

## PERSONAL INFORMATION

### *Akbar Hashemi Tayer*



Ph.D of Hematology & Blood Banking

Assistant Professor, Jahrom University of Medical Sciences  
Mashhad University of Medical Sciences

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## WORK EXPERIENCE

2010-2013

Faculty member of Arak university of medical sciences

- *Activities and responsibilities:*
  - Member of university educational Committee
  - Member of university Research Committee
  - Member of Student Research Committee
  - Advisor of Lab Science students

2017-2025

Faculty member of Jahrom university of medical sciences

- *Activities and responsibilities:*
  - Member of university educational Committee
  - Member of Research in Education Committee
  - Member of university Research Committee
  - Assistant director of EDC
  - Director of the Department of Laboratory Sciences
  - Advisor of Lab Science students

## EDUCATION

2001-2003

**A.S: Laboratory science**

- Hamedan university of medical sciences

2003-2006

**B.Sc: Laboratory science**

- Kerman university of medical sciences

2006-2008

**MSc: Hematology & blood Banking**

- High Institute for Research and Education in Transfusion Medicine

## Curriculum Vitae

- **Thesis Title:** *Study of in Vitro properties of Fibrin Sealant containing platelet Growth Factors Prepared from Single Donor Plasma*

2013-2017

### Ph.D: Hematology & blood Banking

- High Institute for Research and Education in Transfusion Medicine
- **Thesis Title:** *Evaluation the role of RBC microparticles to generate Thrombin in Platelet rich plasma*

2018

### Fellowship of Electronic Learning

- Shiraz University

2019-2020

### Fellowship of Assessment and Evaluation in Medical Sciences

- Virtual University of medical sciences

2017-2020

### MSc of Medical Education

- Virtual University of medical sciences

<b>AWARDS</b>	<b>Top Researcher (2019, 2023, 2024)</b> (Jahrom University Of Medical Sciences)
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## PERSONAL SKILLS

Mother tongue(s)	Persian				
Other language(s)					
	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	good	good	intermediate	Intermediate	good

### Job-related skills

Flow cytometry technique  
 MACS  
 Cell Culture  
 Cell Separation  
 DNA extraction  
 RNA extraction  
 PCR  
 Real-Time PCR  
 Western Blotting  
 MTT assay  
 Vertical/horizontal electrophoresis  
 SDS-PAGE electrophoresis  
 ELISA  
 PRP preparation  
 Platelet gel preparation  
 Fibrin Sealant Preparation  
 Working with Laboratory Animals

**Expert in working with  
laboratory devices**

**Flow cytometry**

Spectrophotometry

Cell Counter (Sysmex)

Coagulometer

Thromboelastography (TEG)

Apheresis

Microscope

Centrifuges

pH meter

**Other skills**

ICDL1 (windows, Internet)

ICDL2 (power point ,word ,Access ,Excel)

SPSS

End Note

Mendeley

**ADDITIONAL  
INFORMATION**

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1. **Hashemi Tayer A**, Amirizadeh N, Ahmadinejad M, Nikougoftar M, Deyhim MR, Zolfaghari S. Procoagulant Activity of Red Blood Cell-Derived Microvesicles during Red Cell Storage. *Transfus Med Hemother* 2019; 46: 224-230. DOI: 10.1159/000494367.
2. Shadmand E, Solhjo K, **Hashemi Tayer A\***. Determination of the effect of autologous platelet gel on cutaneous leishmaniasis wound Healing. *Sci J Iran Blood Transfus* 2019; 16(2):116-123.
3. **Hashemi Tayer A**, Amirizadeh N, Mghsodlu M, Nikogoftar M, Deyhim M R, Ahmadinejad M. Evaluation of Blood Storage Lesions in Leuko-depleted Red Blood Cell Units. *Iran J Ped Hematol Oncol* 2017; 7 (3) :171-179
4. Heidari Bateni M, AlizadehSh, **Hashemi Tayer A\***. The effect of a autologus platelet glue on healing burn wounds; An in vivo study. *Arak Medical University Journal*. 2013; 16(72): 12-19.
5. **Hashemi Tayer A\***, Amirizadeh N, Almasi A. A New Fibrin Sealant; Hemostatics evaluation in animal model. *Sci J Iran Blood Transfus* 2013; 10(3): 289-296.
6. **Hashemi Tayer A\***, Almasi A, Amirizadeh N. Knowledge of female students and teachers in arak universities about safe blood donation. *Sci J Iran Blood Transfus* 2013; 10(2): 207-211.
7. **Hashemi Tayer A\***, AlizadehSh, Heidari Bateni M. Efficacy of a new autologus platelet gel; in vitro study. *Iran J Ped Hematol Oncol* 2012; 2(2): 54-59.
8. Fakhar H, **Hashemi Tayer A\***. Effect of the Garlic Pill in comparison with Plavix on Platelet Aggregation and Bleeding Time. *Iran J Ped Hematol Oncol* 2012; 2(4): 146-152.
9. **Hashemi Tayer A\***, Talebi R, Mucopolysaccharidoses (maroteaux- lamy): A case report. *Arak Medical University Journal*. 2012; 15(61): 119-125.
10. Almasi- Hashiani A\*, Zareifar S, **Hashemi Tayer A**. Survival rate among children with acute lymphoblastic leukemia based on their relapse status in shirashahd faghihi hospital during 2004-9. *Journal of Kashan University of medical Sciences*. 2012; 16(3): 248-253.
11. Ranjbaran R, Abloghasemi H, Nasiri N, Oodi A, Nikogoftar M, Amani M, **Hashemi A**, Amirizadeh N\*. Expansion of CD34+ umbilical cord blood in 3 dimensional culture media on mesenchymal stem cell coated scaffold. *Sci J Iran Blood Transfus* 2012; *Stem Cell Supp*. 9(3): 177-185.
12. **Hashemi Tayer A**, Amirizadeh N\*, Eshghi P, Abolghasemi H, et al. Study of in vitro properties of fibrin sealant prepared from single donor plasma. *Sci J Iran Blood Transfus* 2009; 6(3): 181-189.
13. Shakeri M, **Hashemi Tayer A**, Shakeri H, Sotoodeh Jahromi A, Moradzadeh M, Hojjat-Farsangi M. Toxicity of Saffron Extracts on Cancer and Normal Cells: A Review Article. *Asian Pacific Journal of Cancer Prevention*. 2020;21(7):1867-75.
14. Marzieh Haghbin, **Akbar Hashemi Tayer\***, Maryam Kamravan, Abdolreza Sotoodeh Jahromi. Platelet-Derived Procoagulant Microparticles as Blood-based Biomarker of Breast Cancer. *Asian Pacific Journal of Cancer Prevention* 2021;
15. **Akbar Hashemi Tayer\***, Maryam Kamravan Evaluation of platelet growth and inflammatory factors in platelet gel prepared from cord blood. *Sci J Iran Blood Transfus* 2021;
16. Masihollah shakeri, Farhang hooshmand, **Akbar Hashemi Tayer**, Vahid rahmanian, Abdolreza Sotoodeh Jahromi, Malihe Moradzadeh, mohammad hojjat-farsangi. Effect of Crocin on Cancerous and Normal Cells: Toxicity, Protective, and Safety. *Asian Pacific Journal of Cancer Prevention* 2021;
17. Haghbin M, Sotoodeh Jahromi A, Ranjbaran R, Abbasi M, **Hashemi Tayer A**. Comparison of Interleukin-33 Serum Levels in Patients with Breast Cancer and Idiopathic Granulomatous Mastitis. *Asian Pac J Cancer Prev*. 2023 May 1;24(5):1629-1634.
18. Haghbin M, Sotoodeh Jahromi A, **Hashemi Tayer A**, Ghasemi Nejad Z. The Potential Clinical Relevance of Procoagulant Microparticles as Biomarkers of Blood Coagulation in Breast Cancer: A Systematic Review. *Asian Pac J Cancer Prev*. 2025 Jan 1;26(1):23-32.

- 19- **Tayer AH**, Jahromi HK, Kamravan M, Farhangdoost F, Ahmadi T, Kolaei M. Evaluation of circulating microvesicles and their procoagulant activity in patients with COVID-19. BMC Res Notes. 2024 Aug 22;17(1):233.
- 20- Shadmand E, Solhjoo K, Taghipour A, **Tayer AH**, Sadeghi F, Meshkin A. Healing effects of autologous platelet gel and growth factors on cutaneous leishmaniasis wounds in addition to antimony; a self-controlled clinical trial with randomized lesion assignment. BMC Res Notes. 2023 Sep 9;16(1):200. doi: 10.1186/s13104-023-06470-4. PMID: 37689656; PMCID: PMC10493010.
- 21- **Hashemi Tayer A**, Ranjbaran R, Kamravan M, Abbasi M, Zareian R. Association of Circulating Procoagulant Microvesicles with Painful Vaso-Occlusive Crisis in Sickle Cell Disease. Transfus Med Hemother. 2023 Mar 30;50(5):448-455. doi: 10.1159/000525640. PMID: 37936632; PMCID: PMC10626395.
- 22- Jamali E, Abbasi M, **Tayer AH**, Monfared AA, Tandel P, Tamaddon G, Kazerooni ES, Rakhshandehroo S, Ranjbaran R. The significance of surface neutrophilic MPO expression level in NETosis and NETosis-associated coagulopathies in covid-19 infected patients. Blood Cells Mol Dis. 2022 May 29;96:102676. doi: 10.1016/j.bcmd.2022.102676. Epub ahead of print. PMID: 35661911; PMCID: PMC9148269.
- 23- **Hashemi Tayer, A.**, Kamravan, M., Moradiparast, M. (2024). 'Evaluation of hematological changes in critically ill COVID- 19 patients with venous thromboembolism', *Pars Journal of Medical Sciences*, 22(3), pp. 30-36. doi: 10.22034/pjms.2024.2031137.1142
- 24- kamravan, M., Sotoodeh Jahromi, A., hashemi tayer, A., moradkhani, M. (2023). 'Prevalence of alloantibodies against blood group antigens in beta-thalassemia patients in Jahrom city', *Pars Journal of Medical Sciences*, 21(2), pp. 35-41. doi: 10.22034/pjms.2023.707970
- 25- Ranjbaran, R., Hashemi Tayer, A., Kamravan, M., Gorgin, M. (2022). 'In-vitro evaluation of procoagulant activities of microparticles expressing phosphatidylserine derived from breast cancer cell line MDA-MB-231 treated with Adriamycin', *Pars Journal of Medical Sciences*, 20(3), pp. 1-8. doi: 10.22034/pjms.2022.701644
- 26-

1. M Moradkhani, NC Sonbol, AH Tayer, M Kamravan. Evaluation of Platelet Function in COVID-19 Patients with Disseminated Intravascular Coagulation. Iranian biomedical journal. 2024
2. **Akbar Hashemi Tayer\***, TRITON-ACID-UREA POLYACRYLAMIDE GEL ELECTROPHORESIS CONFIRMED THE AUTOPHAGY-MEDIATED CLEARANCE OF FREE ALPHA GLOBIN IN METFORMIN-TREATED NUCLEATED RED BLOOD CELLS; International Journal of Laboratory Hematology, 112-112. 2023.
3. **Akbar Hashemi Tayer\***, Enayat Shadmand, Kavous Solhjoo. Determination of the Effect of Autologous Platelet Gel on Cutaneous Leishmaniasis Wounds Healing. 12<sup>th</sup> International congress of medical lab and clinic 12-14 Dec 2019: P10-33.
4. **Akbar Hashemi Tayer\***, Maryam Kamravan, Arash Hasannejad, Mohammad Moradkhani. Evaluation of platelet growth factors and inflammatory agents in platelet gel prepared from cord blood in comparison to peripheral blood. 12<sup>th</sup> International congress of medical lab and clinic 12-14 Dec 2019: P11-5.
5. **Akbar Hashemi**, Minoo Ahmadinejad, Naser Amirizadeh, Mahin Nikougoftar, Mohammad Reza Deyhim, Sima Zolfaghari. Assessment of RBC Storage Lesions during Red Cell Storage. Iran J Med Sci Supplement May 2017; Vol 42 No 3, p68.
6. **Akbar Hashemi**, Minoo Ahmadinejad, Naser Amirizadeh, Mahin Nikougoftar, Mohammad Reza Deyhim, Sima Zolfaghari. Elevated Levels of RBC-Derived Procoagulant Microvesicles in Stored RBCs. Iran J Med Sci Supplement May 2017; Vol 42 No 3, P71.
7. **Hashemi Tayer A\***, Kamravan M. Understanding of female students and teacher's motivations and beliefs about safe blood donation criteria. Archives of Iranian Medicine. Volume 18, Num 12 (suppl 1), Dec 2015, S109.
8. Ranjbaran R, Aboulghasemi H, Abbasi M, **Tayer AH**, Mohammadi MH, Amani M, Amirizadeh N. Study of expansion of CD34+ umbilical cord blood in two and three-dimensional culture media on mesenchymal stem cell. In Clinical Chemistry and Laboratory Medicine 2011 May 1 (Vol. 49, pp. S483-S483). Genthiner Strasse 13, D-10785 Berlin, Germany: Walter De Gruyter & Co.
9. **Hashemi Tayer A\*** Ghaznavi Rad E. Antibacterial effect of platelet gel on predominant microorganisms causing nosocomial infections. 6<sup>th</sup> international congress of laboratory & clinic. 12-14 february 2014 tehran-iran. *Oral*
10. **Hashemi Tayer A\*** Amirizadeh N, Kamravan M. Hemostatic effectiveness of fibrin sealant in an animal model. 5<sup>th</sup> international congress of laboratory & clinic. 15-18 January 2013 tehran-iran. Page 24.
11. Hamid fakhar, **Hashemi Tayer A\*** Effect of the garlic pill in comparison with Plavix on Platelet aggregation and bleeding time. 5<sup>th</sup> international congress of laboratory & clinic. 15-18 January 2013 tehran-iran. Page 35.
12. P Eshghi, **A Hashemi**, N Amirizadeh, H Abolghasemi. In vitro properties of blood bank produced fibrin sealants from single donor human plasma. Journal of Thrombosis and Haemostasis 2009, p1004.
13. Amirizadeh N\*, Amani M, **Hashemi A**, Mohamadi M. Fibrin sealant as a scaffold for mesenchymal stem cell. The asian- pacific international congress of anatomists. 16-19 may 2008 tehran-iran. Page 180.
14. **Hashemi Tayer A\***. Autologous Fibrinogen and thrombin purification for use in fibrin glue. 4<sup>th</sup> congress of Laboratory and Clinic. 21-23 Dec 2011 tehran- iran. Page 541.
15. **Hashemi Tayer A\***, Amirizadeh N. Potential uses of autologous fibrin sealant and platelet gel in tissue engineering. 2<sup>nd</sup>. 16-18 may 2012 Yazd, Iran. *Oral* 13.
16. Amirizadeh N\*, **Hashemi A**, Esghi P, Abolghasemi H, Amani M, Mohamadi M. A simple and efficient method for preparation fibrin sealant from single donor plasma in blood bank. International Society of Blood Transfusion Vox Sanguinis 2009 Japan 97 (Suppl. 1), p- 095.

۱۷. **اکبر هاشمی طبر\***، عنایت اله شادمند، مریم کامروان. اخلاق در آزمایشگاه تشخیص طبی. مجله آموزش و اخلاق در پرستاری، ششمین کنگره سالانه اخلاق پزشکی ایران، ۲۷-۲۹ آذر ۹۷ (صفحه ۳۱۶).

۱۸. **اکبر هاشمی طبر\***، عنایت اله شادمند، مریم کامروان. اخلاق در انتقال خون. مجله آموزش و اخلاق در پرستاری، ششمین کنگره سالانه اخلاق پزشکی ایران، ۲۷-۲۹ آذر ۹۷ (صفحه ۳۱۷).

۱۹. **اکبر هاشمی طبر\***، محسن شمسی، امیر الماسی، فرهاد قمری. پلاسمافرز درمانی در بروسلوزیس همراه با ترومبوسیتیک میکروآنژیوپاتی. مجله علمی- پژوهشی بیماریهای عفونی و گرمسیری ایران. همایش کشوری بروسلوز، سال ۱۳۹۰ (صفحه ۱۴)

۲۰. محسن شمسی، امیر الماسی، فرهاد قمری، **اکبر هاشمی**. بررسی نظام مراقبت از بیماری بروسلوز در کشور ایران. مجله علمی- پژوهشی بیماریهای عفونی و

۲۲. فرهاد قمری، محسن شمس، امیر الماسی، **اکبر هاشمی**. بررسی بیماری بروسلوز از نظر مواجهه شغلی. مجله علمی- پژوهشی بیماریهای عفونی و گرمسیری ایران. همایش کشوری بروسلوز، سال ۱۳۹۰ (صفحه ۴۰)

۲۳. امیر الماسی، محسن شمس، مهدی خدایاری، بابک عشرتی، فرهاد قمری، **اکبر هاشمی**. بررسی اپیدمیولوژی و عوامل موثر در فاصله شروع تا تشخیص بیماری تب مالت مجله علمی- پژوهشی بیماریهای عفونی و گرمسیری ایران. همایش کشوری بروسلوز، سال ۱۳۹۰ (صفحه ۴)

## Projects

1. Antibacterial effect of platelet gel on predominant microorganisms causing nasocomial infections in arak hospitals (**Supervisor**, completed)
2. Evaluation of the Knowledge and attitude of female students and members of faculty in arak universities about safe blood donation criteria (**Supervisor**, completed)
3. Effect of autologous fibrin glue-rich platelet growth factors in healing burns (**Supervisor**, completed).
4. Efficacy of Autologous Fibrin Glue for Primary Pterygium Surgery with Conjunctival Autograft (**Co-Supervisor**, completed).
5. Evaluation of platelet growth factors and inflammatory agents in platelet gel prepared from cord blood in comparison to peripheral blood (**Supervisor**, completed)
6. Determination of the Effect of Autologous Platelet Gel on Cutaneous Leishmaniasis Wounds Healing (**Supervisor**, completed).
7. Procoagulant activity of platelet microparticles in stored platelet concentrates at room temperature (**Supervisor**, completed)
8. Anti-fungal and anti-bacterial effects of umbilical cord blood platelet gel on the predominant microorganisms causing nasocomial infections (**Supervisor**, completed)
9. Evaluation of transfusion quality indicators following the hemovigilance system implementation in jahrom city hospitals (**Supervisor**, completed)
10. Evaluation of Circulating microparticles as Prognostic Biomarker in Breast Cancer Patients (**Supervisor**, completed).
11. Evaluation of pro-inflammatory and pro-coagulant activity of platelet-derived microparticles in cardiovascular disorders (**Supervisor**, completed).
12. Determination of the inhibitory effect of beta interferon and glatiramer acetate on the release of endothelial cell derived microparticles in patients with multiple sclerosis (**Supervisor**, completed)
13. Comparison of serum level of interleukin 33 in patients with breast cancer and idiopathic granulomatous mastitis (**Supervisor**, completed)
14. Evaluation of blood coagulation changes in patients with COVID 19 (**Supervisor**, completed)
15. Comparative methylomics analysis of HbF- and HbA-producing erythroid progenitor cells (**Supervisor**, complete).
16. Comparative analysis of transcriptome profiles of differentiating erythroid progenitor cells in a culture medium enriched with thalassemic and normal human serum (**Supervisor**, complete)
17. Evaluation of hemostatic function of red blood cells derived microparticles in patients with sickle cell anemia (**Supervisor**, complete)
18. Evaluation of platelet aggregation and adhesion properties of ginseng saponin and crucin in comparison to Plavix on the platelet-rich plasma in healthy volunteers (**Supervisor**, complete)
19. Evaluation of procoagulant circulating microparticles in patients with COVID-19 (**Supervisor**, complete).
20. Evaluation of anti-platelet properties of saffron crucine in comparison to crucetin in healthy volunteers (**Supervisor**, complete).
21. Evaluation of the role of microparticles expressing phosphatidylserine in the development of venous thromboembolism in critically ill patients with Covid-19 (**Supervisor**, complete).
22. Evaluation of platelet function in COVID-19 patients with Disseminated intravascular coagulopathy in comparison to healthy volunteers (**Supervisor**, complete).
23. Evaluation of circulating microparticles pattern in B-thalassemia patients with COVID-19 (**Supervisor**, complete)



## Lecture

1. 4<sup>th</sup> international congress of laboratory & clinic, 21 Dec 2011 Tehran
2. Blood Transfusion Medicine Seminar, 16 Feb 2012 Arak university of medical Sciences
3. Hemovegilance Seminar, 19 Feb 2012, Arak university of medical Sciences
4. Haematology Congress, 16-18 may 2012, Yazd university of medical Sciences
5. Hemovegilance Seminar, 29 May 2012, Arak university of medical Sciences
6. 6<sup>th</sup> international congress of laboratory & clinic, 13 February 2014 Tehran
7. *Hemovegilance Seminar, 10 May 2018, Jahrom university of medical Sciences*
8. *Peripheral Blood Smear Workshop, 2018, Jahrom university of medical Sciences*

## Participation in Congress and seminar

<i>Congress</i>	<i>Seminar</i>	<i>Workshop</i>
1. <i>international congress of laboratory &amp; clinic(Tehran)</i>	1. <i>Hemovegilance Seminar</i>	1. <i>Peripheral blood smear (Jahrom)</i>
2. <i>6<sup>th</sup> congress of medical ethic (Jahrom)</i>	2. <i>Blood Transfusion Medicine</i>	2. <i>Flow cytometry(shiraz)</i>
3. <i>4<sup>th</sup> international congress of laboratory &amp; clinic(Tehran)</i>	3. <i>Quality control in hematology</i>	3. <i>Flow cytometry(Tehran)</i>
4. <i>5<sup>th</sup> international congress of laboratory &amp; clinic(Tehran)</i>	4. <i>Blood donation</i>	4. <i>Peripheral blood smear (shiraz)</i>
5. <i>6<sup>th</sup> international congress of laboratory &amp; clinic(Tehran)</i>	5. <i>Stem cell</i>	5. <i>Lesson and Course plan</i>
6. <i>2<sup>th</sup> International congress of Hematology (Shiraz)</i>	6. <i>Quran in medicine</i>	6. <i>CBC</i>
7. <i>Hematology (yazd)</i>	7. <i>Hemovegilance Seminar</i>	7. <i>Research methodology</i>
8. <i>International congress of Transfusion Medicine (Tehran)</i>	8. <i>HBV,HCV,HIV</i>	8. <i>Family health</i>
9. <i>International congress of /Brucellosis (Arak)</i>		9. <i>Quran and medicine</i>
		10. <i>Components of promoting human communication with students</i>
		11. <i>Ethics and teaching requirements</i>

**Editorial board**

1. Editorial board of the *Journal of Endocrinology Research* (Singapore)
2. Iranian Journal of pediatric hematology oncology (Yazd, Iran)

**Reviewer of Journals**

- ✓ *Journal of Endocrinology Research* (Singapore)
- ✓ *Iranian Journal of pediatric hematology oncology* (Yazd, Iran)
- ✓ *International Journal of Preventive Medicine* (Isfahan, Iran)
- ✓ *Asian Pacific Journal of Cancer Prevention* (india)
- ✓ *Arak Medical University Journal* (Iran)
- ✓ *Fasa Medical University Journal* (Iran)
- ✓ *Sci J Iran Blood Transfus* (Tehran, Iran)

**Scientific Secretary**

1. Blood Donation Conference (14 Feb 2011, Arak)
2. C.B.C workshop (12 Dec 2012, Arak)
3. C.B.C workshop (13 Dec 2012, Arak)

**Teaching**

Teaching	<b>Jahrom</b> university of medical Sciences	واحد 165 نظری واحد 115 عملی واحد 50
Teaching	<b>Arak</b> university of medical Sciences	واحد 61 نظری واحد 42 عملی واحد 19
Teaching	<b>Azad</b> university of medical Sciences	واحد 24 نظری واحد 6 عملی واحد 18