**, Rafiee M. Asgharzadeh A. Survey Expression of KIBRA Gene in Acute Myeloid Leukemia and Acute Lymphoblastic Leukemia. *Iranian Journal of Pediatric Hematology and Oncology Congress. 2014*

4. Amir Reza Ariyaei Rad, **Mohyedin Barzegar**, Hadi Rezaei. Applying suppressors against IGH promoter in Mucosa-associated lymphoid tissue (MALT) lymphoma might probably be a suggestive molecular-based solution for inhibiting tumor growth. 6th international iranian congress of laboratory and clinic. 2014

5. XmnI polymorphism as a good prognostic factor in patient with β -thalassemia major and intermedia. Ali asgharzadeh, **mohyedin barzegar**, keyvan karimi, moharam ahmadnejad, reza yaghobi, javad ahmadi, bentolhoda kuhestani, Mohammad rafiee, mohsen alinegad. 6th international iranian congress of laboratory and clinic. 2014

6. Tabriznia Tabrizi SH., **Barzegar M**, Rafiee M. Hereditary methemoglobinemia might possibly be noticed as a probable predisposing factor for acquired hemochromatosis

7. Fibrin degradation products (FDPs) and D-dimer might possibly be less correlative for the evaluation of some kinds of DICs and thrombotic events. **Mohyedin Barzegar** Amir Reza Ariyaei Rad1, Hadi Rezaei1, The first Congress of the molecular medicine (MUMS).2012

8. Knowledge of similar molecular pathways in the course of injectable therapies in other diseases is possible it is useful in improving the conflicts in hemophilia. **Mohyedin Barzegar**, Hadi Rezaei1, The first Congress of the molecular medicine (MUMS).2012.

Teaching Experiences:

2013-2014: Blood banking for undergraduate students in Mashhad University of Medical Sciences

2014-2016: Hematology & Blood Banking for undergraduate students in Kermanshah University of Medical Sciences

2017-2019: Hematology & Blood Banking for undergraduate students in Shahid Beheshti University of Medical Sciences

2021-now: Hematology & Blood Banking and quality assurance in medical laboratory for undergraduate students in Kurdistan University of Medical Sciences

Training programs and workshops

Title	Duration time (hour)	Location
Flow cytometry workshop in the diagnosis of blood malignancies	16	Shahid Beheshti University of Medical Sciences
Molecular workshop in the diagnosis of blood malignancies	32	Shahid Beheshti University of Medical Sciences
Hemovigilance and blood safety	12	Iranian blood transfusion organization
Occupational health and safety	4	Kermanshah University of Medical Sciences
Transfusion medicine and plasma fractionation	8	Iranian blood transfusion organization
Article writing software (LaTeX)	8	Shahid Beheshti University of Medical Sciences
Data analysis software (R and R studio)	16	Shahid Beheshti University of Medical Sciences
Data analysis software(SPSS)	12	Shahid Beheshti University of Medical Sciences
Data analysis software(Prism)	32	Shahid Beheshti University of Medical Sciences
Information and Communications Technology (ICT)	16	Shahid Beheshti University of Medical Sciences
Computer skills and files management	32	Shahid Beheshti University of Medical Sciences
Medical ethics and standards	8	Shahid Beheshti University of Medical Sciences
Quality control in Clinical laboratory	8	Shahid Beheshti University of Medical Sciences
Laboratory safety	8	Mashhad University of Medical Sciences
Quality control in hormone laboratory	8	Kermanshah University of Medical Sciences
Quality control in hematology laboratory	32	Kermanshah University of Medical Sciences
Quality control in serology laboratory	8	Mashhad University of Medical Sciences
Laboratory quality management system	16	Shahid Beheshti University of Medical Sciences

Blood transfusion and blood products	8	Iranian blood transfusion organization
Analysis of body fluids	8	Kermanshah University of Medical Sciences
Quality control in blood cell counter	8	Kermanshah University of Medical Sciences

Experimental Skills:

- Flowcytometry & MACS
- Extraction and purification of DNA, RNA, Protein
- PCR and PCR-based analysis (PCR-RFLP, ARMS-PCR, nested and semi-nested PCR, REP PCR, RAPD PCR and Real-time PCR)
- Cell culture (Primary HSC & MSC culture)
- Immunohisto(cyto)chemistry
- SDS-PAGE, Western blot analysis
- ELISA

Computation:

- Advanced knowledge in using the following general-purpose software packages:
 - MS office, PDF files management, Gene Runner, AlleleID, Flow Jo, Gene Banking, LaTeX®, EndNote, Photoshop, Statistic software like SPSS, R, R studio and Graph Pad Prism