

# Fakher Karim Rahim

PhD in Molecular Medicine  
(Clinical Bioinformatics)



## Personal details

- Fakher Karim Rahim
- rahim.fakher@sulicihan.edu.krd
- +9647501456521
- Mamoostayan, B08, no.66  
46001 Suleymania
- March 11, 1971
- Ahwaz
- 9400257419
- Male
- Iranian
- [linkedin.com/m/in/fakher-rahim-b7b67644?originalSubdomain=ir](https://www.linkedin.com/m/in/fakher-rahim-b7b67644?originalSubdomain=ir)
- [scholar.google.com/citations?hl=en&user=ITlvYYYYAAAAJ](https://scholar.google.com/citations?hl=en&user=ITlvYYYYAAAAJ)
- [scopus.com/authid/detail.uri?authorId=23052247800](https://scopus.com/authid/detail.uri?authorId=23052247800)
- [pubmed.ncbi.nlm.nih.gov/?term=Rahim+F&sort=date](https://pubmed.ncbi.nlm.nih.gov/?term=Rahim+F&sort=date)
- [researchgate.net/profile/Fakher-Rahim](https://researchgate.net/profile/Fakher-Rahim)
- [ajums.academia.edu/FakherRahim](https://ajums.academia.edu/FakherRahim)
- [adscientificindex.com/scientist/fakher-](https://adscientificindex.com/scientist/fakher-)

## Education

- BSc Anesthesia** Sep 1998 - Oct 2002  
Ahwaz Jundishapur University of Medical Sciences, Ahwaz
- MSc Bioinformatics** May 2003 - Jul 2007  
University of Pune, PUNE
- PhD of Medical Biotechnology (clinical Bioinformatics)** Jul 2010 - Aug 2015  
Tehran University of Medical Sciences, Tehran
- Fellowship in Medical research and genetic** Jul 2016 - Aug 2017  
Ahwaz Jundishapur University of Medical Sciences, Ahwaz

## Employment

- Director of Research Center** Dec 2022 - Present  
Cihan University

## Profile

<https://scholar.google.com/citations?hl=en&user=ITlvYYYYAAAAJ>

## Certificates

15 International Certificates in Medicine  
2007-2023

## Courses

10 international Courses in Medicine  
2007-2023

## Membership

- Member of Asian Science Editors Association at Australia
- Member of Global Burden of Disease at USA
- Rater at McMaster Online Rating of Evidence (MORE) at Canada

## Grant Award

Honored Research Grant from National Institute for Medical Research Development  
Grant no.987862

Title: Diagnostic performance of classification trees and hematological functions in hematologic disorders: an application of multidimensional scaling and cluster analysis.

Honored Research Grant from National Institute for Medical Research Development  
Grant no. 4010351

Title: Identification and validation of gene expression pattern in patients with chronic immune thrombocytopenia (ITP) based on whole genome sequencing.

## Science & Technology Park

6 Years as a Vice-Counciler  
Reviewing 25 Inventions



## Skills

Molecular dynamic and simulation ●●●●●

Drug designing ●●●●●

Medical and Scientific writing ●●●●●

Systematic review and meta-analysis

Reviewer at International Journals ●●●●●

Microsoft Office ●●●●●

## Languages

English ●●●●●

Arabic ●●●●●

Persian ●●●●●

## Hobbies

- Music
- Drawing
- Sport
- Camping

## Undergraduate Subjects

1. Introduction to Bioinformatics and Molecular Epidemiology
2. DNA Sequencing and Analysis
3. Genomics and Proteomics
4. Phylogenetics and Evolutionary Analysis
5. Sequence Alignment and Homology Detection
6. Structural Bioinformatics and Molecular Modeling
7. Metagenomics and Metatranscriptomics
8. Microbial Genomics and Epidemiology
9. Pathogen Identification and Characterization
10. Host-Pathogen Interactions
11. Viral Evolution and Spread
12. Molecular Epidemiology of Infectious Diseases
13. Epidemiological Modeling and Outbreak Analysis
14. Next-generation Sequencing Technologies
15. Transcriptomics and Gene Expression Analysis
16. Statistical Methods in Bioinformatics
17. Machine Learning and Artificial Intelligence in Bioinformatics
18. Data Visualization and Analysis in Bioinformatics
19. Systems Biology and Network Analysis
20. Pharmacogenomics and Personalized Medicine.

## Postgraduate Subjects

1. Advanced Bioinformatics Analysis: This course would delve deeper into advanced topics in bioinformatics analysis, including topics such as network analysis, epigenomics, and single-cell sequencing analysis.
2. Advanced Molecular Epidemiology: Building on foundational epidemiological concepts, this course would explore more complex statistical and modeling methods used in molecular epidemiology, such as machine learning and Bayesian analysis.
3. High-Performance Computing for Bioinformatics: With the increasing volume of sequencing and other -omics data, it's becoming increasingly important for bioinformaticians to be able to work with large datasets efficiently. This course would cover advanced high-performance computing concepts and techniques as they relate to bioinformatics analysis.
4. Omics Integration: This course would cover methods for integrating data from multiple -omics sources, including genomics, transcriptomics, proteomics, and metabolomics, to gain a more comprehensive view of biological systems.
5. Advanced Bioinformatics Applications in Drug Development: This course would focus specifically on the use of bioinformatics tools and methods in drug development and personalized medicine, including topics such as pharmacogenomics, drug target identification, and drug repurposing.

## Publication

1. GBD 2019 IMID Collaborators. Global, regional, and national incidence of six major immune-mediated inflammatory diseases: findings from the global burden of disease study 2019. *EClinicalMedicine*. 2023 Sep 9;64:102193. doi: 10.1016/j.eclinm.2023.102193. PMID: 37731935; PMCID: PMC10507198.

2. Rahim F. The effect of unintended shortage in technical resources on the quality of endpoint clinical laboratory diagnosis. *Clin Chem Lab Med*. 2023 Aug 23. doi: 10.1515/cclm-2023-0861. Epub ahead of print. PMID: 37606229.

3. Azadnajafabad S, Saeedi Moghaddam S, Mohammadi E, Rezaei N, Rashidi MM, Rezaei N, Mokdad AH, Naghavi M, Murray CJL, Larijani B, Farzadfar F; GBD 2019 NAME Breast Cancer Collaborators. Burden of breast cancer and attributable risk factors in the North Africa and Middle East region, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Front Oncol*. 2023 Aug 1;13:1132816. doi: 10.3389/fonc.2023.1132816. PMID: 37593096;

4. Sepanlou SG, Rezaei Aliabadi H, Naghavi M, Malekzadeh R; GBD 2019 Iran Child Collaborators. Neonate, Infant, and Child Mortality by Cause in Provinces of Iran: An Analysis for the Global Burden of Disease Study 2019. *Arch Iran Med.* 2022 Aug 1;25(8):484-495. doi: 10.34172/aim.2022.80. PMID: 37543870.

5. Zolotarev O, Khakimova A, Rahim F, Senel E, Zatsman I, Gu D. Scientometric analysis of trends in global research on acne treatment. *Int J Womens Dermatol.* 2023 Jul 28;9(3):e082. doi: 10.1097/JW9.000000000000082. PMID: 37521754; PMCID: PMC10378739.

6. Rahim F, Zaki Zadeh A, Javanmardi P, Emmanuel Komolafe T, Khalafi M, Arjomandi A, Ghofrani HA, Shirbandi K. Machine learning algorithms for diagnosis of hip bone osteoporosis: a systematic review and meta-analysis study. *Biomed Eng Online.* 2023 Jul 10;22(1):68. doi: 10.1186/s12938-023-01132-9. PMID: 37430259; PMCID: PMC10331995.

7. GBD 2019 Chronic Respiratory Diseases Collaborators. Global burden of chronic respiratory diseases and risk factors, 1990-2019: an update from the Global Burden of Disease Study 2019. *EClinicalMedicine.* 2023 May;59:101936. doi: 10.1016/j.eclinm.2023.101936. PMID: 37229504; PMCID: PMC7614570.

8. Abbasi-Kangevari M, Malekpour MR, Masinaei M, Moghaddam SS, Ghamari SH, Abbasi-Kangevari Z, Rezaei N, Rezaei N, Mokdad AH, Naghavi M, Larijani B, Farzadfar F, .....Rahim F, Murray CJL; GBD 2019 North Africa and the Middle East Air Pollution Collaborators. Effect of air pollution on disease burden, mortality, and life expectancy in North Africa and the Middle East: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet Planet Health.* 2023 May;7(5):e358-e369. doi: 10.1016/S2542-5196(23)00053-0. PMID: 37164512; PMCID: PMC10186179.

9. Aryannejad A, Saeedi Moghaddam S, Mashinchi B, Tabary M, Rezaei N, Shahin S, Rezaei N; GBD 2019 Iran Breast Cancer Collaborators; Naghavi M, Larijani B, Farzadfar F...Rahim F. National and subnational burden of female and male breast cancer and risk factors in Iran from 1990 to 2019: results from the Global Burden of Disease study 2019. *Breast Cancer Res.* 2023 Apr 26;25(1):47. doi: 10.1186/s13058-023-01633-4. Erratum in: *Breast Cancer Res.* 2023 Jun 15;25(1):70. PMID: 37101247; PMCID: PMC10131337.

10. Neisi A, Goudarzi G, Mohammadi MJ, Tahmasebi Y, Rahim F, Baboli Z, Yazdani M, Sorooshian A, Attar SA, Angali KA, Alam K, Ahmadian M, Farhadi M. Association of the corona virus (Covid-19) epidemic with environmental risk factors. *Environ Sci Pollut Res Int.* 2023 Apr 6:1–12. doi: 10.1007/s11356-023-26647-5. Epub ahead of print. PMID: 37022543; PMCID: PMC10078041.

11. Arjmand B, Rahim F. The Probable Protective Effect of Photobiomodulation on the Immunologic Factor's mRNA Expression Level in the Lung: An Extended COVID-19 Preclinical and Clinical Meta-analysis. *Clin Pathol.* 2023 Mar 13;16: 2632010X221127683. doi: 10.1177/2632010X221127683. PMID: 36938515; PMCID: PMC10014418.

12. Alavi-Moghadam S, Kokabi-Hamidpour S, Rezaei-Tavirani M, Larijani B,

- Arjmand R, Rahim F, Rezazadeh-Mafi A, Adibi H, Arjmand B. Neuromuscular Junction-on-a-Chip for Amyotrophic Lateral Sclerosis Modeling. *Methods Mol Biol.* 2023 Feb 8. doi: 10.1007/7651\_2022\_474. Epub ahead of print. PMID: 36749488.
13. Global Burden of Disease 2021 Health Financing Collaborator Network. Global investments in pandemic preparedness and COVID-19: development assistance and domestic spending on health between 1990 and 2026. *Lancet Glob Health.* 2023 Mar;11(3):e385-e413. doi: 10.1016/S2214-109X(23)00007-4. Epub 2023 Jan 24. PMID: 36706770; PMCID: PMC9998276.
14. Saki N, Hashemi SJ, Hosseini SA, Rahimi Z, Rahim F, Cheraghian B. Socioeconomic status and metabolic syndrome in Southwest Iran: results from Hoveyze Cohort Study (HCS). *BMC Endocr Disord.* 2022 Dec 28;22(1):332. doi: 10.1186/s12902-022-01255-5. PMID: 36575435; PMCID: PMC9795639.
15. Haeuser E, Serfes AL, Cork MA, Yang M, Abbastabar H, Abhilash ES, Adabi M, Adebayo OM, Adekanmbi V, Adeyinka DA, Afzal S, Ahinkorah BO, Ahmadi K, Ahmed MB, Akalu Y, Akinyemi RO, Akunna CJ, Alahdab F, Alanezi FM, Alanzi TM, Alene KA, Alhassan RK, Alipour V, Almasi-Hashiani A, Alvis-Guzman N, ..., Rahim F, ET al; Local Burden of Disease sub-Saharan Africa HIV Prevalence Collaborators. Mapping age- and sex-specific HIV prevalence in adults in sub-Saharan Africa, 2000-2018. *BMC Med.* 2022 Dec 19;20(1):488. doi: 10.1186/s12916-022-02639-z. PMID: 36529768; PMCID: PMC9760541.
16. Arjmand B, Alavi-Moghadam S, Rezaei-Tavirani M, Kokabi-Hamidpour S, Arjmand R, Gilany K, Rajaeinejad M, Rahim F, Namazi N, Larijani B. GMP-Compliant Mesenchymal Stem Cell-Derived Exosomes for Cell-Free Therapy in Cancer. *Methods Mol Biol.* 2022 Dec 15. doi: 10.1007/7651\_2022\_467. Epub ahead of print. PMID: 36515892.
17. Reiner RC Jr; LBD Triple Burden Collaborators; Hay SI. The overlapping burden of the three leading causes of disability and death in sub-Saharan African children. *Nat Commun.* 2022 Dec 6;13(1):7457. doi: 10.1038/s41467-022-34240-6. PMID: 36473841; PMCID: PMC9726883.
18. NIHR Global Health Unit on Global Surgery; COVIDSurg Collaborative. Elective surgery system strengthening: development, measurement, and validation of the surgical preparedness index across 1632 hospitals in 119 countries. *Lancet.* 2022 Nov 5;400(10363):1607-1617. doi: 10.1016/S0140-6736(22)01846-3. Epub 2022 Oct 31. PMID: 36328042; PMCID: PMC9621702.
19. Global Health Research Group on Children's Non-Communicable Diseases Collaborative. Twelve-month observational study of children with cancer in 41 countries during the COVID-19 pandemic. *BMJ Glob Health.* 2022 Oct;7(10):e008797. doi: 10.1136/bmjgh-2022-008797. PMID: 36261229; PMCID: PMC9581782.
20. Eini E, Moradinejad M, Chaharmahali R, Rahim F. The effect of micro-osteoperforations on the rate of orthodontic tooth movement in animal model: A systematic review and meta-analysis. *J Oral Biol Craniofac Res.* 2022 Nov-Dec;12(6):873-878. doi: 10.1016/j.jobcr.2022.09.015. Epub 2022 Sep 29. PMID: 36212615; PMCID: PMC9535315.
21. Maleki M, Noorimotlagh Z, Mirzaee SA, Jaafarzadeh N, Martinez SS, Rahim F, Kaffashian M. An updated systematic review on the maternal exposure to environmental pesticides and involved mechanisms of autism spectrum disorder (ASD) progression risk in children. *Rev Environ Health.* 2022 Sep 21. doi: 10.1515/reveh-2022-0092. Epub ahead of print. PMID: 36126654.
22. Local Burden of Disease Household Air Pollution Collaborators. Mapping development and health effects of cooking with solid fuels in low-income and middle-income countries, 2000-18: a geospatial modelling study. *Lancet Glob Health.* 2022 Oct;10(10):e1395-e1411. doi: 10.1016/S2214-109X(22)00332-1. PMID: 36113526; PMCID: PMC9638039.
23. Kueh MTW, Rahim FF, Rashid A. Development and validation of the health belief model questionnaire to promote smoking cessation for nasopharyngeal cancer prevention: a cross-sectional study. *BMJ Open.* 2022 Sep 14;12(9):e057552. doi: 10.1136/bmjopen-2021-057552. PMID: 36104123; PMCID: PMC9476129.
24. Amiri M, Hasanlifard M, Rahim F, Asghari A, Mirmomeni G, Bayat A. Progression of Contralateral Hearing Loss in Patients with Unilateral Ear

- Involvement: A Scoping Review. *J Int Adv Otol.* 2022 Sep;18(5):433-440. doi: 10.5152/iao.2022.21563. PMID: 36063099; PMCID: PMC9524366.
25. GBD 2019 Cancer Risk Factors Collaborators. The global burden of cancer attributable to risk factors, 2010-19: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet.* 2022 Aug 20;400(10352):563-591. doi: 10.1016/S0140-6736(22)01438-6. PMID: 35988567; PMCID: PMC9395583.
26. GBD 2019 LRI Collaborators. Age-sex differences in the global burden of lower respiratory infections and risk factors, 1990-2019: results from the Global Burden of Disease Study 2019. *Lancet Infect Dis.* 2022 Nov;22(11):1626-1647. doi: 10.1016/S1473-3099(22)00510-2. Epub 2022 Aug 11. PMID: 35964613; PMCID: PMC9605880.
27. GBD 2019 Diabetes and Air Pollution Collaborators. Estimates, trends, and drivers of the global burden of type 2 diabetes attributable to PM2-5 air pollution, 1990-2019: an analysis of data from the Global Burden of Disease Study 2019. *Lancet Planet Health.* 2022 Jul;6(7):e586-e600. doi: 10.1016/S2542-5196(22)00122-X. PMID: 35809588; PMCID: PMC9278144.
28. GBD 2019 Adolescent Transport and Unintentional Injuries Collaborators. Adolescent transport and unintentional injuries: a systematic analysis using the Global Burden of Disease Study 2019. *Lancet Public Health.* 2022 Aug;7(8):e657-e669. doi: 10.1016/S2468-2667(22)00134-7. Epub 2022 Jun 30. Erratum in: *Lancet Public Health.* 2022 Dec;7(12):e992. PMID: 35779567; PMCID: PMC9329128.
29. Ansari N, Jahangiri M, Shirbandi K, Ebrahimi M, Rahim F. The association between different predictive biomarkers and mortality of COVID-19. *Bull Natl Res Cent.* 2022;46(1):158. doi: 10.1186/s42269-022-00844-7. Epub 2022 May 31. PMID: 35669157; PMCID: PMC9152825.
30. Sayyah M, Delirrooyfard A, Rahim F. Assessment of the diagnostic performance of two new tools versus routine screening instruments for bipolar disorder: a meta-analysis. *Braz J Psychiatry.* 2022 May-Jun;44(3):349-361. doi: 10.1590/1516-4446-2021-2334. PMID: 35588536; PMCID: PMC9169473.
31. Alisamir M, Ebrahimi M, Rahim F. Anemia in chronic obstructive pulmonary disease: A systematic review. *Respir Investig.* 2022 Jul;60(4):510-521. doi: 10.1016/j.resinv.2022.03.006. Epub 2022 Apr 26. PMID: 35484075.
32. Ghasemi S, Harmooshi NN, Rahim F. Diagnostic utility of antigen detection rapid diagnostic tests for Covid-19: a systematic review and meta-analysis. *Diagn Pathol.* 2022 Apr 13;17(1):36. doi: 10.1186/s13000-022-01215-6. PMID: 35414002; PMCID: PMC9005339.
33. Global Health Research Group on Children's Non-Communicable Diseases Collaborative. Impact of the COVID-19 pandemic on patients with paediatric cancer in low-income, middle-income and high-income countries: a multicentre, international, observational cohort study. *BMJ Open.* 2022 Apr 11;12(4):e054690. doi: 10.1136/bmjopen-2021-054690. PMID: 35410925; PMCID: PMC9021459.
34. GBD 2019 Iran Collaborators. Health system performance in Iran: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet.* 2022 Apr 23;399(10335):1625-1645. doi: 10.1016/S0140-6736(21)02751-3. Epub 2022 Apr 6. PMID: 35397236; PMCID: PMC9023870.
35. Eini E, Ghaemi A, Rahim F. Bone Using Stem Cells for Maxillofacial Bone Disorders: A Systematic Review and Meta-analysis. *Adv Exp Med Biol.* 2022 Apr 8. doi: 10.1007/5584\_2022\_706. Epub ahead of print. PMID: 35389197.
36. Khakimova A, Abdollahi L, Zolotarev O, Rahim F. Global interest in vaccines during the COVID-19 pandemic: Evidence from Google Trends. *Vaccine X.* 2022 Apr;10:100152. doi: 10.1016/j.jvacx.2022.100152. Epub 2022 Mar 11. PMID: 35291263; PMCID: PMC8915451.
37. Jaafarzadeh N, Poormohammadi A, Almasi H, Ghaedrahmat Z, Rahim F, Zahedi A. Arsenic in drinking water and kidney cancer: a systematic review. *Rev Environ Health.* 2022 Mar 15. doi: 10.1515/reveh-2021-0168. Epub ahead of print. PMID: 35286785.
38. Aronson SJ, Junge N, Trabelsi M, Kelmemei W, Hubert A, Brigatti KW, Fox MD, de Knecht RJ, Escher JC, Ginocchio VM, Iorio R, Zhu Y, Özçay F, Rahim F, El-Shabrawi MHF, Shteyer E, Di Giorgio A, D'Antiga L, Mingozzi F, Brunetti-Pierri N, Strauss KA, Labrune P, Mrad R, Baumann U, Beuers U, Bosma PJ; CureCN

- Consortium. Disease burden and management of Crigler-Najjar syndrome: Report of a world registry. *Liver Int.* 2022 Jul;42(7):1593-1604. doi: 10.1111/liv.15239. Epub 2022 Mar 29. PMID: 35274801.
39. Dehghan B, Saeidimehr S, Sayyah M, Rahim F. The Effect of Virtual Reality on Emotional Response and Symptoms Provocation in Patients With OCD: A Systematic Review and Meta-Analysis. *Front Psychiatry.* 2022 Feb 1;12:733584. doi: 10.3389/fpsyt.2021.733584. PMID: 35177996; PMCID: PMC8846333.
40. Arjmand B, Kokabi Hamidpour S, Rabbani Z, Tayanloo-Beik A, Rahim F, Aghayan HR, Larijani B. Organ on a Chip: A Novel in vitro Biomimetic Strategy in Amyotrophic Lateral Sclerosis (ALS) Modeling. *Front Neurol.* 2022 Jan 17;12:788462. doi: 10.3389/fneur.2021.788462. PMID: 35111126; PMCID: PMC8802668.
41. Ghanawat M, Arjmand B, Rahim F. The Pro-tumor and Anti-tumor Effects of NLRP3 Inflammasome as a New Therapeutic Option for Colon Cancer: a Meta-analysis of Pre-clinical Studies. *J Gastrointest Cancer.* 2022 Jan 24. doi: 10.1007/s12029-022-00805-3. Epub ahead of print. PMID: 35072914.
42. GBD 2019 Dementia Forecasting Collaborators. Estimation of the global prevalence of dementia in 2019 and forecasted prevalence in 2050: an analysis for the Global Burden of Disease Study 2019. *Lancet Public Health.* 2022 Feb;7(2):e105-e125. doi: 10.1016/S2468-2667(21)00249-8. Epub 2022 Jan 6. PMID: 34998485; PMCID: PMC8810394.
43. Global Burden of Disease 2019 Cancer Collaboration; Kocarnik JM, Compton K, Dean FE, Fu W, Gaw BL, Harvey JD, Henrikson HJ, Lu D, Pennini A, Xu R, Ababneh E, Abbasi-Kangevari M, Abastabar H, Abd-Elsalam SM, Abdoli A, Abedi A, Abidi H, Abolhassani H, Adedeji IA, Adnani QES, Advani SM, Afzal MS, Aghaali M, Ahinkorah BO, Ahmad S, Ahmad T, Ahmadi A, Ahmadi S, Ahmed Rashid T, Ahmed Salih Y, Akalu GT, Aklilu A, Akram T, Akunna CJ, Al Hamad H, ..., Rahim F, ET al. Cancer Incidence, Mortality, Years of Life Lost, Years Lived With Disability, and Disability-Adjusted Life Years for 29 Cancer Groups From 2010 to 2019: A Systematic Analysis for the Global Burden of Disease Study 2019. *JAMA Oncol.* 2022 Mar 1;8(3):420-444. doi: 10.1001/jamaoncol.2021.6987. PMID: 34967848; PMCID: PMC8719276.
44. Raji H, Arjmand B, Rahim F. The Probable Protective Effect of Photobiomodulation on the Inflammation of the Airway and Lung in COVID-19 Treatment: A Preclinical and Clinical Meta-Analysis. *Adv Exp Med Biol.* 2022; 1376:29-44. doi: 10.1007/5584\_2021\_665. PMID: 34907516.
45. Harmooshi NN, Abeshtan A, Zakerkish M, Mirmomeni G, Rahim F. The effect of metformin on body mass index and metabolic parameters in non-diabetic HIV-positive patients: a meta-analysis. *J Diabetes Metab Disord.* 2021 Aug 12;20(2):1901-1911. doi: 10.1007/s40200-021-00869-1. PMID: 34900832; PMCID: PMC8630165.
46. GBD 2019 Adolescent Young Adult Cancer Collaborators. The global burden of adolescent and young adult cancer in 2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet Oncol.* 2022 Jan;23(1):27-52. doi: 10.1016/S1470-2045(21)00581-7. Epub 2021 Dec 3. PMID: 34871551; PMCID: PMC8716339.
47. Haybar H, Shirbandi K, Rahim F. C2HEST score for atrial fibrillation risk prediction models: a Diagnostic Accuracy Tests meta-analysis. *Egypt Heart J.* 2021 Dec 4;73(1):104. doi: 10.1186/s43044-021-00230-0. PMID: 34862957; PMCID: PMC8643379.
48. Rahim F, Khakimova A, Ebrahimi A, Zolotarev O, Rafiei Nasab F. Global Scientific Research on SARS-CoV-2 Vaccines: A Bibliometric Analysis. *Cell J.* 2021 Oct;23(5):523-531. doi: 10.22074/cellj.2021.7794. Epub 2021 Oct 30. PMID: 34837679; PMCID: PMC8588811.
49. Saadati N, Haidari F, Barati M, Nikbakht R, Mirmomeni G, Rahim F. The effect of low glycemic index diet on the reproductive and clinical profile in women with polycystic ovarian syndrome: A systematic review and meta-analysis. *Heliyon.* 2021 Nov 9;7(11):e08338. doi: 10.1016/j.heliyon.2021.e08338. PMID: 34820542; PMCID: PMC8600081.
50. Jahangiri M, Rahim F, Saki N, Saki Malehi A. Application of Bayesian Decision Tree in Hematology Research: Differential Diagnosis of  $\beta$ -Thalassemia

- Trait from Iron Deficiency Anemia. *Comput Math Methods Med*. 2021 Nov 9;2021:6401105. doi: 10.1155/2021/6401105. PMID: 34795791; PMCID: PMC8594992.
51. Rahim F, Kazemnejad A, Jahangiri M, Malehi AS, Gohari K. Diagnostic performance of classification trees and hematological functions in hematologic disorders: an application of multidimensional scaling and cluster analysis. *BMC Med Inform Decis Mak*. 2021 Nov 10;21(1):313. doi: 10.1186/s12911-021-01678-5. PMID: 34758828; PMCID: PMC8579574.
52. GBD 2019 Adolescent Mortality Collaborators. Global, regional, and national mortality among young people aged 10-24 years, 1950-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2021 Oct 30;398(10311):1593-1618. doi: 10.1016/S0140-6736(21)01546-4. Epub 2021 Oct 28. Erratum in: *Lancet*. 2022 Feb 26;399(10327):802. PMID: 34755628; PMCID: PMC8576274.
53. Kinyoki D, Osgood-Zimmerman AE, Bhattacharjee NV; Local Burden of Disease Anaemia Collaborators; Kassebaum NJ, Hay SI. Anemia prevalence in women of reproductive age in low- and middle-income countries between 2000 and 2018. *Nat Med*. 2021 Oct;27(10):1761-1782. doi: 10.1038/s41591-021-01498-0. Epub 2021 Oct 12. PMID: 34642490; PMCID: PMC8516651.
54. COVIDSurg Collaborative. Effect of COVID-19 pandemic lockdowns on planned cancer surgery for 15 tumour types in 61 countries: an international, prospective, cohort study. *Lancet Oncol*. 2021 Nov;22(11):1507-1517. doi: 10.1016/S1470-2045(21)00493-9. Epub 2021 Oct 5. PMID: 34624250; PMCID: PMC8492020.
55. Khafaie MA, Malehi AS, Rahim F. The association between various indicators of hospital capacity, age category, and the number of screening tests performed with case fatality rate and recovery rate during the COVID-19 disease pandemic. *J Prev Med Hyg*. 2021 Jul 30;62(2):E261-E269. doi: 10.15167/2421-4248/jpmh2021.62.2.1569. PMID: 34604564; PMCID: PMC8451361.
56. GBD 2019 HIV Collaborators. Global, regional, and national sex-specific burden and control of the HIV epidemic, 1990-2019, for 204 countries and territories: the Global Burden of Diseases Study 2019. *Lancet HIV*. 2021 Oct;8(10):e633-e651. doi: 10.1016/S2352-3018(21)00152-1. Erratum in: *Lancet HIV*. 2022 Feb 21;: PMID: 34592142; PMCID: PMC8491452.
57. GBD 2019 Tuberculosis Collaborators. Global, regional, and national sex differences in the global burden of tuberculosis by HIV status, 1990-2019: results from the Global Burden of Disease Study 2019. *Lancet Infect Dis*. 2022 Feb;22(2):222-241. doi: 10.1016/S1473-3099(21)00449-7. Epub 2021 Sep 23. PMID: 34563275; PMCID: PMC8799634.
58. Global Burden of Disease 2020 Health Financing Collaborator Network. Tracking development assistance for health and for COVID-19: a review of development assistance, government, out-of-pocket, and other private spending on health for 204 countries and territories, 1990-2050. *Lancet*. 2021 Oct 9;398(10308):1317-1343. doi: 10.1016/S0140-6736(21)01258-7. Epub 2021 Sep 22. PMID: 34562388; PMCID: PMC8457757.
59. Saki A, Rajaei E, Rahim F. Safety and efficacy of tocilizumab for rheumatoid arthritis: a systematic review and meta-analysis of clinical trial studies. *Reumatologia*. 2021;59(3):169-179. doi: 10.5114/reum.2021.107026. Epub 2021 Jul 11. PMID: 34538944; PMCID: PMC8436803.
60. GBD 2019 Stroke Collaborators. Global, regional, and national burden of stroke and its risk factors, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet Neurol*. 2021 Oct;20(10):795-820. doi: 10.1016/S1474-4422(21)00252-0. Epub 2021 Sep 3. PMID: 34487721; PMCID: PMC8443449.
61. COVIDSurg Collaborative; GlobalSurg Collaborative. SARS-CoV-2 infection and venous thromboembolism after surgery: an international prospective cohort study. *Anaesthesia*. 2022 Jan;77(1):28-39. doi: 10.1111/anae.15563. Epub 2021 Aug 24. PMID: 34428858; PMCID: PMC8652887.
62. GBD 2019 Dementia Collaborators. Use of multidimensional item response theory methods for dementia prevalence prediction: an example using the Health and Retirement Survey and the Aging, Demographics, and Memory Study. *BMC Med Inform Decis Mak*. 2021 Aug 11;21(1):241. doi: 10.1186/s12911-021-01590-

y. PMID: 34380485; PMCID: PMC8356410.

63. COVIDSurg Collaborative; GlobalSurg Collaborative. Effects of pre-operative isolation on postoperative pulmonary complications after elective surgery: an international prospective cohort study. *Anaesthesia*. 2021 Nov;76(11):1454-1464. doi: 10.1111/anae.15560. Epub 2021 Aug 9. PMID: 34371522.

64. GBD 2019 Collaborators. Global mortality from dementia: Application of a new method and results from the Global Burden of Disease Study 2019. *Alzheimers Dement (N Y)*. 2021 Jul 27;7(1):e12200. doi: 10.1002/trc2.12200. PMID: 34337138; PMCID: PMC8315276.

65. Cromwell EA, Osborne JCP, Unnasch TR, Basáñez MG, Gass KM, Barbre KA, Hill E, Johnson KB, Donkers KM, Shirude S, Schmidt CA, Adekanmbi V, Adetokunboh OO, Afarideh M, Ahmadpour E, Ahmed MB, Akalu TY, Al-Aly Z, Alanezi FM, Alanzi TM, Alipour V, Andrei CL, Ansari F, Ansha MG, Anvari D, Appiah SCY, Arabloo J, Arnold BF, Ausloos M, Ayanore MA, Baig AA, Banach M, Barac A, Bärnighausen TW, Bayati M, Bhattacharyya K, Bhutta ZA, Bibi S, Bijani A, ET al. Predicting the environmental suitability for onchocerciasis in Africa as an aid to elimination planning. *PLoS Negl Trop Dis*. 2021 Jul 28;15(7):e0008824. doi: 10.1371/journal.pntd.0008824. PMID: 34319976; PMCID: PMC8318275.

66. Eini E, Yousefimanesh H, Ashtiani AH, Saki-Malehi A, Olapour A, Rahim F. Comparing success of immediate versus delay loading of implants in fresh sockets: a systematic review and meta-analysis. *Oral Maxillofac Surg*. 2022 Jun;26(2):185-194. doi: 10.1007/s10006-021-00983-7. Epub 2021 Jul 12. PMID: 34251545.

67. COVIDSurg Collaborative. Machine learning risk prediction of mortality for patients undergoing surgery with perioperative SARS-CoV-2: the COVIDSurg mortality score. *Br J Surg*. 2021 Nov 11;108(11):1274-1292. doi: 10.1093/bjs/znac183. PMID: 34227657; PMCID: PMC8344569.

68. Delbari A, Zanjari N, Momtaz YA, Rahim F, Saeidimehr S. Prevalence of frailty and associated socio-demographic factors among community-dwelling older people in southwestern Iran: a cross-sectional study. *J Diabetes Metab Disord*. 2021 Mar 31;20(1):601-610. doi: 10.1007/s40200-021-00787-2. PMID: 34222080; PMCID: PMC8212196.

69. Arjmand B, Alavi-Moghadam S, Parhizkar Roudsari P, Rezaei-Tavirani M, Rahim F, Gilany K, Mohamadi-Jahani F, Adibi H, Larijani B. COVID-19 Pathology on Various Organs and Regenerative Medicine and Stem Cell-Based Interventions. *Front Cell Dev Biol*. 2021 Jun 14;9:675310. doi: 10.3389/fcell.2021.675310. PMID: 34195193; PMCID: PMC8238122.

70. GBD 2019 Dementia Collaborators. The Burden of Dementia due to Down Syndrome, Parkinson's Disease, Stroke, and Traumatic Brain Injury: A Systematic Analysis for the Global Burden of Disease Study 2019. *Neuroepidemiology*. 2021;55(4):286-296. doi: 10.1159/000515393. Epub 2021 Jun 28. PMID: 34182555; PMCID: PMC8794050.

71. Local Burden of Disease HIV Collaborators. Subnational mapping of HIV incidence and mortality among individuals aged 15-49 years in sub-Saharan Africa, 2000-18: a modelling study. *Lancet HIV*. 2021 Jun;8(6):e363-e375. doi: 10.1016/S2352-3018(21)00051-5. PMID: 34087097; PMCID: PMC8187986.

72. Bhattacharjee NV, Schaeffer LE, Hay SI; Local Burden of Disease Exclusive Breastfeeding Collaborators. Mapping inequalities in exclusive breastfeeding in low- and middle-income countries, 2000-2018. *Nat Hum Behav*. 2021 Aug;5(8):1027-1045. doi: 10.1038/s41562-021-01108-6. Epub 2021 Jun 3. PMID: 34083753; PMCID: PMC8373614.

73. Ebrahimi M, Mohammadi-Asl J, Rahim F. The worldwide molecular spectrum and distribution of thalassaemia: a systematic review. *Ann Hum Biol*. 2021 Jun;48(4):307-312. doi: 10.1080/03014460.2021.1909135. Epub 2021 May 25. PMID: 34032183.

74. RECOVERY Collaborative Group. Convalescent plasma in patients admitted to hospital with COVID-19 (RECOVERY): a randomised controlled, open-label, platform trial. *Lancet*. 2021 May 29;397(10289):2049-2059. doi: 10.1016/S0140-6736(21)00897-7. Epub 2021 May 14. PMID: 34000257; PMCID: PMC8121538.

75. Moezzi M, Shirbandi K, Shahvandi HK, Arjmand B, Rahim F. The diagnostic accuracy of Artificial Intelligence-Assisted CT imaging in COVID-19 disease: A



systematic review and meta-analysis. *Inform Med Unlocked*. 2021;24:100591. doi: 10.1016/j.imu.2021.100591. Epub 2021 May 6. PMID: 33977119; PMCID: PMC8099790.

76. RECOVERY Collaborative Group. Tocilizumab in patients admitted to hospital with COVID-19 (RECOVERY): a randomised, controlled, open-label, platform trial. *Lancet*. 2021 May 1;397(10285):1637-1645. doi: 10.1016/S0140-6736(21)00676-0. PMID: 33933206; PMCID: PMC8084355.

77. COVIDSurg Collaborative, GlobalSurg Collaborative. SARS-CoV-2 vaccination modelling for safe surgery to save lives: data from an international prospective cohort study. *Br J Surg*. 2021 Sep 27;108(9):1056-1063. doi: 10.1093/bjs/znac101. PMID: 33761533; PMCID: PMC7995808.

78. Rahim F, Azizimalamiri R, Sayyah M, Malayeri A. Experimental Therapeutic Strategies in Epilepsies Using Anti-Seizure Medications. *J Exp Pharmacol*. 2021 Mar 11;13:265-290. doi: 10.2147/JEP.S267029. PMID: 33732031; PMCID: PMC7959000.

79. GBD 2019 Hearing Loss Collaborators. Hearing loss prevalence and years lived with disability, 1990-2019: findings from the Global Burden of Disease Study 2019. *Lancet*. 2021 Mar 13;397(10278):996-1009. doi: 10.1016/S0140-6736(21)00516-X. PMID: 33714390; PMCID: PMC7960691.

80. COVIDSurg Collaborative; GlobalSurg Collaborative. Timing of surgery following SARS-CoV-2 infection: an international prospective cohort study. *Anaesthesia*. 2021 Jun;76(6):748-758. doi: 10.1111/anae.15458. Epub 2021 Mar 9. PMID: 33690889; PMCID: PMC8206995.

81. RECOVERY Collaborative Group. Azithromycin in patients admitted to hospital with COVID-19 (RECOVERY): a randomised, controlled, open-label, platform trial. *Lancet*. 2021 Feb 13;397(10274):605-612. doi: 10.1016/S0140-6736(21)00149-5. Epub 2021 Feb 2. PMID: 33545096; PMCID: PMC7884931.

82. Khafaie MA, Rahim F. Estimating Case Fatality and Case Recovery Rates of COVID-19: is this the right thing to do? *Cent Asian J Glob Health*. 2021 Jan 15;10(1):e489. doi: 10.5195/cajgh.2021.489. PMID: 35865121; PMCID: PMC9291733.

83. Local Burden of Disease Vaccine Coverage Collaborators. Mapping routine measles vaccination in low- and middle-income countries. *Nature*. 2021 Jan;589(7842):415-419. doi: 10.1038/s41586-020-03043-4. Epub 2020 Dec 16. PMID: 33328634; PMCID: PMC7739806.

84. Roth GA, Mensah GA, Johnson CO, Addolorato G, Ammirati E, Baddour LM, Barengo NC, Beaton AZ, Benjamin EJ, Benziger CP, Bonny A, Brauer M, Brodmann M, Cahill TJ, Carapetis J, Catapano AL, Chugh SS, Cooper LT, Coresh J, Criqui M, DeCleene N, Eagle KA, Emmons-Bell S, Feigin VL, Fernández-Solà J, Fowkes G, Gakidou E, Grundy SM, He FJ, Howard G, Hu F, Inker L, Karthikeyan G, Kassebaum N, Koroshetz W, Lavie C, Lloyd-Jones D, Lu HS, Mirijello A, Temesgen AM, Mokdad A, Moran AE, Muntner P, Narula J, Neal B, Ntsekhe M, Moraes de Oliveira G, Otto C, Owolabi M, Pratt M, Rajagopalan S, Reitsma M, Ribeiro ALP, Rigotti N, Rodgers A, Sable C, Shakil S, Sliwa-Hahnle K, Stark B, Sundström J, Timpel P, Tleyjeh IM, Valgimigli M, Vos T, Whelton PK, Yacoub M, Zuhlke L, Murray C, Fuster V; GBD-NHLBI-JACC Global Burden of Cardiovascular Diseases Writing Group. Global Burden of Cardiovascular Diseases and Risk Factors, 1990-2019: Update From the GBD 2019 Study. *J Am Coll Cardiol*. 2020 Dec 22;76(25):2982-3021. doi: 10.1016/j.jacc.2020.11.010. Erratum in: *J Am Coll Cardiol*. 2021 Apr 20;77(15):1958-1959. PMID: 33309175; PMCID: PMC7755038.

85. Ebrahimi M, Malehi AS, Rahim F. COVID-19 Patients: A Systematic Review and Meta-Analysis of Laboratory Findings, Comorbidities, and Clinical Outcomes Comparing Medical Staff versus the General Population. *Osong Public Health Res Perspect*. 2020 Oct;11(5):269-279. doi: 10.24171/j.phrp.2020.11.5.02. PMID: 33117631; PMCID: PMC7577386.

86. Sayyah M, Shirbandi K, Rahim F, Ganji R. Statin for Migraine Headache: Is It Worthwhile? *Neurol India*. 2020 Sep-Oct;68(5):1003-1007. doi: 10.4103/0028-3886.299154. PMID: 33109841.

87. GBD 2019 Universal Health Coverage Collaborators. Measuring universal health coverage based on an index of effective coverage of health services in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2020 Oct 17;396(10258):1250-1284. doi:

- 10.1016/S0140-6736(20)30750-9. Epub 2020 Aug 27. PMID: 32861314; PMCID: PMC7562819.
88. Local Burden of Disease WaSH Collaborators. Mapping geographical inequalities in access to drinking water and sanitation facilities in low-income and middle-income countries, 2000-17. *Lancet Glob Health*. 2020 Sep;8(9):e1162-e1185. doi:10.1016/S2214-109X(20)30278-3. PMID: 32827479; PMCID: PMC7443708.
89. Ebrahimi M, Malehi AS, Rahim F. COVID-19 Patients: A Systematic Review and Meta-Analysis of Laboratory Findings, Comorbidities, and Clinical Outcomes Comparing Medical Staff versus the General Population. *Osong Public Health Res Perspect*. 2020 Oct;11(5):269-279. doi: 10.24171/j.phrp.2020.11.5.02. PMID: 33117631; PMCID: PMC7577386.
90. Roth GA, Mensah GA, Johnson CO, Addolorato G, Ammirati E, Baddour LM, Barengo NC,... ; GBD-NHLBI-JACC Global Burden of Cardiovascular Diseases Writing Group. Global Burden of Cardiovascular Diseases and Risk Factors, 1990-2019: Update From the GBD 2019 Study. *J Am Coll Cardiol*. 2020 Dec 22;76(25):2982-3021. doi:10.1016/j.jacc.2020.11.010. Erratum in: *J Am Coll Cardiol*. 2021 Apr 20;77(15):1958-1959. PMID: 33309175; PMCID: PMC7755038.
91. Local Burden of Disease Vaccine Coverage Collaborators. Mapping routine measles vaccination in low- and middle-income countries. *Nature*. 2021 Jan;589(7842):415-419. doi: 10.1038/s41586-020-03043-4. Epub 2020 Dec 16. PMID: 33328634; PMCID: PMC7739806.
92. COVIDSurg Collaborative; GlobalSurg Collaborative. Timing of surgery following SARS-CoV-2 infection: an international prospective cohort study. *Anaesthesia*. 2021 Jun;76(6):748-758. doi: 10.1111/anae.15458. Epub 2021 Mar 9. PMID: 33690889; PMCID: PMC8206995.
93. GBD 2019 Hearing Loss Collaborators. Hearing loss prevalence and years lived with disability, 1990-2019: findings from the Global Burden of Disease Study 2019. *Lancet*. 2021 Mar 13;397(10278):996-1009. doi:10.1016/S0140-6736(21)00516-X. PMID: 33714390; PMCID: PMC7960691.
94. Rahim F, Azizimalamiri R, Sayyah M, Malayeri A. Experimental Therapeutic Strategies in Epilepsies Using Anti-Seizure Medications. *J Exp Pharmacol*. 2021 Mar 11;13:265-290. doi: 10.2147/JEP.S267029. PMID: 33732031; PMCID: PMC7959000.
95. COVIDSurg Collaborative, GlobalSurg Collaborative. SARS-CoV-2 vaccination modelling for safe surgery to save lives: data from an international prospective cohort study. *Br J Surg*. 2021 Sep 27;108(9):1056-1063. doi: 10.1093/bjs/znab101. PMID: 33761533; PMCID: PMC7995808.
96. Moezzi M, Shirbandi K, Shahvandi HK, Arjmand B, Rahim F. The diagnostic accuracy of Artificial Intelligence-Assisted CT imaging in COVID-19 disease: A systematic review and meta-analysis. *Inform Med Unlocked*. 2021;24:100591. doi: 10.1016/j.imu.2021.100591. Epub 2021 May 6. PMID: 33977119; PMCID: PMC8099790.
97. Ebrahimi M, Mohammadi-Asl J, Rahim F. The worldwide molecular spectrum and distribution of thalassaemia: a systematic review. *Ann Hum Biol*. 2021 Jun;48(4):307-312. doi: 10.1080/03014460.2021.1909135. Epub 2021 May 25. PMID: 34032183.
98. Bhattacharjee NV, Schaeffer LE, Hay SI; Local Burden of Disease Exclusive Breastfeeding Collaborators. Mapping inequalities in exclusive breastfeeding in low- and middle-income countries, 2000-2018. *Nat Hum Behav*. 2021 Aug;5(8):1027-1045. doi: 10.1038/s41562-021-01108-6. Epub 2021 Jun 3. PMID: 34083753; PMCID: PMC8373614.
99. Local Burden of Disease HIV Collaborators. Subnational mapping of HIV incidence and mortality among individuals aged 15-49 years in sub-Saharan Africa, 2000-18: a modelling study. *Lancet HIV*. 2021 Jun;8(6):e363-e375. doi: 10.1016/S2352-3018(21)00051-5. PMID: 34087097; PMCID: PMC8187986.
100. GBD 2019 Dementia Collaborators. The Burden of Dementia due to Down Syndrome, Parkinson's Disease, Stroke, and Traumatic Brain Injury: A Systematic Analysis for the Global Burden of Disease Study 2019. *Neuroepidemiology*. 2021; 55(4):286-296. doi: 10.1159/000515393. Epub 2021 Jun 28. PMID: 34182555.
101. Arjmand B, Alavi-Moghadam S, Parhizkar Roudsari P, Rezaei-Tavirani M,

- Rahim F, Gilany K, Mohamadi-Jahani F, Adibi H, Larijani B. COVID-19 Pathology on Various Organs and Regenerative Medicine and Stem Cell-Based Interventions. *Front Cell Dev Biol.* 2021 Jun 14;9:675310. doi: 10.3389/fcell.2021.675310. PMID: 34195193; PMCID: PMC8238122.
102. Delbari A, Zanjari N, Momtaz YA, Rahim F, Saeidimehr S. Prevalence of frailty and associated socio-demographic factors among community-dwelling older people in southwestern Iran: a cross-sectional study. *J Diabetes Metab Disord.* 2021 Mar 31;20(1):601-610. doi: 10.1007/s40200-021-00787-2. PMID: 34222080; PMCID: PMC8212196.
103. COVIDSurg Collaborative. Machine learning risk prediction of mortality for patients undergoing surgery with perioperative SARS-CoV-2: the COVIDSurg mortality score. *Br J Surg.* 2021 Nov 11;108(11):1274-1292. doi: 10.1093/bjs/znab183. PMID: 34227657; PMCID: PMC8344569.
104. Eini E, Yousefimanesh H, Ashtiani AH, Saki-Malehi A, Olapour A, Rahim F. Comparing success of immediate versus delay loading of implants in fresh sockets: a systematic review and meta-analysis. *Oral Maxillofac Surg.* 2021 Jul 12. doi: 10.1007/s10006-021-00983-7. Epub ahead of print. PMID: 34251545.
105. Cromwell EA, Osborne JCP, Unnasch TR, Basáñez MG, Gass KM, Barbre KA, Hill E, Johnson KB, ... Predicting the environmental suitability for onchocerciasis in Africa as an aid to elimination planning. *PLoS Negl Trop Dis.* 2021 Jul 28;15(7):e0008824. doi: 10.1371/journal.pntd.0008824. PMID: 34319976; PMCID: PMC8318275.
106. GBD 2019 Dementia Collaborators. Use of multidimensional item response theory methods for dementia prevalence prediction: an example using the Health and Retirement Survey and the Aging, Demographics, and Memory Study. *BMC Med Inform Decis Mak.* 2021 Aug 11;21(1):241. doi: 10.1186/s12911-021-01590-y. PMID:34380485; PMCID: PMC8356410.
107. GBD 2019 Stroke Collaborators. Global, regional, and national burden of stroke and its risk factors, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet Neurol.* 2021 Oct;20(10):795-820. doi: 10.1016/S1474-4422(21)00252-0. Epub 2021 Sep 3. PMID: 34487721; PMCID: PMC8443449.
108. Saki A, Rajaei E, Rahim F. Safety and efficacy of tocilizumab for rheumatoid arthritis: a systematic review and meta-analysis of clinical trial studies. *Reumatologia.* 2021;59(3):169-179. doi: 10.5114/reum.2021.107026. Epub 2021 Jul 11. PMID: 34538944; PMCID: PMC8436803.
109. Global Burden of Disease 2020 Health Financing Collaborator Network. Tracking development assistance for health and for COVID-19: a review of development assistance, government, out-of-pocket, and other private spending on health for 204 countries and territories, 1990-2050. *Lancet.* 2021 Oct 9;398(10308):1317-1343. doi: 10.1016/S0140-6736(21)01258-7. Epub 2021 Sep 22. PMID: 34562388; PMCID: PMC8457757.
110. GBD 2019 Tuberculosis Collaborators. Global, regional, and national sex differences in the global burden of tuberculosis by HIV status, 1990-2019: results from the Global Burden of Disease Study 2019. *Lancet Infect Dis.* 2021 Sep 23; S1473-3099(21)00449-7. doi: 10.1016/S1473-3099(21)00449-7. Epub ahead of print. PMID: 34563275.
111. GBD 2019 HIV Collaborators. Global, regional, and national sex-specific burden and control of the HIV epidemic, 1990-2019, for 204 countries and territories: the Global Burden of Diseases Study 2019. *Lancet HIV.* 2021 Oct;8(10):e633-e651. doi: 10.1016/S2352-3018(21)00152-1. PMID: 34592142; PMCID: PMC8491452.
112. Khafaie MA, Malehi AS, Rahim F. The association between various indicators of hospital capacity, age category, and the number of screening tests performed with case fatality rate and recovery rate during the COVID-19 disease pandemic. *J Prev Med Hyg.* 2021 Jul 30;62(2):E261-E269. doi: 10.15167/2421-4248/jpmh2021.62.2.1569. PMID: 34604564; PMCID: PMC8451361.
113. COVIDSurg Collaborative. Effect of COVID-19 pandemic lockdowns on planned cancer surgery for 15 tumour types in 61 countries: an international, prospective, cohort study. *Lancet Oncol.* 2021 Nov;22(11):1507-1517. doi:

10.1016/S1470-2045(21)00493-9. Epub 2021 Oct 5. PMID: 34624250; PMCID: PMC8492020.

114. Kinyoki D, Osgood-Zimmerman AE, Bhattacharjee NV; Local Burden of Disease Anaemia Collaborators, Kassebaum NJ, Hay SI. Anemia prevalence in women of reproductive age in low- and middle-income countries between 2000 and 2018. *Nat Med.* 2021 Oct;27(10):1761-1782. doi: 10.1038/s41591-021-01498-0. Epub 2021 Oct 12. PMID: 34642490; PMCID: PMC8516651.

115. GBD 2019 Adolescent Mortality Collaborators. Global, regional, and national mortality among young people aged 10-24 years, 1950-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet.* 2021 Oct 30;398(10311):1593-1618. doi: 10.1016/S0140-6736(21)01546-4. Epub 2021 Oct 28. PMID: 34755628; PMCID: PMC8576274.

116. Rahim F, Kazemnejad A, Jahangiri M, Malehi AS, Gohari K. Diagnostic performance of classification trees and hematological functions in hematologic disorders: an application of multidimensional scaling and cluster analysis. *BMC Med Inform Decis Mak.* 2021 Nov 10;21(1):313. doi: 10.1186/s12911-021-01678-5. PMID: 34758828; PMCID: PMC8579574.

117. Jahangiri M, Rahim F, Saki N, Saki Malehi A. Application of Bayesian Decision Tree in Hematology Research: Differential Diagnosis of  $\beta$ -Thalassemia Trait from Iron Deficiency Anemia. *Comput Math Methods Med.* 2021 Nov 9;2021:6401105. doi: 10.1155/2021/6401105. PMID: 34795791; PMCID: PMC8594992.

118. Saadati N, Haidari F, Barati M, Nikbakht R, Mirmomeni G, Rahim F. The effect of low glycemic index diet on the reproductive and clinical profile in women with polycystic ovarian syndrome: A systematic review and meta-analysis. *Heliyon.* 2021 Nov 9;7(11):e08338. doi: 10.1016/j.heliyon.2021.e08338. PMID: 34820542; PMCID: PMC8600081.

119. Rahim F, Khakimova A, Ebrahimi A, Zolotarev O, Rafiei Nasab F. Global Scientific Research on SARS-CoV-2 Vaccines: A Bibliometric Analysis. *Cell J.* 2021 Oct;23(5):523-531. doi: 10.22074/cellj.2021.7794. Epub 2021 Oct 30. PMID: 34837679; PMCID: PMC8588811.

120. Haybar H, Shirbandi K, Rahim F. C2HEST score for atrial fibrillation risk prediction models: a Diagnostic Accuracy Tests meta-analysis. *Egypt Heart J.* 2021 Dec 4;73(1):104. doi: 10.1186/s43044-021-00230-0. PMID: 34862957; PMCID: PMC8643379. 3

121. GBD 2019 Adolescent Young Adult Cancer Collaborators. The global burden of adolescent and young adult cancer in 2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet Oncol.* 2022 Jan;23(1):27-52. doi: 10.1016/S1470-2045(21)00581-7. Epub 2021 Dec 3. PMID: 34871551; PMCID: PMC8716339.

122. Harmooshi NN, Abeshtan A, Zakerkish M, Mirmomeni G, Rahim F. The effect of metformin on body mass index and metabolic parameters in non-diabetic HIV-positive patients: a meta-analysis. *J Diabetes Metab Disord.* 2021 Aug 12;20(2):1901-1911. doi: 10.1007/s40200-021-00869-1. PMID: 34900832; PMCID: PMC8630165.

123. Raji H, Arjmand B, Rahim F. The Probable Protective Effect of Photobiomodulation on the Inflammation of the Airway and Lung in COVID-19 Treatment: A Preclinical and Clinical Meta-Analysis. *Adv Exp Med Biol.* 2021 Dec 16. doi: 10.1007/5584\_2021\_665. Epub ahead of print. PMID: 34907516.

124. Global Burden of Disease 2019 Cancer Collaboration, Kocarnik JM, Compton K, 41. Dean FE,.. Cancer Incidence, Mortality, Years of Life Lost, Years Lived With Disability, and Disability-Adjusted Life Years for 29 Cancer Groups From 2010 to 2019: A Systematic Analysis for the Global Burden of Disease Study 2019. *JAMA Oncol.* 2021 Dec 30:e216987. doi:10.1001/jamaoncol.2021.6987. Epub ahead of print. PMID: 34967848; PMCID: PMC8719276.

125. Ebrahimi M, Maleknia M, Parav N, Mohammadi MB, Mortazavi Y, Saki N, Rahim F. The HLA-DRB1\*11 group-specific allele is a predictor for alloantibody production in the transfusion-dependent thalassemia patients. *Transfus Apher Sci.* 2020 Jun;59(3):102729. doi: 10.1016/j.transci.2020.102729. Epub 2020 Jan 9. PMID: 31941582.

126. Abbasi Pashaki P, Rahim F, Habibi Roudkenar M, Razavi-Toosi S, Ebrahimi A. MicroRNA Tough Decoy Knockdowns miR-195 and Represses Hypertrophy in

- Chondrocytes. *Appl Biochem Biotechnol*. 2020 Jul;191(3):1056-1071. doi: 10.1007/s12010-020-03229-6. Epub 2020 Jan 20. PMID: 31956957.
127. Rahim F, Abbasi Pashaki P, Jafarisani M, Ghorbani F, Ebrahimi A. Runx2 silencing promotes adipogenesis via down-regulation of DLK1 in chondrogenic differentiating MSCs. *J Gene Med*. 2020 Nov;22(11):e3244. doi: 10.1002/jgm.3244. Epub 2020 Jul 10. PMID: 32559818.
128. Abbasi Pashaki P, Habibi Roudkenar M, Rahim F, Ebrahimi A. From SARS-CoV to SARS-CoV2: a potential guide to better understanding of pathophysiology of the disease and potential therapeutic modality. *Eur Rev Med Pharmacol Sci*. 2020 Jul;24(14):7816-7825. doi: 10.26355/eurrev\_202007\_22286. PMID: 32744709.
129. Arjmand B, Goodarzi P, Aghayan HR, Payab M, Rahim F, Alavi-Moghadam S, Mohamadi-Jahani F, Larijani B. Co-transplantation of Human Fetal Mesenchymal and Hematopoietic Stem Cells in Type 1 Diabetic Mice Model. *Front Endocrinol (Lausanne)*. 2019 Nov 6;10:761. doi: 10.3389/fendo.2019.00761. PMID: 31781036; PMCID: PMC6856665.
130. Jahangiri M, Rahim F, Malehi AS. Diagnostic performance of hematological discrimination indices to discriminate between  $\beta$  thalassemia trait and iron deficiency anemia and using cluster analysis: Introducing two new indices tested in Iranian population. *Sci Rep*. 2019 Dec 9;9(1):18610. doi: 10.1038/s41598-019-54575-3. PMID: 31819078; PMCID: PMC6901548.
131. Saki J, Shadnough F, Arjmand R, Rahim F. In-Silico Identification of the Best Compound Against *Leishmania infantum*: High Throughput Screening of All FDA Approved Drugs. *Turkiye Parazitoloj Derg*. 2019 Dec 23;43(4):158-164. doi: 10.4274/tpd.galenos.2019.6290. PMID: 31865648.
132. Goodarzi P, Payab M, Alavi-Moghadam S, Larijani B, Rahim F, Bana N, Sarvari M, Adibi H, Foroughi Heravani N, Hadavandkhani M, Arjmand B. Development and validation of Alzheimer's Disease Animal Model for the Purpose of Regenerative Medicine. *Cell Tissue Bank*. 2019 Jun;20(2):141-151. doi: 10.1007/s10561-019-09773-8. Epub 2019 May 13. PMID: 31087217.
133. Khademvatan S, Eskandari K, Hazrati-Tappeh K, Rahim F, Foroutan M, Yousefi E, Asadi N. In silico and in vitro comparative activity of green tea components against *Leishmania infantum*. *J Glob Antimicrob Resist*. 2019 Sep;18:187-194. doi: 10.1016/j.jgar.2019.02.008. Epub 2019 Feb 20. PMID: 30797085.
134. Larijani B, Goodarzi P, Payab M, Alavi-Moghadam S, Rahim F, Bana N, Abedi M, Arabi M, Adibi H, Gilany K, Arjmand B. Metabolomics and Cell Therapy in Diabetes Mellitus. *Int J Mol Cell Med*. 2019 Winter;8(Suppl1):41-48. doi: 10.22088/IJMCM.BUMS.8.2.41. Epub 2019 May 30. PMID: 32351908; PMCID: PMC7175613.
135. Goodarzi P, Alavi-Moghadam S, Payab M, Larijani B, Rahim F, Gilany K, Bana N, Tayanloo-Beik A, Foroughi Heravani N, Hadavandkhani M, Arjmand B. Metabolomics Analysis of Mesenchymal Stem Cells. *Int J Mol Cell Med*. 2019 Winter;8(Suppl1):30-40. doi: 10.22088/IJMCM.BUMS.8.2.30. Epub 2019 Jun 20. PMID: 32351907; PMCID: PMC7175611.
136. Rahim F, Arjmand B, Shirbandi K, Payab M, Larijani B. Stem cell therapy for patients with diabetes: a systematic review and meta-analysis of metabolomics-based risks and benefits. *Stem Cell Investig*. 2018 Nov 14;5:40. doi: 10.21037/sci.2018.11.01. PMID: 30596080; PMCID: PMC6286886.
137. Zeinvand-Lorestani M, Kalantari H, Khodayar MJ, Teimoori A, Saki N, Ahangarpour A, Rahim F, Khorsandi L. Dysregulation of Sqstm1, mitophagy, and apoptotic genes in chronic exposure to arsenic and high-fat diet (HFD). *Environ Sci Pollut Res Int*. 2018 Dec;25(34):34351-34359. doi: 10.1007/s11356-018-3349-4. Epub 2018 Oct 9. PMID: 30302732.
138. Zarezade V, Abolghasemi M, Rahim F, Veisi A, Behbahani M. In silico assessment of new progesterone receptor inhibitors using molecular dynamics: a new insight into breast cancer treatment. *J Mol Model*. 2018 Nov 10;24(12):337. doi: 10.1007/s00894-018-3858-6. PMID: 30415281.
139. Zeinvand-Lorestani M, Kalantari H, Khodayar MJ, Teimoori A, Saki N, Ahangarpour A, Rahim F, Alboghobeish S. Autophagy upregulation as a possible mechanism of arsenic induced diabetes. *Sci Rep*. 2018 Aug 10; 8(1):11960. Doi: 10.1038/s41598-018-30439-0. PubMed PMID: 30097599; PubMed Central

PMCID: PMC6086829.

140. Javanmardi F, Saki-Malehi A, Ahmadzadeh A, Rahim F. Assessing Prognostic Factors in Hodgkin's Lymphoma: Multistate Illness-Death Model. *Int J Hematol Oncol Stem Cell Res.* 2018 Jan 1;12(1):57-64. PubMed PMID: 29951179; PubMed Central PMCID: PMC6018242.
141. Payab M, Goodarzi P, Heravani NF, Hadavandkhani M, Zarei Z, Falahzadeh K, Larijani B, Rahim F, Arjmand B. Stem Cell and Obesity: Current State and Future Perspective. *Adv Exp Med Biol.* 2018 Jun 7. doi: 10.1007/5584\_2018\_227. [PMID: 29876867]
142. Goodarzi P, Alavi-Moghadam S, Sarvari M, Tayanloo Beik A, Falahzadeh K, Aghayan H, Payab M, Larijani B, Gilany K, Rahim F, Adibi H, Arjmand B. Adipose Tissue-Derived Stromal Cells for Wound Healing. *Adv Exp Med Biol.* 2018 Jun 2. doi: 10.1007/5584\_2018\_220. [PMID: 29858972]
143. Noorimotlagh Z, Mirzaee SA, Ahmadi M, Jaafarzadeh N, Rahim F. The possible DNA damage induced by environmental organic compounds: The case of Nonylphenol. *Ecotoxicol Environ Saf.* 2018 Aug 30;158:171-181. doi:10.1016/j.ecoenv.2018.04.023. Epub 2018 Apr 24. Review. [PMID: 29684747]
144. Ebrahimi A, Rahim F. Crigler-Najjar syndrome: current perspectives and the application of clinical genetics. *Endocr Metab Immune Disord Drug Targets.* 2017 Dec 13. [PMID: 29237388]
145. Jahangiri, M., Khodadi, E., Rahim, F., Saki, N., Saki Malehi, A. Decision-tree-based methods for differential diagnosis of  $\beta$ -thalassemia trait from iron deficiency anemia. *Expert Systems.* 2017; 34 (3), e12201 [doi: 10.1111/exsy.12201]
146. Sayyah M, Shirbandi K, Saki-Malehi A, Rahim F. Use of a problem-based learning teaching model for undergraduate medical and nursing education: a systematic review and meta-analysis. *Adv Med Educ Pract.* 2017 Oct 3; 8: 691-700. doi: 10.2147/AMEP.S143694. eCollection 2017. Review. [PMID: 29042827]
147. Heidari N, Abroun S, Bertacchini J, Vosoughi T, Rahim F, Saki N. Significance of Inactivated Genes in Leukemia: Pathogenesis and Prognosis. *Cell J.* 2017 spring; 19(Suppl 1):9-26. [PMID: 28580304]
148. Khademvatan S, Masjedizadeh R, Yousefi-Razin E, Mahbodfar H, Rahim F, Yousefi E, Foroutan M. PCR-based molecular characterization of Blastocystis hominis subtypes in southwest of Iran. *J Infect Public Health.* 2017 Apr 9. pii: S1876-0341(17)30101-6. doi: 10.1016/j.jiph.2017.03.009. [PMID: 28404232]
149. Saki N, Shirzad R, Rahim F, Saki Malehi A. Estimation of diagnosis and prognosis in ET by assessment of CALR and JAK2(V617F) mutations and laboratory findings: a meta-analysis. *Clin Transl Oncol.* 2017 Jul;19(7):874-883. Review. [PMID: 28205126]
150. Rahim F. Commentary on a Cochrane Review of Hormone Therapy for Preventing Cardiovascular Disease in Postmenopausal Women. *Nurs Womens Health.* 2017 Feb - Mar; 21(1):9-11. [PMID: 28187847]
151. Khademvatan S, Masjedizadeh R, Rahim F, Mahbodfar H, Salehi R, Yousefi-Razin E, Foroutan M. Blastocystis and irritable bowel syndrome: Frequency and subtypes from Iranian patients. *Parasitol Int.* 2017 Apr; 66(2):142-145. [PMID: 28087441]
152. Shahrabi S, Khosravi A, Shahjahani M, Rahim F, Saki N. Genetics and Epigenetics of Myelodysplastic Syndromes and Response to Drug Therapy: New Insights. *Oncol Rev.* 2016 Dec 14; 10(2):311. [PMID: 28058097]
153. Noorimotlagh Z, Haghighi NJ, Ahmadimoghadam M, Rahim F. An updated systematic review on the possible effect of nonylphenol on male fertility. *Environ Sci Pollut Res Int.* 2017 Feb; 24(4):3298-3314. [PMID: 27826822]
154. Saeidimehr S, Ebrahimi A, Saki N, Goodarzi P, Rahim F. MicroRNA-Based Linkage between Aging and Cancer: from Epigenetics View Point. *Cell J.* 2016 Jul-Sep; 18(2):117-26. Epub 2016 May 30. Review. [PMID: 27540517]
155. Malehi AS, Rahim F. Prognostic classification index in Iranian colorectal cancer patients: Survival tree analysis. *South Asian J Cancer.* 2016 Jan-Mar; 5(1): 23-6. doi: 10.4103/2278-330X.179703. [PMID: 27169118]
156. Azizidoost S, Ahmadzadeh A, Rahim F, Shahjahani M, Seghatoleslami M, Saki N. Hepatic metastatic niche: from normal to pre-metastatic and metastatic niche. *Tumour Biol.* 2016 Feb; 37(2):1493-503. Review. [PMID: 26662805]

157. Abroun S, Saki N, Ahmadvand M, Asghari F, Salari F, Rahim F. STATs: An Old Story, Yet Mesmerizing. *Cell J*. 2015 Fall; 17(3):395-411. Review. [PMID: 26464811]
158. Gholipour C, Rahim F, Fakhree A, Ziapour B. Using an Artificial Neural Networks (ANNs) Model for Prediction of Intensive Care Unit (ICU) Outcome and Length of Stay at Hospital in Traumatic Patients. *J Clin Diagn Res*. 2015 Apr;9(4): OC19-23. [PMID: 26023581]
159. Ebrahimi A, Rahim F. Recent immunomodulatory strategies in transplantation. *Immunol Invest*. 2014;43(8):829-37. doi: 10.3109/08820139.2014.915414. Review. [PMID: 25296237]
160. Shahrabi S, Azizidoost S, Shahjahani M, Rahim F, Ahmadzadeh A, Saki N. New insights in cellular and molecular aspects of BM niche in chronic myelogenous leukemia. *Tumour Biol*. 2014 Nov; 35(11):10627-33. Review. [PMID: 25234716]
161. Rahim F, Ebrahimi A. Gene therapy modalities in lung transplantation. *Transpl Immunol*. 2014 Sep; 31(3):165-72. Review. [PMID: 25160118]
162. Rahim F, Hajizamani S, Mortaz E, Ahmadzadeh A, Shahjahani M, Shahrabi S, Saki N. Molecular regulation of bone marrow metastasis in prostate and breast cancer. *Bone Marrow Res*. 2014; 2014:405920. Review. [PMID: 25147739]
163. Shirazi AS, Razi T, Cheraghi F, Rahim F, Ehsani S, Davoodi M. Diagnostic accuracy of magnetic resonance imaging versus clinical staging in cervical cancer. *Asian Pac J Cancer Prev*. 2014; 15(14):5729-32. [PMID: 25081693]
164. Azizidoost S, Bavarsad MS, Bavarsad MS, Shahrabi S, Jaseb K, Rahim F, Shahjahani M, Saba F, Ghorbani M, Saki N. The role of notch signaling in bone marrow niche. *Hematology*. 2015 Mar; 20(2):93-103. Review. [PMID:24724873]
165. Masbi MH, Mohammadiasl J, Galehdari H, Ahmadzadeh A, Tabatabaiefar MA, Golchin N, Haghpanah V, Rahim F. Characterization of wild-type and mutated RET proto-oncogene associated with familial medullary thyroid cancer. *Asian Pac J Cancer Prev*. 2014; 15(5):2027-33. [PMID: 24716929]
166. Saki N, Abroun S, Hajizamani S, Rahim F, Shahjahani M. Association of Chromosomal Translocation and MiRNA Expression with The Pathogenesis of Multiple Myeloma. *Cell J*. 2014 summer; 16(2):99-110. Review. [PMID: 24567933]
167. Rahim F, Galehdari H, Mohammadi-Asl J, Saki N. Regression Modeling and Meta-Analysis of Diagnostic Accuracy of SNP -Based Pathogenicity Detection Tools for UGT1A1 Gene Mutation. *Genet Res Int*. 2013; 2013: 546909. [PMID: 23997956]
168. Azizidoost S, Babashah S, Rahim F, Shahjahani M, Saki N. Bone marrow neoplastic niche in leukemia. *Hematology*. 2013 Jul 31. [PMID: 23905984]
169. Panahi M, Saki N, Ashourzadeh S, Rahim F. Expressional correlation of human epidermal growth factor receptor 2, estrogen/progesterone receptor and protein 53 in breast cancer. *Asian Pac J Cancer Prev*. 2013; 14(6):3699 -703. [PMID: 23886168]
170. Galehdari H, Saki N, Mohammadi -Asl J, Rahim F. Meta-analysis diagnostic accuracy of SNP-based pathogenicity detection tools: a case of UGT1A1 gene mutations. *Int J Mol Epidemiol Genet*. 2013 Jun 25; 4(2):77-85. [PMID: 23875061]
171. Khademvatan S, Adibpour N, Eskandari A, Rezaee S, Hashemitabar M, Rahim F. In silico and in vitro comparative activity of novel experimental derivatives against *Leishmania major* and *Leishmania infantum* promastigotes. *Exp Parasitol*. 2013 Jul 16; 135(2):208-216. [PMID: 23872452]
172. Khademvatan S, Rahim F, Tavalla M, Abdizadeh R, Hashemitabar M. PCR-based molecular characterization of *Toxocara* spp. using feces of stray cats: a study from Southwest Iran. *PLoS One*. 2013 Jun 3; 8(6):e65293. [PMID: 23755213]
173. Ranjbari N, Almasi S, Mohammadi -Asl J, Rahim F. BRAF mutations in Iranian patients with papillary thyroid carcinoma. *Asian Pac J Cancer Prev*. 2013; 14(4):2521 -3. [PMID: 23725167]
174. Abroun S, Saki N, Fakher R, Asghari F. Biology and bioinformatics of myeloma cell. *Lab Hematol*. 2012 Dec; 18(4):30 -41. doi: 10.1532/LH96.11003. Review. [PMID: 23253865]
175. Ranjbari N, Rahim F. The Ki-67/MIB-1 index level and recurrence of papillary thyroid carcinoma. *Med Hypotheses*. 2013 Mar; 80(3):311-4. [PMID: 23313072]

176. Rahim F, Soltani A, Haghpanah V. Developing organized level of biomedical evidence: evidence-based biomedicine. *Front Physiol.* 2012; 3: 428. [PMID: 23162472]
177. Aghayan HR, Goodarzi P, Baradaran-Rafii A, Larijani B, Moradabadi L, Rahim F, Arjmand B. Bacterial contamination of amniotic membrane in a tissue bank from Iran. *Cell Tissue Bank.* 2013 Sep;14(3):401-6. [PMID: 23095908]
178. Nader S, Nikakhlagh S, Rahim F, Fatehizade P. Endolaryngeal lipoma: case report and literature review. *Ear Nose Throat J.* 2012 Feb;91(2):E18-21. Review. [PMID: 22359140]
179. Motamedi SM, Majdzadeh R, Larijani FA, Raheem F, Koleini Z, Larijani B. Potentially preventable incidence of diabetes due to risk factor modification. *J Diabetes Metab Disord.* 2012 Aug 24; 11(1):8. [PMID: 23497419]
180. Khademvatan S, Gharavi MJ, Rahim F, Saki J. Miltefosine-induced apoptotic cell death on *Leishmania major* and *L. tropica* strains. *Korean J Parasitol.* 2011 Mar; 49(1):17-23. [PMID: 21461264]
181. Rahim F. Correlation of beta-thalassemia mutations with alpha-thalassemia: an experience of the southwestern region of Iran. *Hematology.* 2010 Dec; 15(6): 430-3. [PMID: 21114907]
182. Rahim F. Microcytic hypochromic anemia patients with thalassemia: genotyping approach. *Indian J Med Sci.* 2009 Mar; 63(3):101-8. [PMID: 19359777]
183. Rahim F. In silico comparison of simple sequence repeats in high nucleotides-rich genomes of microorganism. *Pak J Biol Sci.* 2008 Oct 15; 11(20): 2372-81. [PMID: 19137845]
184. Rahim F, Kaikhaei B, Zandian K, Hoseini A. Co-inheritance of alpha-and beta-thalassemia in Khuzestan Province, Iran. *Hematology.* 2008 Feb; 13(1):59-64. [PMID: 18534068]
185. Rahim F, Abromand M. Spectrum of  $\beta$ -Thalassemia mutations in various Ethnic Regions of Iran. *Pakistan journal of medical sciences.* 2008; 24 (3): 410.
103. Rahim F. An in silico development of selective inhibitor for histamine receptors. *Biotechnology.* 2010; 9 (2): 157-163.
177. Rahim F, Keikhaei B. Better differential diagnosis of iron deficiency anemia from beta-thalassemia trait. *Turk J Hematol.* 2009; 26 (3): 138-145.
178. Adibpour N, Rahim F, Rezaeei S, Khalaj A, Ebrahimi A. In silico designing selective inhibitor of drugs, medicinal plants compounds and experimental ligands for pteridine reductase targeting visceral leishmaniasis *African Journal of Microbiology Research.* 2012; 6 (5): 917-926.
179. Rahim F, Hamid F, Galedari H, Khamisipour GH, Keikhaei B, Jaseb K, Saki N. Three Different Co-existing  $\alpha$ -Thalassemia Mutations and Sick Cell Disease in a Pregnant Woman. 2013; 44: e72-e76
180. Davoudi M, Sharifi MSZ, Rahim F. Study the Complications of Ct-guidance Fine Needle Biopsy in Intra-thoracic Masses *International Journal of Cancer Research.* 2010; 6: 243-250.
181. Ebadi A, Ramezani A, Rahim F, Afraee N. Postoperative cardiac arrest due to Cardiac surgery complications. *Pak J Med Sci.* 2010; 26 (1): 43-48.
182. Nikakhlagh S, Rahim F, Khodadadi A, Saki N. The association between Epstein-Barr virus with nasopharyngeal carcinoma in patients from southwestern region of Iran. *International Journal of Cancer Research.* 2010; 6(2):89-94.
183. Khademvatan S, Saki J, Gharavi MJ, Rahim F. *Allium sativum* extract induces apoptosis in *Leishmania major* (MRHO/IR/75/ER) promastigotes *Journal of medicinal plants research.* 2011; 5 (16): 3725-3732.
184. Zadeh BSM, Dahanzadeh S, Rahim F. Preparation and evaluation of the self-emulsifying drug delivery system containing loratadine. *International Journal of Advances in Pharmaceutical Sciences.* 2010; 1 (3): 239-248.
185. Keikhaei B, Rahim F, Zandian KHM, Pedram M. comparison of different indices for better differential diagnosis of iron deficiency anemia from  $\beta$  thalassemia trait. *BLOOD (KHOON).* 2007; 4 (2): 95-104.
186. Rahim F, Deshpande A, Hosseini A. Fuzzy expert system for fluid management in general anaesthesia. *Journal of Clinical and Diagnostic Research.* 2007; 1 (4): 256-267.
187. Rahim F. Bioinformatics and proteomic approaches to disease: in vivo and in silico proteome analysis tools. *Journal of Clinical and Diagnostic Research.* 2008;



2:879-886.

188. Rahim F, Ahadi R. Thalassemia and hemoglobin disorders in Khuzestan province of Iran. *Journal of Clinical and Diagnostic Research*. 2008; 2:820-826.
189. Panahi M, Rahim F, Rashidi I, Irani S. Incidence of aplastic anaemia in khuzestan province, IRAN: A RETROSPECTIVE SINGLE-CENTRE STUDY. *Journal of Clinical and Diagnostic Research*. 2007; 1:352-355.
190. Rahim F, Saki N. Age-specific cutoff in discriminating Iron deficiency anemia from beta-thalassemia traits. *Iranian Journal of Blood and Cancer*. 2010; 2 (4): 197.
191. Hossein SA, Rahim F, Mola, K. Omega-3 induced change in clinical parameters of rheumatoid arthritis. *Journal of Medical Sciences*. 2009; 9 (2): 93-97.
192. Salimi A, Ghollasi M, Saki N, Rahim F, Dehghanifard A, Alizadeh SH, Farshdousti Hagh M, Soleimani M. Application of Nanoscaffolds and Mesenchymal Stem Cells in Tissue Engineering. *Iranian Journal of Blood and Cancer*. 2010; 3 (1): 11-20.
193. Saki N, Dehghani Fard A, Kaviani S, Jalali Far MA, Kheirollah SH, Mousavi A, Rahim F. Beta Thalassemia: Epidemiology and Diagnostic and Treatment Approaches in Iran. *Genetic 3rd melinium*. 2012; 10 (1): 2674-2683.
194. Rahim F, Allahmoradi H, Salari F, Shahjahani M, Dehghani Fard A, Hosseini SA, Mousakhani H. Evaluation of Signaling Pathways Involved in  $\gamma$ -Globin Gene Induction Using Fetal Hemoglobin Inducer Drugs. *International Journal of Hematology-Oncology and Stem Cell Research*. 2013; 7 (3): 40-45.
195. Saki N, Jalalifar MA, Soleimani M, Hajizamani S, Rahim F. Adverse Effect of High Glucose Concentration on Stem Cell Therapy. *International Journal of Hematology-Oncology and Stem Cell Research*. 2013; 7 (3): 33-39.
196. Dehghanifard A, Shahjahani M, Galehdari H, Rahim F, Hamid F, Jaseb K, Amin AA, Jalalifar MA, Saki N. Prenatal diagnosis of different polymorphisms of  $\beta$ -globin gene in Ahvaz. *International Journal of Hematology-Oncology and Stem Cell Research*. 2013; 7 (2): 17-22.