

## CURRICULUM VITAE

### Naseer Ahmed, MBBS, PhD, Postdoc, FACC

#### Current Roles:

**Associate Professor and In-charge**, Dept. of Pharmacology-RCD-RMI  
**Director Research**, Research Cell, RCD-RMI  
**Member** American College of Clinical Pharmacology (USA)  
**Chairman** Scientific Council Cardiovascular Research & Academic Program  
Pakistan Cardiac Society  
**Advisor Pakistan** Heart Journal (Official journal of Pakistan Cardiac Society)  
**HEC Approved PhD Supervisor Since 2017**  
**Member, ASRB and BoS** (Rehman University shadow bodies)

Address: Department of Pharmacology  
Rehman College of Dentistry, Rehman Medical Institute,  
Peshawar, KPK

Email: dr.naseer99@gmail.com

Education: **M.B.B.S** (2011), Islamic International Medical College, Rawalpindi, Pakistan

**Ph.D.** (2017), University of Verona, Verona, Italy

**Europeus Doctor (2017)**, European University Association, EU

**Postdoctoral Fellowship Pharmacology, (2017), University of Verona, Verona, Italy**

Languages: English, Urdu, and Italian

PMDC Reg. No:17838N

Nationality Pakistani

#### ACADEMIC APPOINTMENTS

**July 2022-Till date** **Associate Professor Pharmacology**, Department of Pharmacology, RCD-Rehman Medical Institute, Peshawar, Pakistan

**2021April-June 2022** **Assistant Professor Pharmacology**, Department of Pharmacology, RCD-Rehman Medical Institute, Peshawar, Pakistan

2021 March-April 2022 **Assistant Professor Pharmacology (BPS-19)**, IBMS, Khyber Medical University, Peshawar, Pakistan

- 2018 May-Mar 2021 **Assistant Professor Pharmacology**, Department of Biological and Biomedical Sciences, Aga Khan University Medical College, Karachi, Pakistan
- 2017 Aug-2018 May **Adjunct Assistant Professor Research**, Faculty of Allied Health Sciences, University of Lahore
- 2017 Aug – 2018 April **Assistant Professor Clinical Pharmacology**, Faculty of Health Sciences, University of the Punjab, Lahore
- 2017 (Jan – June) **Postdoctoral fellow Pharmacology**, University of Verona, Verona, Italy
- 2014 - 2016 **PhD Graduate Teaching Assistant (Cardiovascular Pharmacology)**, University of Verona, Verona, Italy

### **CLINICAL APPOINTMENTS**

- 2014-2016 Attachment, Department of Cardiology, Negrar Hospital, Verona, Italy
- 2013 Incharge Medical Officer, Fareed Family Hospital, Rawalpindi
- 2013 House Physician, Department of Medicine, NESCOM Hospital, Islamabad, Pakistan
- 2012 House Surgeon, Department of Surgery, Faderal Govt. Ployclinic Hospital, Islamabad, Pakistan

### **SERVICE-RELATED ADMINISTRATIVE ACTIVITIES**

#### ***Committee Participation and Administration Affairs***

- 2022 Jan-to date **Director Research**, RCD-Rehman Medical Institute, Peshawar, Pakistan
- 2020-to date **Founding Editor JRC D**
- 2021-to date **Member ASRB, BoS** (Shadow bodies-Rehman Universities)
- 2018-to 2021 **Module Coordinator**, Section Pharmacology, Aga Khan University, Karachi, Pakistan
- 2017-2018 Program Director**, Department of Cardiac Perfusion Technology, Faculty of Health Sciences, University of the Punjab, Lahore
- 2017-2018 Incharge Admissions**-2017-18, DPT, Nursing and Allied Health Sciences Faculty of Health Sciences, University of the Punjab, Lahore
- 2017 Served as an **Acting Dean**, Faculty of Health Sciences, University of the Punjab, Lahore
- 2015-2017 **Representative of PhD** school of Life and Health Sciences, University of Verona, Medical School, Verona
- 2015-2016 Member of Advisory Board for PhD school of Life and Health Sciences**, University of

Verona, Verona, Italy

2014-2017 **Founding organizer of Monthly PhD research Seminars** in PhD school of Cardiovascular Sciences, University of Verona

### **RESEARCH SUPERVISION:**

**PhD Candidate Co-supervision:** Muhammad Safdar Ali, Project: Effect of Aerobic Training and Moringa Oleifera on Dyslipidemia and Cardiac Endurance (2018-22)

**MS Candidate co-supervision:** Protective Role of Phoenix dactylifera derived polyphenols in Myocardial Injury (2019-20) **Graduated from IIUI**

**MPhil Candidate Co-supervision:** Enhanced level of cardiac biomarkers (Troponin-I, Atrial Natriuretic Peptide) and Angiotensin-II may determine the severity of COVID-19 in hospitalized acute coronary syndrome patients **(Graduated from KMU)**

**Three MPhil candidates** in process of thesis submission

### **CONFERENCES**

- International Conference of Biological Sciences, University of Haripur, Haripur **(Invited talk)**
- Annual Conference on “The Current Usage of Nano therapeutics & Bio-drugs, Islamabad, Pakistan (12-13 December 2018) **(Invited Speaker)**.
- 21<sup>st</sup> National Health Sciences Research Symposium, Basic Sciences and Emergency Medicine, 10-11 November 2018 **(Chair/Speaker session)**
- 13<sup>th</sup> International Conference of Cardiology, Jordan Cardiac Society, Amman, Jordan 7-9<sup>th</sup> November 2017 **(Invited talk)**
- 7<sup>th</sup> International Cardiovascular Research Days, Heidelberg, Germany 14-16<sup>th</sup> April 2016. **(Plenary talk)**
- 12<sup>th</sup> International Congress of Update in Cardiology and Cardiovascular Surgery (UCCVS), March 10-13, 2016, Antalya, Turkey
- **European Society of Cardiology**, 27 August-1<sup>st</sup> September 2016, Rome, Italy
- 11<sup>th</sup> International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, June 10<sup>th</sup>-13<sup>th</sup>, 2015, Verona, Italy
- LAA, How to Close Left Atrial Appendage, 11-13<sup>th</sup> November 2015, Frankfurt, Germany.

- Clinical Trials: **European Society of Cardiology, Berlin, Germany**
- **Introductory Short Course in Health Professions Education (ISC-HPE) AKU, Pakistan**
- Animal Experimentation: **University of Verona Medical School, Verona, Italy**
- Good Clinical Practice (GCP): **St George's, University of London**
- Scientific writing and publishing, and Ethics in Biomedical Research: **University of Verona Medical School, Verona, Italy**
- Drug discovery and development: **University of California, San Diego, USA**
- Understanding Clinical Research: **University of Cape Town**
- **PhD Traininmg workshop, COEUR Papendal, The Netherland**
- **Cardiovascular Phramacology , Erasmus University, Rotterdam, The Netherlands**
- **Congenital Heart Disease, Erasmus University, The Netherlands**

## GRANTS AND AWARDS

- ***Best teacher award***, University of the Punjab, Lahore
- ***Europeaus Doctorate*** Title, European Union
- HEC Startup Research grants **0.5 M Rs.**
- Departmental BBS research funds **104K Rs.**
- European Society of Cardiology Educational Grant **800 €**
- Travel Grant by Higher Education Commission, Pakistan **1,10,000/- Rs.**
- European Co-oprint Internationalization Grant **6,000 €**
- PhD Grant by University of Verona, Italy **50,000 €**
- Travel Grant by University of Rostock, Germany **1200 €**

## RESEARCH PUBLICATIONS\_NASEER AHMED

### Research publications:

Total Number of articles published **>30 (In last 5 years)**

Total Impact factor for original articles: **78.23**

Overall impact factors: **78.23 (articles) +133.21(abstracts) =211.44**

### Other accomplishments:

1. **One Book in Elsevier Inc. published in 2019 as sole author**
2. **One Book chapter in Encyclopedia of Clinical Pharmacy practice published 2019**
3. Supervised/under supervision: **3 MPhil + 1 PhD**
4. HEC Approved PhD Supervisor
5. *Launched JRCD as Editor*
6. Contribution to reforming modules for RCD

### LIST OF SELECTED PUBLICATIONS (ALL JOURNALS ARE HEC/HJRS RECOGNIZED, AND IN FIRST 6 AUTHORS)

	Article/ Paper Title	Journal of Publication /Conference Name /Abstracts	Authorship
1.	<b>Ahmed N, et al.</b> Role of <i>Phoenix dactylifera</i> (Ajwa) on lipid profile; a randomized controlled trial. <i>King Saud University Journal, Science</i> 2022, <a href="https://doi.org/10.1016/j.jksus.2022.101959">https://doi.org/10.1016/j.jksus.2022.101959</a> ( <b>CLINICAL TRIAL</b> )	King Saud University Journal, Science <b>(IF 4.01)</b>	Principal and corresponding author
2.	<b>Ahmed N, Farooq J, Siddiqi HS, et al.</b> Impact of Intermittent Fasting on Lipid Profile-A Quasi-Randomized Clinical Trial. <i>Front Nutr.</i> 2021;7:596787. ( <b>CLINICAL TRIAL</b> )	Frontiers in Nutrition <b>(IF 6.57)</b>	Principal and corresponding author
3.	<b>Ahmed S*, Ahmed N*, Rungatscher A, et al.</b> Cocoa Flavonoids Reduce Inflammation and Oxidative Stress in a Myocardial Ischemia-Reperfusion Experimental Model. <i>Antioxidants (Basel).</i> 2020 Feb 18;9(2):167. doi: 10.3390/antiox9020167. PMID: 32085604; PMCID: PMC7070606. ( <b>EXPERIMENTAL STUDY</b> )	Anti-oxidants <b>(IF 6.3)</b>	First author (Shared)
4.	<b>Ahmed, N.; Farooq, J.; Sadiq, S.; Meo, S.A.; Jan, A.; Cheema, F.H.; Faggian, G.; Rungatscher, A.</b> Fingolimod (FTY720) Preserves High Energy Phosphates and Improves Cardiac Function in Heterotopic Heart Transplantation Model. <i>Int. J. Mol. Sci.</i> 2020, 21,	International Journal of Molecular Sciences <b>(IF 5.9)</b>	Principal and corresponding author

	6548. <a href="https://doi.org/10.3390/ijms21186548">https://doi.org/10.3390/ijms21186548</a> ( <b>EXPERIMENTAL STUDY</b> )		
5.	<b>Ahmed N*</b> , et al. <i>Fingolimod Plays Role in Attenuation of Myocardial Injury Related to Experimental Model of Cardiac Arrest and Extra Corporeal Life Support Resuscitation Int. J. Mol. Sci.</i> 2019, 20(24), 6237 ( <b>EXPERIMENTAL STUDY</b> )	International Journal of Molecular Sciences ( <b>IF 5.9</b> )	Principal and corresponding author
6.	<b>Ahmed N*</b> , Adeela Mehmood et al. <i>Cardioprotective effect of Sphingosine-1-phosphate Receptor Immunomodulator FTY720 in Clinically relevant model of Cardioplegic Arrest and Cardiopulmonary Bypass, Frontiers Pharmacol</i> , 2019; 10: 802 ( <b>EXPERIMENTAL STUDY</b> )	Frontiers in Pharmacology ( <b>IF 5.8</b> )	Principal and corresponding author
7.	<b>Ahmed N</b> , Linardi D, Decimo I, Mehboob R, Gebrie MA, Innamorati G, Luciani GB, Faggian G, Rungatscher A. <i>Characterization and Expression of Sphingosine 1-Phosphate Receptors in Human and Rat Heart. Front Pharmacol</i> 2017; 8(312): doi: 10.3389/fphar.2017.00312 ( <b>EXPERIMENTAL STUDY</b> )	Frontiers in Pharmacology( <b>IF 5.8</b> )	Principal and corresponding author
8.	<b>Ahmed N</b> , Linardi D, Gebrie MA, Innamorati G, Luciani GB, Faggian G, Rungatscher A. <i>Sphingosine 1-Phosphate Receptor Modulator Fingolimod (FTY720) Attenuates Myocardial Fibrosis in Post-Heterotopic Heart Transplantation. Front Pharmacol</i> 2017; 8: 645.( <b>EXPERIMENTAL STUDY</b> )	Frontiers in Pharmacology( <b>IF 5.8</b> )	Principal and corresponding author
9.	<b>Naseer Ahmed</b> , et al. <i>Role of Fingolimod in Attenuation of Lymphocyte Count Leading to Reduced Apoptosis in Myocardial Ischemia-Reperfusion Injury. Pak J. Medical and Health Sciences</i> , Vol. 15, No.11, NOV 2021. ( <b>CROSS-SECTIONAL STUDY</b> )	Pakistan Journal of Health and Medical Sciences ( <b>HEC Recognized</b> )	Principal and corresponding author
10.	Adnan Tahir, Faridulah Khan, Naseer Ahmed et al. <i>Comparison of Magnesium Sulphate with Placebo for Prevention of Atrial Fibrillation in Post Coronary Artery Bypass Grafting (CABG) Patients, Interventional Cardiology</i> , 2021 ( <b>CLINICAL TRIAL</b> )	Interventional Cardiology ( <b>HEC Recognized</b> )	Co-author
11.	<b>Ahmed N</b> , Title “Cardioprotective Role of Sphingosine 1-Phosphate Receptor Agonist Fingolimod (FTY720) in Global Ischemia-Reperfusion Models” <b>ISBN 978-886- 9-25074-3</b>	<b>Books</b>	
12.	<b>Authored by Naseer Ahmed</b> , Pathophysiology of Ischemia Reperfusion Injury and Use of Fingolimod in Cardioprotection, First Edition 2019, <b>Elsevier Publisher ISBN#9780128180235</b> .		
13.	Editors: Hashim Talib Hashim, <b>Naseer Ahmed</b> , etc al. <i>Heart Transplantation, Springer Nature (In press) 2023, ISBN#978-3031173103</i>		
14.	Sadiq S, <b>Ahmed N</b> . <i>Atypical Antipsychotics: Road to Metabolic Toxicity. LAP. ISBN-13: 9786139839759</i> .		

15	Essential medicine list, policies and the World Health Organization; <i>Encyclopedia of Pharmacy Practice and Clinical Pharmacy</i> , Naseer Ahmed, Elsevier Publisher ISBN:9780128127353.	<b>Book Chapter</b>	
<b>ADDITIONAL SELECTED ARTICLES AND ABSTRACTS</b>			
16	Iqbal T, Jan A, Ahmed N, Muhammad A, Shah SM, Khan S, Tahir I, Shah H, Iftikhar N, Rehman J. Pulmonary Endarterectomy for Chronic Thromboembolic Pulmonary Hypertension. Pak Heart J. 2021;54(02):126- 131. DOI: <a href="https://doi.org/10.47144/phj.v54i2.2086">https://doi.org/10.47144/phj.v54i2.2086</a>	Pakistan Heart Journal	Corresponding author
17	Muhammad Shahid, Mujahidul Islam, Imtiaz Ahmed, Bahauddin Khan, Muhammad Faizan Ali, Naseer Ahmed, et al. Post Operative Complications Associated With Preoperative Use Of Clopidogrel In Patients Undergoing Coronary Artery Bypass Surgery, Pak J. Medical and Health Sciences, P J M H S Vol. 15, No.10, OCT 2021 ( <b>CROSS SECTIONAL STUDY</b> )	Pakistan Journal of Health and Medical Sciences (HEC Recognized)	Co-author
18	Naseer Ahmed, Cardioprotective mechanism of FTY720 in ischemia reperfusion injury, Journal of Basic and Clinical Physiology and Pharmacology, 2019 Aug 30;30(5)	Journal of Basic and Clinical Physiology and Pharmacology (IF 1.7)	Principal and corresponding author (Sole author)
19	Naseer Ahmed*, Shahida Perveen, Adeela Mehmood, Gulab Fatima Rani, Giulio Molon, Is Coronary sinus potential key player in persistent AF, 2019;143(3-4):107-113	Cardiology (IF 1.8)	First and corresponding
20	Nazeer Muhammad, Muhammad Sharif, Javeria Amin, Riffat Mehboob Syed Amir Gilani, Nargis Bibi, Hasnain Javed, Naseer Ahmed*, Neurochemical Alterations in Sudden Unexplained Perinatal Deaths—A Review, Frontiers in Pediatrics, 6, 6, 2018	Frontiers in Pediatrics (IF 3.4)	Last, corresponding author
21	Biancari F, Onorati F, Rubino AS, Mosorin MA, Juvonen T, Ahmed N, Faggian G, Mariani C, Mignosa C, Cottini M, Beghi C, Mariscalco G. Outcome of emergency coronary artery bypass grafting. J Cardiothorac Vasc Anesth 2015; 29: 275-282.	Journal of Cardiothoracic and vascular anesthesia (IF 2.6)	Co-author, S.n////////// ////////// //////////o. 6
22	Zahid Mahmood, Nazeer M, Nargis Bibi, Yasir Malik, Naseer Ahmed*, Human visual enhancement using Multi Scale Retinex; Informatics in Medicine Unlocked, Volume 13, 2018, 9-20	Information in medicine unlock (IF 0.5)	Co-author, last, S. no 5
23	Sultan Ayoub Meo, Faris Jamal AlMutairi, Majed Mohammed Alasbali, Turki Badr Alqahtani, Saad Saeed AlMutairi, Rakan Abdulaziz AlbuHayjan, Fawziah Al Rouq, Naseer Ahmed, Men's health in industries: Plastic plant pollution and prevalence of pre-diabetes and type 2 diabetes mellitus, American journal of men health, 2018	American journal of Men health (IF 2.8)	Last co-author, S. no 9
24	Jan A, Ahmed N, Shah MA, Faggian G. Aortic Surgery Cost in Teaching vs nonteaching hospitals. EJCM 2016; 04(3): 80-85.	e-Journal of Cardiovascular Medicine	Corresponding author, S. no 2
25	Jan A, Anwar M, Rehman S, Rungtischer A, Ahmed N, Faggian G. Hypertrophic Obstructive Cardiomyopathy and the cost of treatment. EJCM 2016; 04(2): 23-28.	e-Journal of Cardiovascular Medicine	Corresponding author, S. no 2

26	Perveen S, Firdous H, Khalid MA, Ahmed N, Baqai HZ. Relationship Between Serum Lactate Dehydrogenase Levels and Dengue Severity. J Rawalpindi Med Coll (JRMC) 2016; 21(1): 9-12.	Journal of Rawalpindi Medical College	Co-author, S. no: 4
<b>CASE REPORTS, CASE SERIES AND EDITORIALS</b>			
27	Naseer Ahmed., et al. "Functional Food with Nanoparticles for Cardiovascular Health". EC Cardiology 7.3 (2020): 01-02	EC Cardiology	Corresponding author
28	Muhammad Zuhair Yusuf, Naseer Ahmed, Are we geared for the upcoming challenges by nCoV-19 or is it still grim news....? Pakistan Biomedical Journal, 2020	Pakistan Biomedical Journal	Corresponding author
29	Javeria Farooq & Naseer Ahmed, Positive Impact of Intermittent Fasting on Cardioprotection	EC Cardiology	Senior and corresponding author
30	Naseer Ahmed, Rehana Rehman, Anwar Gilani, Role of Ajwa Date (Phoenix Dactyl L) Derived Polyphenols in Male Infertility" Editorial, JPMA 2019. (IF 0.718)	Journal of Pakistan Medical Association(IF 0.71)	Primary and corresponding author
31	Rehman R, Alam F, Baig M, Khan AH, Ahmed N. Editorial: Vitamin D Deficiency and Sufficiency in Reproduction and Bone Metabolism. Front Endocrinol (Lausanne). 2021 Sep 6;12:740021. doi: 10.3389/fendo.2021.740021. PMID: 34552565; PMCID: PMC8451175.	Frontiers in Endocrinology (IF 5.5)	Co-author
32	Naseer Ahmed et. al. Protective role of peroxiredoxin 4 in heart failure; Clinical Science, (2020) 134 71–72	Clinical Science (IF 6.1)	Principal and corresponding author
33	Jan, A. ., Ahmed, N. ., Awan, N. I. ., Khan, B. ., Ul-Islam, M., Ahmed, I. ., Shabbir, A. ., Mohammad, A. ., & Shah, H. . (2021). The Lung Mass and Nodule: A Case Series: The Lung Mass and Nodule. Pakistan BioMedical Journal, 4(1). <a href="https://doi.org/10.52229/pbmj.v4i1.61">https://doi.org/10.52229/pbmj.v4i1.61</a>	Pakistan Biomedical Journal	Corresponding author
<b>ABSTRACTS</b>			
34	Alessio Rungatscher, Daniele Linardi, <b>Naseer Ahmed</b> , R. Mani, Stiljan Hoxha, Giovanni Battista Luciani, Giuseppe Faggian, Sphingosine-1-Phosphate Receptor Agonist Fingolimod Reduces Myocardial Ischemia-Reperfusion Injury and Apoptosis Increasing Long-Term Left Ventricular Function after Heart Transplantation, <i>The Journal of Heart and Lung Transplantation</i> 38(4): S223, 2019 (IF 7.99)		
35	<b>Ahmed N</b> , Mebratu G, Mansoor M, Mansoor M, Mansoor M, Rungatscher A. Fingolimod can play important role in prevention of heart failure induced by ischemia reperfusion injury during heart transplantation, <i>Eur J Heart Failur</i> 2018; (IF 10.68)		
36	<b>Ahmed N</b> , Mebratu G, Mansoor M, Mansoor M, Mansoor M, Rungatscher A Cardioprotective effect of sphingosine 1-phosphate receptor 1 agonist in myocardial infarction and revascularization experimental model, <i>Eur J Heart Failur</i> 2018; (IF 10.68)		
37	Gebrie MA, Rungatscher A, Linardi D, Andrioli A, <b>Ahmed N</b> , Ahmed S, Ismail M, Tessari M, Soave A, Innamorati G, Luciani GB, Faggian G. P948Characterization of classical opioid receptors, and their effects on ischemia-reperfusion injury in hearts of diabetic rats. <i>Eur Heart J</i> 2018; 39(Sup. 1); (IF 29.98)		
38	<b>Ahmed N</b> , Linardi D, Ahmed S, Mehboob R, Luciani GB, Faggian G, Rungatscher A. Cardioprotective role of fingolimod in ischemia-reperfusion injury by activation of akt/erk pathways in rat model. <i>Heart</i> 2017; 103(Suppl 5): A119-A119. (IF 5.99)		



39.	<b>Ahmed N</b> , Linardi D, Ahmed S, Mehboob R, Luciani GB, Faggian G, Rungatscher A. 233 Anti-arrhythmic role of sphingosine 1-phosphate in post-operative atrial fibrillation by pak1 activation. <i>Heart</i> 2017; 103(Suppl 5) A149-A150. <b>(IF 5.99)</b> .
40.	<b>Ahmed N</b> , Rungatscher A, Linardi D, Molon G, Luciani GB, Faggian G. Coronary Sinus Can Be Target For Permanant Atrial Fibrillation Ablation Therapy?" <i>Am J Cardiol</i> DOI: 10.1016/j.amjcard.2016.04.254 <b>(IF 2.7)</b>
41.	Rungatscher A, Hallström S, Linardi D, Rossmann C, <b>Ahmed N</b> , Merigo F, Luciani GB, Faggian G. Prolonged Treatment With S-Nitroso Human Serum Albumin Compared to Inhaled Nitric Oxide is More Effective and Prevents Inflammatory and Oxidative Effects in Experimental Pulmonary Arterial Hypertension. <i>Circulation</i> 2016;134: A20867 <b>(IF 29.6)</b>
42.	Rungatscher A, Linardi D, Biagio LS, Berton MG, <b>Ahmed N</b> , Tessari M, Luciani GB, Faggian G. Sphingosine-1- Phosphate Receptor Agonist Fingolimod After Prolonged Circulatory Arrest Improves Cardiac and Neurological Outcomes in a Rat Model of Extracorporeal Life Support. <i>Circulation</i> 2016; 134: A20797 <b>(IF 29.6)</b>
43.	Ajwa Dates Plays Important Role in Prevention of Cardiovascular Diseases, (Accepted) JPMA 2020, (Principal Investigator) <b>(IF 0.7)</b>
44.	Association of Glycemic Index and Glycemic Load with Metabolic Syndrome , (Accepted) JPMA 2020, (Principal Investigator) <b>(IF 0.7)</b>
45.	Positive impact of Intermittent Fasting on dyslipidemia, (Accepted) JPMA 2020, (Principal Investigator) <b>(IF 0.7)</b>
46.	Combination of Aerobic training and Moringa Oleifera significantly attenuated the levels of Low-density lipoprotein (LDL), (Accepted) JPMA 2020, (Principal Investigator) <b>(IF 0.7)</b>
47.	Protective role of Transferulic acid in myocardial Ischemia reperfusion injury, (Accepted) JPMA 2020, (Principal Investigator) <b>(IF 0.7)</b>