

Curriculum Vitae

(Last updated: 2023-03-25)

1. Current position

Clinical Assistant Professor

Division of Cardiology, Department of Medicine, Heart Vascular Stroke Institute, Samsung Medical Center, Sungkyunkwan University School of Medicine, Republic of Korea

2. Academic degrees

2003 - 2009 Graduate (M.D.), Sungkyunkwan University School of Medicine, Seoul, Korea

2012 - 2014 Master's degree, Sungkyunkwan University School of Medicine, Seoul, Korea

2019 - 2021 Doctor of Philosophy, Sungkyunkwan University School of Medicine, Seoul, Korea

3. Professional training

2009 - 2010 Internship, Samsung Medical Center

2010 - 2014 Residency, Internal Medicine, Samsung Medical Center

2014 - 2017 Military doctor for a military service

2017 - 2019 Fellowship, Division of cardiology, Department of Medicine, Heart Vascular Stroke Institute, Samsung Medical Center, Sungkyunkwan School of Medicine

2020 - Present Clinical Assistant Professor, Division of cardiology, Department of Medicine, Heart Vascular Stroke Institute, Samsung Medical Center, Sungkyunkwan School of Medicine

4. Licenses

Certificate of Medical Doctor (No. 101058)

Certified Board of Internal Medicine, Korean Board of Internal Medicine (No. 14542)

Certified Subspecialty Board of Cardiology, Korean Board of Internal Medicine (No. 2-19-1231)

5. Honors and Awards

2018.10 Young Investigator Awards, Korean Society of Cardiology

2019.08 LG Life Science, Young Medical Scientist Prize, Winner

2022.11 Awards from the Minister of Health and Welfare

6. Publications

(1) Papers in SCI-journals as the first author

[1] Lee JM, **Choi KH (Co-first author)**, Song YB, Lee JY, Lee SJ, Lee SY, Kim SM, Yun KH, Cho JY, Kim CJ, Ahn HS, Nam CW, Yoon HJ, Park YH, Lee WS, Jeong JO, Song PS, Doh JH, Jo SH, Yoon CH, Kang MG, Koh JS, Lee KY, Lim YH, Cho YH, Cho JM, Jang WJ, Chun KJ, Hong D, Park TK, Yang JH, Choi SH, Gwon HC, Hahn JY; RENOVATE-COMPLEX-PCI Investigators. Intravascular Imaging-Guided or Angiography-Guided Complex PCI. *N Engl J Med*. 2023 Mar 5. doi: 10.1056/NEJMoa2216607. [IF=176.10].

[2] Lee JM, **Choi KH (Co-first author)**, Choi JO, Shin D, Park Y, Kim J, Lee SH, Kim D, Yang JH, Cho YH, Sung K, Choi JY, Park M, Kim JS, Park TK, Song YB, Hahn JY, Choi SH, Gwon HC, Oh JK, Jeon ES. Coronary Microcirculatory Dysfunction and Acute Cellular Rejection After Heart Transplantation. *Circulation*. 2021 Nov 2;144(18):1459-1472. [IF=39.922]

[3] **Choi KH (First author)**, Park YH, Song YB, Park TK, Lee JM, Yang JH, Choi JH, Choi SH, Oh JH, Chun WJ, Jang WJ, Im ES, Jeong JO, Cho BR, Oh SK, Yun KH, Cho DK, Lee JY, Koh YY, Bae JW, Choi JW, Lee WS, Yoon HJ, Lee SU, Cho JH, Choi WG, Rha SW, Gwon HC, Hahn JY; SMART-CHOICE Investigators. Long-term Effects of P2Y12 Inhibitor Monotherapy After Percutaneous Coronary Intervention: 3-Year Follow-up of the SMART-CHOICE Randomized Clinical Trial. *JAMA Cardiol*. 2022 Nov 1;7(11):1100-1108. [IF=30.157]

[4] **Choi KH (First author)**, Lee JM, Kim SR, Kim D, Choi JO, Kim SJ, Kim K, Kim JS, Koo BK, Jeon ES. Prognostic Value of the Index of Microcirculatory Resistance Over Serum Biomarkers in Cardiac Amyloidosis. *J Am Coll Cardiol*. 2020 Feb 11;75(5):560-561. [IF 24.093]

[5] Lee JM, **Choi KH (Co-first author)**, Park J, Hwang D, Rhee TM, Kim J, Park J, Kim HY, Jung HW, Cho YK, Yoon HJ, Song YB, Hahn JY, Nam CW, Shin ES, Doh JH, Hur SH, Koo BK. Physiological and Clinical Assessment of Resting Physiological Indexes. *Circulation*. 2019 Feb 12;139(7):889-900. Erratum in: *Circulation*. 2019 Feb 12;139(7):e41. [IF=23.603]

[6] DEFINE-FLAIR Trial Investigators, Lee JM, **Choi KH (Co-first author)**, Koo BK, Dehbi HM, Doh JH, Nam CW, Shin ES, Cook CM, Al-Lamee R, Petraco R, Sen S, Malik IS, Nijjer SS, Mejía-Rentería H, Alegria-Barrero E, Alghamdi A, Altman J, Baptista SB, Bhindi R, Bojara W, Brugaletta S, Silva PC, Di Mario C, Erglis A, Gerber RT, Going O, Härle T, Hellig F, Indolfi C, Janssens L, Jeremias A, Kharbanda RK, Khashaba A, Kikuta Y, Krackhardt F, Laine M, Lehman SJ, Matsuo H, Meuwissen M, Niccoli G, Piek JJ, Ribichini F, Samady H, Sapontis J, Seto AH,

Sezer M, Sharp ASP, Singh J, Takashima H, Talwar S, Tanaka N, Tang K, Van Belle E, van Royen N, Vinhas H, Vrints CJ, Walters D, Yokoi H, Samuels B, Buller C, Patel MR, Serruys P, Escaned J, Davies JE. Comparison of Major Adverse Cardiac Events Between Instantaneous Wave-Free Ratio and Fractional Flow Reserve-Guided Strategy in Patients With or Without Type 2 Diabetes: A Secondary Analysis of a Randomized Clinical Trial. **JAMA Cardiol.** 2019 Sep 1;4(9):857-864. [IF=12.794]

[7] **Choi KH (First author)**, Song YB, Jeong DS, Jang YH, Hong D, Lee SY, Youn T, Bak M, Min KM, Lee JM, Park TK, Yang JH, Hahn JY, Choi JH, Choi SH, Chung SR, Cho YH, Sung K, Kim WS, Gwon HC, Lee YT. Differential effects of dual antiplatelet therapy in patients presented with acute coronary syndrome vs. stable ischaemic heart disease after coronary artery bypass grafting. **Eur Heart J Cardiovasc Pharmacother.** 2021 Nov 3;7(6):517-526. [IF=11.617]

[8] **Choi KH (First author)**, Dai N, Li Y, Kim J, Shin D, Lee SH, Joh HS, Kim HK, Jeon K-H, Ha SJ, Kim S-M, Jang MJ, Park TK, Yang JH, Song YB, Hahn J-Y, Doh J-H, Shin E-S, Choi S-H, Gwon H-C, Lee JM. Functional Coronary Angiography–Derived Index of Microcirculatory Resistance in Patients With ST-Segment Elevation Myocardial Infarction. **JACC: Cardiovascular Interventions.** 2021;14:1670-1684. [IF=11.177]

[9] Yang JH, **Choi KH (Co-first author)**, Ko YG, Ahn CM, Yu CW, Chun WJ, Jang WJ, Kim HJ, Kim BS, Bae JW, Lee SY, Kwon SU, Lee HJ, Lee WS, Jeong JO, Park SD, Lim SH, Cho S, Park TK, Lee JM, Song YB, Hahn JY, Choi SH, Gwon HC. Clinical Characteristics and Predictors of In-Hospital Mortality in Patients With Cardiogenic Shock: Results From the RESCUE Registry. **Circ Heart Fail.** 2021 Jun;14(6):e008141. [IF=10.447]

[10] **Choi KH (First author)**, Lee JM, Kim HK, Kim J, Park J, Hwang D, Rhee TM, Park TK, Yang JH, Song YB, Shin ES, Nam CW, Doh JH, Hahn JY, Choi JH, Choi SH, Koo BK, Gwon HC. Fractional Flow Reserve and Instantaneous Wave-Free Ratio for Non-Culprit Stenosis in Patients with Acute Myocardial Infarction. **JACC Cardiovasc Interv.** 2018 Sep 24;11(18):1848-1858. [IF=9.544]

[11] **Choi KH (First author)**, Lee JM, Koo BK, Nam CW, Shin ES, Doh JH, Rhee TM, Hwang D, Park J, Zhang J, Kim KJ, Hu X, Wang J, Ye F, Chen S, Yang J, Chen J, Tanaka N, Yokoi H, Matsuo H, Takashima H, Shiono Y, Akasaka T. Prognostic Implication of Functional Incomplete Revascularization and Residual Functional SYNTAX Score in Patients With Coronary Artery Disease. **JACC Cardiovasc Interv.** 2018 Feb 12;11(3):237-245. [IF=9.544]

[12] Lee JM, **Choi KH (Co-first author)**, Hwang D, Park J, Jung JH, Kim HY, Jung HW, Cho YK, Yoon HJ, Song YB, Hahn JY, Doh JH, Nam CW, Shin ES, Hur SH, Koo BK. Prognostic Implication of Thermodilution Coronary Flow Reserve in Patients Undergoing Fractional Flow Reserve Measurement. **JACC Cardiovasc Interv.** 2018 Aug 13;11(15):1423-1433. [IF=9.544]

[13] **Choi KH (First author)**, Yang JH, Park TK, Lee JM, Song YB, Hahn JY, Choi SH, Ko YG, Yu CW, Chun WJ, Jang WJ, Kim HJ, Bae JW, Kwon SU, Lee HJ, Lee WS, Jeong JO, Park SD, Cho S, Gwon HC. Differential Prognostic Implications of Vasoactive Inotropic Score for Patients With Acute Myocardial Infarction Complicated by Cardiogenic Shock According to Use of Mechanical Circulatory Support. **Crit Care Med.** 2021 May 1;49(5):770-780. [IF=9.296]

[14] **Choi KH (First author)**, Song YB, Lee JM, Lee SY, Park TK, Yang JH, Choi JH, Choi SH, Gwon HC, Hahn JY. Impact of Intravascular Ultrasound-Guided Percutaneous Coronary Intervention on Long-Term Clinical Outcomes in Patients Undergoing Complex Procedures. **JACC Cardiovasc Interv.** 2019 Apr 8;12(7):607-620. [IF=8.432]

[15] Lee SH, **Choi KH (Co-first author)**, Lee JM, Hwang D, Rhee TM, Park J, Kim HK, Cho YK, Yoon HJ, Park J, Song YB, Hahn JY, Doh JH, Nam CW, Shin ES, Hur SH, Koo BK. Physiologic Characteristics and Clinical Outcomes of Patients With Discordance Between FFR and iFR. **JACC Cardiovasc Interv.** 2019 Oct 28;12(20):2018-2031. [IF=8.432]

[16] Chung YJ, **Choi KH (Co-first author)**, Lee SH, Shin D, Hong D, Park S, Joh HS, Kim HK, Ha SJ, Park TK, Yang JH, Song YB, Hahn JY, Choi SH, Gwon HC, Lee JM. Prognostic Impact of Indeterminate Diastolic Function in Patients With Functionally Insignificant Coronary Stenosis. **J Am Soc Echocardiogr.** 2023 Mar;36(3):295-306.e5. [IF=7.722]

[17] Kwon W, **Choi KH (Co-first author)**, Yang JH, Chung YJ, Park TK, Lee JM, Song YB, Hahn JY, Choi SH, Ahn CM, Yu CW, Park IH, Jang WJ, Kim HJ, Bae JW, Kwon SU, Lee HJ, Lee WS, Jeong JO, Park SD, Gwon HC. Efficacy of thrombus aspiration in cardiogenic shock complicating acute myocardial infarction and high thrombus burden. **Rev Esp Cardiol (Engl Ed).** 2023 Feb 4:S1885-5857(23)00042-7. [IF=7.050]

[18] Hong D, **Choi KH (Co-first author)**, Cho YH, Cho SH, Park SJ, Kim D, Park TK, Lee JM, Song YB, Choi JO, Hahn JY, Choi SH, Choi JH, Sung K, Gwon HC, Jeon ES, Yang JH. Multidisciplinary team approach in acute myocardial infarction patients undergoing veno-arterial

extracorporeal membrane oxygenation. **Ann Intensive Care**. 2020 Jun 16;10(1):83. [IF=6.925]

[19] **Choi KH (First author)**, Song YB, Lee JM, Park TK, Yang JH, Choi JH, Choi SH, Oh JH, Cho DK, Lee JB, Doh JH, Kim SH, Jeong JO, Bae JH, Kim BO, Cho JH, Suh IW, Kim DI, Park HK, Park JS, Choi WG, Lee WS, Gwon HC, Hahn JY. Clinical Usefulness of PRECISE-DAPT Score for Predicting Bleeding Events in Patients With Acute Coronary Syndrome Undergoing Percutaneous Coronary Intervention: An Analysis From the SMART-DATE Randomized Trial. **Circ Cardiovasc Interv**. 2020 May;13(5):e008530. [IF=6.546]

[20] **Choi KH (First Author)**, Song YB, Lee JM, Park TK, Yang JH, Hahn JY, Choi JH, Choi SH, Kim HS, Chun WJ, Hur SH, Han SH, Rha SW, Chae IH, Jeong JO, Heo JH, Yoon J, Lim DS, Park JS, Hong MK, Doh JH, Cha KS, Kim DI, Lee SY, Chang K, Hwang BH, Choi SY, Jeong MH, Hong SJ, Nam CW, Koo BK, Gwon HC. Prognostic Effects of Treatment Strategies for Left Main Versus Non-Left Main Bifurcation Percutaneous Coronary Intervention With Current-Generation Drug-Eluting Stent. **Circ Cardiovasc Interv**. 2020 Feb;13(2):e008543. [IF=6.546]

[21] Lee SH, **Choi KH (Co-first author)**, Song YB, Jeong DS, Yang JH, Kim WS, Lee YT. Comprehensive assessment of heart failure in patients with preserved ejection fraction undergoing coronary bypass grafting. **J Thorac Cardiovasc Surg**. 2021 Jun 19:S0022-5223(21)00980-6. doi: 10.1016/j.jtcvs.2021.06.026. Epub ahead of print. PMID: 34217536. [IF=6.439]

[22] **Choi KH (First author)**, Yang JH, Seo JH, Hong D, Youn T, Joh HS, Lee SH, Kim D, Park TK, Lee JM, Song YB, Choi JO, Hahn JY, Choi SH, Gwon HC, Jeon ES. Discriminative Role of Invasive Left Heart Catheterization in Patients Suspected of Heart Failure With Preserved Ejection Fraction. **J Am Heart Assoc**. 2023 Mar 21;12(6):e027581. [IF=6.107]

[23] Kwon W, **Choi KH (Co-first author)**, Jeong DS, Lee SY, Lee JM, Park TK, Yang JH, Hahn JY, Choi SH, Chung SR, Cho YH, Sung K, Kim WS, Gwon HC, Lee YT, Song YB. Comparison of long-term cardiovascular and renal outcomes between percutaneous coronary intervention and coronary artery bypass grafting in multi-vessel disease with chronic kidney disease. **Front Cardiovasc Med**. 2022 Sep 12;9:951113. [IF=5.846]

[24] Jang YH, **Choi KH (Co-first author)**, Song YB, Jeong DS, Hahn JY, Choi SH, Kim WS, Gwon HC, Lee YT. Effects of Statin Intensity on Long-term Outcomes After Coronary Artery Bypass Grafting. **Ann Thorac Surg**. 2022 Nov;114(5):1705-1714. [IF=5.113]

[25] **Choi KH (First author)**, Lee GY, Choi JO, Jeon ES, Lee HY, Cho HJ, Lee SE, Kim MS, Kim JJ, Hwang KK, Chae SC, Baek SH, Kang SM, Choi DJ, Yoo BS, Kim KH, Park HY, Cho MC, Oh BH. Outcomes of de novo and acute decompensated heart failure patients according to ejection fraction. **Heart**. 2018 Mar;104(6):525-532. [IF=5.082]

[26] **Choi KH (First author)**, Song YB, Jeong JO, Park TK, Lee JM, Yang JH, Hahn JY, Choi SH, Choi JH, Lee SH, Jeong MH, Koo BK, Kim HS, Yu CW, Rha SW, Jang Y, Yoon JH, Oh JH, Park JS, Gwon HC. Treatment Strategy for STEMI With Bifurcation Culprit Lesion Undergoing Primary PCI: The COBIS II Registry. **Rev Esp Cardiol (Engl Ed)**. 2018 Oct;71(10):811-819. [IF=5.078]

[27] Lee SY, **Choi KH (Co-first author)**, Song YB, Park TK, Lee JM, Yang JH, Choi JH, Choi SH, Gwon HC, Hahn JY. Use of intravascular ultrasound and long-term cardiac death or myocardial infarction in patients receiving current generation drug-eluting stents. **Sci Rep**. 2022 May 17;12(1):8237. [IF=4.997]

[28] **Choi KH (First author)**, Choi JO, Jeon ES, Lee GY, Choi DJ, Lee HY, Kim JJ, Chae SC, Baek SH, Kang SM, Yoo BS, Kim KH, Cho MC, Park HY, Oh BH. Guideline-Directed Medical Therapy for Patients With Heart Failure With Midrange Ejection Fraction: A Patient-Pooled Analysis From the Kor HF and Kor AHF Registries. **J Am Heart Assoc**. 2018 Nov 6;7(21):e009806. [IF=4.660]

[29] **Choi KH (First author)**, Yang JH, Park TK, Lee JM, Song YB, Hahn JY, Choi SH, Choi JH, Cho YH, Sung K, Carriere K, Ahn J, Gwon HC. Risk prediction model of in-hospital mortality in patients with myocardial infarction treated with venoarterial extracorporeal membrane oxygenation. **Rev Esp Cardiol (Engl Ed)**. 2019 Sep;72(9):724-731. [IF=4.642]

[30] Lee JM, **Choi KH (Co-first author)**, Koo BK, Zhang J, Han JK, Yang HM, Park KW, Song YB, Hahn JY, Choi SH, Gwon HC, Kim HS. Intravascular ultrasound or optical coherence tomography-defined anatomic severity and hemodynamic severity assessed by coronary physiologic indices. **Rev Esp Cardiol (Engl Ed)**. 2019 Dec 4:S1885-5857(19)30340-8. [IF=4.642]

[31] **Choi KH (First author)**, Park TK, Kim J, Ko YG, Yu CW, Yoon CH, Lee JH, Min PK, Koh YS, Chae IH, Choi D, Choi SH; K-VIS Investigators. Sex Differences in Outcomes

Following Endovascular Treatment for Symptomatic Peripheral Artery Disease: An Analysis From the K- VIS ELLA Registry. **J Am Heart Assoc.** 2019 Jan 22;8(2):e010849. [IF=4.605]

[32] Park J, **Choi KH (Co-first author)**, Lee JM, Kim HK, Hwang D, Rhee TM, Kim J, Park TK, Yang JH, Song YB, Choi JH, Hahn JY, Choi SH, Koo BK, Chae SC, Cho MC, Kim CJ, Kim JH, Jeong MH, Gwon HC, Kim HS; KAMIR-NIH (Korea Acute Myocardial Infarction Registry–National Institutes of Health) Investigators. Prognostic Implications of Door-to-Balloon Time and Onset-to-Door Time on Mortality in Patients With ST-Segment-Elevation Myocardial Infarction Treated With Primary Percutaneous Coronary Intervention. **J Am Heart Assoc.** 2019 May 7;8(9):e012188. [IF=4.605]

[33] Hwang D, **Choi KH (Co-first author)**, Lee JM, Mejía-Rentería H, Kim J, Park J, Rhee TM, Jeon KH, Lee HJ, Kim HK, Park TK, Yang JH, Song YB, Shin ES, Nam CW, Kwak JJ, Doh JH, Hahn JY, Choi JH, Choi SH, Escaned J, Koo BK, Gwon HC. Diagnostic Agreement of Quantitative Flow Ratio With Fractional Flow Reserve and Instantaneous Wave-Free Ratio. **J Am Heart Assoc.** 2019 Apr 16;8(8):e011605. [IF=4.605]

[34] **Choi KH (First author)**, Yang JH, Song YB, Hahn JY, Choi JH, Gwon HC, Lee SH, Choi SH. Long-term clinical outcomes of patients with coronary chronic total occlusion treated with percutaneous coronary intervention versus medical therapy according to presence of diabetes mellitus. **EuroIntervention.** 2017 Oct 20;13(8):970-977. [IF=4.417]

[35] Lee JM, **Choi KH (Co-first author)**, Koo BK, Shin ES, Nam CW, Doh JH, Hwang D, Park J, Zhang J, Lim HS, Yoon MH, Tahk SJ. Prognosis of deferred non-culprit lesions according to fractional flow reserve in patients with acute coronary syndrome. **EuroIntervention.** 2017 Oct 13;13(9):e1112-e1119. [IF=4.417]

[36] **Choi KH (First author)**, Lee SH, Lee JM, Hwang D, Zhang J, Kim J, Im SY, Kim HK, Nam CW, Doh JH, Shin ES, Mejía-Rentería H, Park TK, Yang JH, Song YB, Hahn JY, Choi SH, Gwon HC, Escaned J, Koo BK. Clinical relevance and prognostic implications of contrast quantitative flow ratio in patients with coronary artery disease. **Int J Cardiol.** 2021 Feb 15;325:23-29. [IF=4.039]

[37] Hong D, **Choi KH (Co-first author)**, Song YB, Lee JM, Park TK, Yang JH, Hahn JY, Choi JH, Choi SH, Kim SM, Choe Y, Kim EK, Chang SA, Lee SC, Oh JK, Gwon HC. Prognostic implications of post-percutaneous coronary intervention neutrophil-to-lymphocyte ratio on

infarct size and clinical outcomes in patients with acute myocardial infarction. **Sci Rep**. 2019 Jul 4;9(1):9646. [IF=3.998]

[38] Jang WJ, **Choi KH (Co-first author)**, Kim J, Yang JH, Hahn JY, Choi SH, Gwon HC, Cho YH, Sung K, Kim WS, Jeong DS, Song YB. Impact of gender on mid-term prognosis of patients undergoing coronary artery bypass grafting. **PLoS One**. 2023 Mar 2;18(3):e0279030. [IF=3.752]

[39] **Choi KH (First author)**, Park J, Lee JM, Choi T, Song YB, Hahn JY, Nam CW, Shin ES, Doh JH, Hur SH, Koo BK. Comparison of Current and Novel ECG-Independent Algorithms for Resting Pressure Derived Physiologic Indices. **IEEE Access**. vol. 7, pp. 144313-144323, 2019. [IF=3.745]

[40] **Choi KH (First author)**, Lee GY, Choi JO, Jeon ES, Lee HY, Cho HJ, Lee SE, Kim MS, Kim JJ, Hwang KK, Chae SC, Baek SH, Kang SM, Choi DJ, Yoo BS, Kim KH, Park HY, Cho MC, Oh BH. Effects of angiotensin receptor blocker at discharge in patients with heart failure with reduced ejection fraction: Korean Acute Heart Failure (KorAHF) registry. **Int J Cardiol**. 2018 Apr 15;257:168-176. [IF=3.471]

[41] Lee SH, **Choi KH (Co-first author)**, Yang JH, Song YB, Lee JM, Park TK, Hahn JY, Choi JH, Choi SH, Gwon HC. Association Between Preexisting Elevated Left Ventricular Filling Pressure and Clinical Outcomes of Future Acute Myocardial Infarction. **Circ J**. 2022 Mar 25;86(4):660-667. [IF=3.350]

[42] **Choi KH (First author)**, Lee JM, Park I, Kim J, Rhee TM, Hwang D, Park J, Park TK, Yang JH, Song YB, Hahn JY, Jeong DS, Cho YH, Kim WS, Sung K, Jang MJ, Sung JD, Choi JH, Choi SH, Koo BK, Lee YT, Kim EK, Chang SA, Park SJ, Choi JO, Lee SC, Park SW, Cho YS, Choi JY, Gwon HC, Oh JK. Comparison of long-term clinical outcomes between revascularization versus medical treatment in patients with silent myocardial ischemia. **Int J Cardiol**. 2019 Feb 15;277:47-53. [IF=3.229]

[43] **Choi KH (First author)**, Choi SH. Current Status and Future Perspectives of Renal Denervation. **Korean Circ J**. 2021 Sep;51(9):717-732. [IF=3.101]

[44] **Choi KH (First author)**, Yang JH, Hong D, Park TK, Lee JM, Song YB, Hahn JY, Choi SH, Choi JH, Chung SR, Cho YH, Jeong DS, Sung K, Kim WS, Lee YT, Gwon HC. Optimal Timing of Venoarterial-Extracorporeal Membrane Oxygenation in Acute Myocardial Infarction

Patients with Refractory Cardiogenic Shock. **Circ J**. 2020 Aug 25;84(9):1502-1510. [IF=2.993]

[45] **Choi KH (First author)**, Yang JH, Kim JH, Song YB, Hahn JY, Choi JH, Gwon HC, Lee SH, Choi SH. The Impact of Renal Dysfunction on the Long Term Clinical Outcomes of Diabetic Patients Undergoing Percutaneous Coronary Intervention in the Drug-Eluting Stent Era. **PLoS One**. 2016 Jan 5;11(1):e0141846. [IF=2.806]

[46] **Choi KH (First author)**, Lee GY, Choi JO, Jeon ES, Lee HY, Lee SE, Kim JJ, Chae SC, Baek SH, Kang SM, Choi DJ, Yoo BS, Kim KH, Cho MC, Park HY, Oh BH. The Mortality Benefit of Carvedilol versus Bisoprolol in Patients with Heart Failure with Reduced Ejection Fraction. **Korean J Intern Med**. 2019;34(5):1030–1039. [IF=2.751]

[47] Lee SH, **Choi KH (Co-first author)**, Lee JM, Shin D, Hwang D, Kim HK, Doh JH, Nam CW, Shin ES, Jang MJ, Im SY, Park TK, Yang JH, Song YB, Hahn JY, Choi SH, Koo BK, Gwon HC. Residual functional SYNTAX score by quantitative flow ratio and improvement of exercise capacity after revascularization. **Catheter Cardiovasc Interv**. 2021 Mar;97(4):E454-E466. [IF=2.585]

[48] Kim SR, **Choi KH (Co-first author)**, Song YB, Lee JM, Park TK, Yang JH, Hahn JY, Choi JH, Choi SH, Gwon HC. Effect of sarpegrelate and high-dose statin on the reduction of coronary spasm in vasospastic angina: A two by two factorial, pilot randomized study. **Clin Cardiol**. 2019 Oct;42(10):899-907. [IF=2.248]

[49] **Choi KH (First author)**, Han S, Lee GY, Choi JO, Jeon ES, Lee HY, Lee SE, Kim JJ, Chae SC, Baek SH, Kang SM, Choi DJ, Yoo BS, Kim KH, Cho MC, Park HY, Oh BH. Prognostic significance of left axis deviation in acute heart failure patients with left bundle branch block: An analysis from the Korean Acute Heart Failure (KorAHF) registry. **Korean Circ J**. 2018 Nov;48(11):1002-1011. [IF=1.694]

[50] **Choi KH (First author)**, Song YB, Lee JM, Park TK, Yang JH, Hahn J-Y, Choi J-H, Choi S-H, Kim H-S, Chun WJ, Hur S-H, Han SH, Rha S-W, Chae I-H, Jeong J-O, Heo JH, Yoon J, Lim D-S, Park J-S, Hong M-K, Doh J-H, Cha KS, Kim D-I, Lee SY, Chang K, Hwang B-H, Choi S-Y, Jeong MH, Hong S-J, Nam C-W, Koo B-K, Gwon H-C. Differential Long-Term Effects of First- and Second-Generation DES in Patients With Bifurcation Lesions Undergoing PCI. **JACC: Asia**. 2021;1:68-79.

(2) Papers in SCI-journals as coauthor

[1] Koo BK, Hu X, Kang J, Zhang J, Jiang J, Hahn JY, Nam CW, Doh JH, Lee BK, Kim W, Huang J, Jiang F, Zhou H, Chen P, Tang L, Jiang W, Chen X, He W, Ahn SG, Yoon MH, Kim U, Lee JM, Hwang D, Ki YJ, Shin ES, Kim HS, Tahk SJ, Wang J; **FLAVOUR Investigators**. Fractional Flow Reserve or Intravascular Ultrasonography to Guide PCI. **N Engl J Med**. 2022 Sep 1;387(9):779-789. [IF=176.10]

[2] Hahn JY, Song YB, Oh JH, Cho DK, Lee JB, Doh JH, Kim SH, Jeong JO, Bae JH, Kim BO, Cho JH, Suh IW, Kim DI, Park HK, Park JS, Choi WG, Lee WS, Kim J, **Choi KH**, Park TK, Lee JM, Yang JH, Choi JH, Choi SH, Gwon HC; SMART-DATE investigators. 6-month versus 12-month or longer dual antiplatelet therapy after percutaneous coronary intervention in patients with acute coronary syndrome (SMART-DATE): a randomised, open-label, non-inferiority trial. **Lancet**. 2018 Mar 31;391(10127):1274-1284. [IF=59.102]

[3] Lee JM, Kim HK, Park KH, Choo EH, Kim CJ, Lee SH, Kim MC, Hong YJ, Ahn SG, Doh JH, Lee SY, Park SD, Lee HJ, Kang MG, Koh JS, Cho YK, Nam CW, Koo BK, Lee BK, Yun KH, Hong D, Joh HS, **Choi KH**, Park TK, Yang JH, Song YB, Choi SH, Gwon HC, Hahn JY; FRAME-AMI Investigators. Fractional flow reserve versus angiography-guided strategy in acute myocardial infarction with multivessel disease: a randomized trial. **Eur Heart J**. 2023 Feb 7;44(6):473-484. [IF=35.855]

[4] Lee JM, Park J, Hwang D, Kim CH, **Choi KH**, Rhee TM, Tong Y, Park JJ, Shin ES, Nam CW, Doh JH, Koo BK. Similarity and Difference of Resting Distal to Aortic Coronary Pressure and Instantaneous Wave-Free Ratio. **J Am Coll Cardiol**. 2017 Oct 24;70(17):2114-2123. [IF=19.896]

[5] Lee JM, **Choi KH**, Koo BK, Park J, Kim J, Hwang D, Rhee TM, Kim HY, Jung HW, Kim KJ, Yoshiaki K, Shin ES, Doh JH, Chang HJ, Cho YK, Yoon HJ, Nam CW, Hur SH, Wang J, Chen S, Kuramitsu S, Tanaka N, Matsuo H, Akasaka T. Prognostic Implications of Plaque Characteristics and Stenosis Severity in Patients With Coronary Artery Disease. **J Am Coll Cardiol**. 2019 May 21;73(19):2413-2424. [IF=18.639]

[6] Lee JM, Rhee TM, Hahn JY, Kim HK, Park J, Hwang D, **Choi KH**, Kim J, Park TK, Yang JH, Song YB, Choi JH, Choi SH, Koo BK, Kim YJ, Chae SC, Cho MC, Kim CJ, Gwon HC, Kim JH, Kim HS, Jeong MH; KAMIR Investigators. Multivessel Percutaneous Coronary Intervention in Patients With ST-Segment Elevation Myocardial Infarction With Cardiogenic Shock. **J Am**

Coll Cardiol. 2018 Feb 27;71(8):844-856. [IF=16.834]

[7] Kim D, Seo JH, **Choi KH**, Lee SH, Choi JO, Jeon ES, Yang JH. Prognostic Implications of Left Atrial Stiffness Index in Heart Failure Patients With Preserved Ejection Fraction. *JACC Cardiovasc Imaging.* 2022 Dec 1:S1936-878X(22)00662-3. [IF=16.051]

[8] Kim D, Park Y, **Choi KH**, Park TK, Lee JM, Cho YH, Choi JO, Jeon ES, Yang JH. Prognostic Implication of RV Coupling to Pulmonary Circulation for Successful Weaning From Extracorporeal Membrane Oxygenation. *JACC Cardiovasc Imaging.* 2021 Apr 7:S1936-878X(21)00197-2. [IF=14.805]

[9] Lee SH, Kim J, Lefieux A, Molony D, Shin D, Hwang D, **Choi KH**, Chang HS, Jeon KH, Lee HJ, Jang HJ, Kim HK, Ha SJ, Park TK, Yang JH, Song YB, Hahn JY, Choi SH, Doh JH, Shin ES, Nam CW, Koo BK, Gwon HC, Lee JM. Clinical and Prognostic Impact From Objective Analysis of Post-Angioplasty Fractional Flow Reserve Pullback. *JACC Cardiovasc Interv.* 2021 Sep 13;14(17):1888-1900. doi: 10.1016/j.jcin.2021.07.014. [IF=11.195]

[10] Shin D, Dai N, Lee SH, **Choi KH**, Lefieux A, Molony D, Hwang D, Kim HK, Jeon KH, Lee HJ, Jang HJ, Ha SJ, Park TK, Yang JH, Song YB, Hahn JY, Choi SH, Doh JH, Shin ES, Nam CW, Koo BK, Gwon HC, Ge J, Lee JM. Physiological Distribution and Local Severity of Coronary Artery Disease and Outcomes After Percutaneous Coronary Intervention. *JACC Cardiovasc Interv.* 2021 Aug 23;14(16):1771-1785. doi: 10.1016/j.jcin.2021.06.013. [IF=11.195]

[11] Choi YJ, Lee SJ, Kim BK, Hong SJ, Ahn CM, Kim JS, Gwon HC, Kim HS, Chun WJ, Hur SH, Nam CW, Han SH, Rha SW, Chae IH, Jeong JO, Heo JH, Yoon J, Lim DS, Park JS, Cha KS, Kim DI, Lee SY, Chang K, Hwang BH, Choi SY, Jeong MH, **Choi KH**, Song YB, Hong SJ, Doh JH, Koo BK, Hong MK, Jang Y. Effect of Wire Jailing at Side Branch in 1-Stent Strategy for Coronary Bifurcation Lesions. *JACC Cardiovasc Interv.* 2022 Feb 28;15(4):443-455. [IF=11.195]

[12] Kim J, Shin D, Lee JM, Lee SH, Hong D, **Choi KH**, Hwang D, Boerhout CKM, de Waard GA, Jung JH, Mejia-Renteria H, Hoshino M, Echavarria-Pinto M, Meuwissen M, Matsuo H, Madera-Camero M, Eftekhari A, Effat MA, Murai T, Marques K, Doh JH, Christiansen EH, Banerjee R, Kim HK, Nam CW, Niccoli G, Nakayama M, Tanaka N, Shin ES, Chamuleau SAJ, van Royen N, Knaapen P, Koo BK, Kakuta T, Escaned J, Piek JJ, van de Hoef TP; ILIAS Registry

Investigators. Differential Prognostic Value of Revascularization for Coronary Stenosis With Intermediate FFR by Coronary Flow Reserve. **JACC Cardiovasc Interv.** 2022 May 23;15(10):1033-1043. [IF=11.195]

[13] Lee JM, Hwang D, **Choi KH**, Rhee TM, Park J, Kim HY, Jung HW, Hwang JW, Lee HJ, Jang HJ, Kim SH, Song YB, Cho YK, Nam CW, Hahn JY, Shin ES, Kawase Y, Matsuo A, Tanaka N, Doh JH, Koo BK, Matsuo H. Prognostic Implications of Relative Increase and Final Fractional Flow Reserve in Patients With Stent Implantation. **JACC Cardiovasc Interv.** 2018 Oct 22;11(20):2099-2109. [IF=9.881]

[14] Lee JM, Kim HK, Lim KS, Park JK, **Choi KH**, Park J, Hwang D, Rhee TM, Yang JH, Shin ES, Nam CW, Doh JH, Hahn JY, Koo BK, Jeong MH. Influence of Local Myocardial Damage on Index of Microcirculatory Resistance and Fractional Flow Reserve in Target and Nontarget Vascular Territories in a Porcine Microvascular Injury Model. **JACC Cardiovasc Interv.** 2018 Apr 23;11(8):717-724. [IF=9.881]

[15] Lee JM, Hwang D, **Choi KH**, Kim CH, Bang JI, Suh M, Paeng JC, Cheon GJ, Koo BK. Diagnostic Performance of Nonhyperemic Pressure Ratios Assessed by ¹³N-Ammonium Positron Emission Tomography. **JACC Cardiovasc Interv.** 2019 Aug 12;12(15):1517-1518. [IF=9.544]

[16] Yang JH, Harada T, **Choi KH**, Kato T, Kim D, Takama N, Park TK, Kurabayashi M, Chang SA, Obokata M. Peripheral Venous Pressure-Assisted Exercise Stress Echocardiography in the Evaluation of Pulmonary Hypertension During Exercise in Patients With Suspected Heart Failure With Preserved Ejection Fraction. **Circ Heart Fail.** 2022 Mar;15(3):e009028. [IF=8.790]

[17] Chung JH, Lee KE, Lee JM, Her AY, Kim CH, **Choi KH**, Song YB, Hahn JY, Kim HY, Choi JH, Garg S, Doh JH, Nam CW, Koo BK, Shin ES. Effect of Sex Difference of Coronary Microvascular Dysfunction on Long-Term Outcomes in Deferred Lesions. **JACC Cardiovasc Interv.** 2020;13(14):1669-1679. [IF=8.432]

[18] Lee SH, Kim HK, Lee JM, Hong YJ, Lim KS, Kim HB, **Choi KH**, Shin ES, Nam CW, Doh JH, Yang JH, Song YB, Hahn JY, Choi SH, Jeong MH, Samady H, Escaned J. Coronary Circulatory Indexes in Non-Infarct-Related Vascular Territories in a Porcine Acute Myocardial Infarction Model. **JACC Cardiovasc Interv.** 2020 May 25;13(10):1155-1167. [IF=8.432]

[19] Hwang D, Lee JM, Yang S, Chang M, Zhang J, **Choi KH**, Kim CH, Nam CW, Shin ES,

Kwak JJ, Doh JH, Hoshino M, Hamaya R, Kanaji Y, Murai T, Zhang JJ, Ye F, Li X, Ge Z, Chen SL, Kakuta T, Koo BK. Role of Post-Stent Physiological Assessment in a Risk Prediction Model After Coronary Stent Implantation. **JACC Cardiovasc Interv.** 2020 Jul 27;13(14):1639-1650. [IF=8.432]

[20] Lee SH, Shin D, Lee JM, Lefieux A, Molony D, **Choi KH**, Hwang D, Lee HJ, Jang HJ, Kim HK, Ha SJ, Kwak JJ, Park TK, Yang JH, Song YB, Hahn JY, Doh JH, Shin ES, Nam CW, Koo BK, Choi SH, Gwon HC. Automated Algorithm Using Pre-Intervention Fractional Flow Reserve Pullback Curve to Predict Post-Intervention Physiological Results. **JACC Cardiovasc Interv.** 2020 Nov 23;13(22):2670-2684. [IF=8.432]

[21] Shin D, Lee SH, Lee JM, **Choi KH**, Hwang D, Lee HJ, Jang HJ, Kim HK, Kwak JJ, Ha SJ, Song YB, Shin ES, Doh JH. Prognostic Implications of Post-Intervention Resting Pd/Pa and Fractional Flow Reserve in Patients With Stent Implantation. **JACC Cardiovasc Interv.** 2020 Aug 24;13(16):1920-1933. [IF=8.432]

[22] Hong D, Shin D, Lee SH, Joh HS, **Choi KH**, Kim HK, Ha SJ, Park TK, Yang JH, Song YB, Hahn JY, Choi SH, Gwon HC, Lee JM. Prognostic Impact of Coronary Microvascular Dysfunction According to Different Patterns by Invasive Physiologic Indexes in Symptomatic Patients With Intermediate Coronary Stenosis. **Circ Cardiovasc Interv.** 2023 Mar;16(3):e012621. [IF=7.514]

[23] Park S, Lee SH, Shin D, Hong D, Joh HS, **Choi KH**, Kim HK, Ha SJ, Park TK, Yang JH, Song YB, Hahn JY, Choi SH, Gwon HC, Lee JM. Prognostic Impact of Coronary Flow Reserve in Patients With CKD. **Kidney Int Rep.** 2022 Oct 8;8(1):64-74. [IF=6.234]

[24] Hong D, Lee SH, Shin D, **Choi KH**, Kim HK, Ha SJ, Joh HS, Park TK, Yang JH, Song YB, Hahn JY, Choi SH, Gwon HC, Lee JM. Prognostic Impact of Cardiac Diastolic Function and Coronary Microvascular Function on Cardiovascular Death. **J Am Heart Assoc.** 2023 Feb 7;12(3):e027690. [IF=6.107]

[25] Joh HS, Shin D, Lee JM, Lee SH, Hong D, **Choi KH**, Hwang D, Boerhout CKM, de Waard GA, Jung JH, Mejia-Renteria H, Hoshino M, Echavarria-Pinto M, Meuwissen M, Matsuo H, Madera-Camero M, Eftekhari A, Effat MA, Murai T, Marques K, Doh JH, Christiansen EH, Banerjee R, Kim HK, Nam CW, Niccoli G, Nakayama M, Tanaka N, Shin ES, Chamuleau SAJ, van Royen N, Knaapen P, Koo BK, Kakuta T, Escaned J, Piek JJ, van de Hoef TP; ILIAS Registry

Investigators [Link]. Prognostic Impact of Coronary Flow Reserve in Patients With Reduced Left Ventricular Ejection Fraction. **J Am Heart Assoc.** 2022 Aug 2;11(15):e025841. [IF=6.107]

[26] Kim J, Jang WJ, Lee WS, **Choi KH**, Lee JM, Park TK, Yang JH, Choi JH, Song YB, Choi SH, Gwon HC, Lee SH, Oh JH, Chun WJ, Park YH, Im ES, Jeong JO, Cho BR, Oh SK, Yun KH, Cho DK, Lee JY, Koh YY, Bae JW, Choi JW, Yoon HJ, Lee SU, Cho JH, Choi WG, Rha SW, Hahn JY. P2Y12 inhibitor monotherapy after coronary stenting according to type of P2Y12 inhibitor. **Heart.** 2021 Mar 23;heartjnl-2020-318821. doi: 10.1136/heartjnl-2020-318821. Epub ahead of print. [IF=5.994]

[27] Cha JJ, Hong SJ, Kim JH, Lim S, Joo HJ, Park JH, Yu CW, Kang J, Kim HS, Gwon HC, Chun WJ, Hur SH, Han SH, Rha SW, Chae IH, Jeong JO, Heo JH, Yoon J, Park JS, Hong MK, Doh JH, Cha KS, Kim DI, Lee SY, Chang K, Hwang BH, Choi SY, Jeong MH, Song YB, **Choi KH**, Nam CW, Koo BK, Lim DS. Bifurcation strategies using second-generation drug-eluting stents on clinical outcomes in diabetic patients. **Front Cardiovasc Med.** 2022 Dec 21;9:1018802. [IF=5.848]

[28] Kim TW, Ko RE, Na SJ, Chung CR, **Choi KH**, Park CM, Yang JH. Associations of albumin and nutritional index factors with delirium in patients admitted to the cardiac intensive care unit. **Front Cardiovasc Med.** 2023 Mar 3;10:1100160. [IF=5.848]

[29] Lee SH, Hong D, Dai N, Shin D, **Choi KH**, Kim SM, Kim HK, Jeon KH, Ha SJ, Lee KY, Park TK, Yang JH, Song YB, Hahn JY, Choi SH, Choe YH, Gwon HC, Ge J, Lee JM. Anatomic and Hemodynamic Plaque Characteristics for Subsequent Coronary Events. **Front Cardiovasc Med.** 2022 May 23;9:871450. [IF=5.848]

[30] Kim SE, Ko RE, Na SJ, Chung CR, **Choi KH**, Kim D, Park TK, Lee JM, Song YB, Choi JO, Hahn JY, Choi SH, Gwon HC, Yang JH. External validation and comparison of two delirium prediction models in patients admitted to the cardiac intensive care unit. **Front Cardiovasc Med.** 2022 Aug 3;9:947149. [IF=5.848]

[31] Seo JH, Hong D, Youn T, Lee SH, **Choi KH**, Kim D, Park TK, Lee JM, Song YB, Choi JO, Hahn JY, Choi SH, Gwon HC, Jeon ES, Yang JH. Prognostic implications of coronary artery disease and stress tests in patients with elevated left ventricular filling pressure and preserved ejection fraction. **Front Cardiovasc Med.** 2022 Aug 15;9:955731. [IF=5.848]

- [32] Park TK, Lee SH, **Choi KH**, Lee JM, Yang JH, Song YB, Hahn JY, Choi JH, Gwon HC, Lee SH, Choi SH. Late Survival Benefit of Percutaneous Coronary Intervention Compared With Medical Therapy in Patients With Coronary Chronic Total Occlusion: A 10-Year Follow-Up Study. **J Am Heart Assoc**. 2021 Mar 16;10(6):e019022. [IF=5.501]
- [33] Lee JM, Lee SH, Kim J, **Choi KH**, Park TK, Yang JH, Song YB, Hahn JY, Choi JH, Choi SH, Kim HS, Chun WJ, Nam CW, Hur SH, Han SH, Rha SW, Chae IH, Jeong JO, Heo JH, Yoon J, Lim DS, Park JS, Hong MK, Doh JH, Cha KS, Kim DI, Lee SY, Chang K, Hwang BH, Choi SY, Jeong MH, Hong SJ, Koo BK, Gwon HC. Ten-Year Trends in Coronary Bifurcation Percutaneous Coronary Intervention: Prognostic Effects of Patient and Lesion Characteristics, Devices, and Techniques. **J Am Heart Assoc**. 2021 Sep 21;10(18):e021632. doi: 10.1161/JAHA.121.021632. [IF=5.501]
- [34] Lee JM, Hwang D, **Choi KH**, Lee HJ, Song YB, Cho YK, Nam CW, Hahn JY, Shin ES, Doh JH, Hoshino M, Hamaya R, Kanaji Y, Murai T, Zhang JJ, Ye F, Li X, Ge Z, Chen SL, Kakuta T, Koo BK. Prognostic Impact of Residual Anatomic Disease Burden After Functionally Complete Revascularization. **Circ Cardiovasc Interv**. 2020 Sep;13(9):e009232. [IF=5.493]
- [35] Lee JM, Joh HS, **Choi KH**, Hong D, Park TK, Yang JH, Song YB, Choi JH, Choi SH, Jeong JO, Lee JY, Choi YJ, Chae JK, Hur SH, Bae JW, Oh JH, Chun KJ, Kim HJ, Cho BR, Shin D, Lee SH, Hwang D, Lee HJ, Jang HJ, Kim HK, Ha SJ, Shin ES, Doh JH, Hahn JY, Gwon HC; SMART-REWARD Investigators. Safety and Efficacy of Everolimus-Eluting Bioresorbable Vascular Scaffold Versus Second-Generation Drug-Eluting Stents in Real-World Practice. **J Korean Med Sci**. 2023 Feb 6;38(5):e34. [IF=5.354]
- [36] Hamaya R, Mittleman MA, Hoshino M, Kanaji Y, Murai T, Lee JM, **Choi KH**, Zhang JJ, Ye F, Li X, Ge Z, Chen SL, Kakuta T. Prognostic Value of Prerevascularization Fractional Flow Reserve Mediated by the Postrevascularization Level. **JAMA Netw Open**. 2020 Sep 1;3(9):e2018162. [IF=5.032]
- [37] Lee SH, Rhee TM, Shin D, Hong D, **Choi KH**, Kim HK, Park TK, Yang JH, Song YB, Hahn JY, Choi SH, Chae SC, Cho MC, Kim CJ, Kim JH, Kim HS, Gwon HC, Jeong MH, Lee JM; KAMIR-NIH Investigators. Prognosis after discontinuing renin angiotensin aldosterone system inhibitor for heart failure with restored ejection fraction after acute myocardial infarction. **Sci Rep**. 2023 Mar 2;13(1):3539. [IF=4.997]

[38] Shin D, Kim J, **Choi KH**, Dai N, Li Y, Lee SH, Joh HS, Kim HK, Kim SM, Ha SJ, Jang MJ, Park TK, Yang JH, Song YB, Hahn JY, Choi SH, Choe YH, Gwon HC, Lee JM. Functional angiography-derived index of microcirculatory resistance validated with microvascular obstruction in cardiac magnetic resonance after STEMI. **Rev Esp Cardiol** (Engl Ed). 2022 Mar 3:S1885-5857(22)00014-7. [IF=4.753]

[39] Lee JM, Rhee TM, Kim HK, Hwang D, Lee SH, **Choi KH**, Kim J, Park TK, Yang JH, Song YB, Choi JH, Choi SH, Koo BK, Chae SC, Cho MC, Kim CJ, Kim JH, Kim HS, Gwon HC, Jeong MH, Hahn JY; KAMIR Investigators. Comparison of Long-Term Clinical Outcome Between Multivessel Percutaneous Coronary Intervention Versus Infarct-Related Artery-Only Revascularization for Patients With ST-Segment-Elevation Myocardial Infarction With Cardiogenic Shock. **J Am Heart Assoc**. 2019 Dec 17;8(24):e013870. [IF=4.660]

[40] Kim CH, Koo BK, Lee JM, Shin ES, Park J, **Choi KH**, Hwang D, Rhee TM, Zhang J, Choi YJ, Lee SY, Choi JH, Doh JH, Nam CW, Wang J, Chen S, Kuramitsu S, Tanaka N, Matsuo H, Akasaka T. Influence of Sex on Relationship Between Total Anatomical and Physiologic Disease Burdens and Their Prognostic Implications in Patients With Coronary Artery Disease. **J Am Heart Assoc**. 2019 Mar 5;8(5):e011002. [IF=4.660]

[41] Lee JM, Lee SH, Hwang D, Rhee TM, **Choi KH**, Kim J, Park J, Kim HY, Jung HW, Cho YK, Yoon HJ, Song YB, Hahn JY, Nam CW, Shin ES, Doh JH, Hur SH, Koo BK. Long-Term Clinical Outcomes of Nonhyperemic Pressure Ratios: Resting Full-Cycle Ratio, Diastolic Pressure Ratio, and Instantaneous Wave-Free Ratio. **J Am Heart Assoc**. 2020 Sep 15;9(18):e016818. [IF=4.605]

[42] Hoshino M, Hamaya R, Kanaji Y, Kanno Y, Hada M, Yamaguchi M, Sumino Y, Hirano H, Horie T, Usui E, Sugiyama T, Murai T, Lee T, Yonetsu T, Lee JM, **Choi KH**, Hwang D, Park J, Jung JH, Kim HY, Jung HW, Cho YK, Yoon HJ, Song YB, Hahn JY, Doh JH, Nam CW, Shin ES, Hur SH, Mejía-Rentería H, Lauri F, Goto S, Macaya F, McInerney A, Gravina G, Vera R, Gonzalo N, Jimenez-Quevedo P, Nuñez-Gil I, Salinas P, Nombela-Franco L, Del Trigo M, Fernández-Ortiz A, Macaya C, Koo BK, Escaned J, Kakuta T. Sex Differences in Long-Term Outcomes in Patients With Deferred Revascularization Following Fractional Flow Reserve Assessment: International Collaboration Registry of Comprehensive Physiologic Evaluation. **J Am Heart Assoc**. 2020 Feb 18;9(4):e014458. [IF=4.605]

[43] Lee SH, Lee JM, Park J, **Choi KH**, Hwang D, Doh JH, Nam CW, Shin ES, Hoshino M,

Murai T, Yonetsu T, Mejía-Rentería H, Kakuta T, Escaned J; International Collaboration of Comprehensive Physiologic Assessment Investigators. Prognostic Implications of Resistive Reserve Ratio in Patients With Coronary Artery Disease. **J Am Heart Assoc.** 2020 Apr 21;9(8):e015846. [IF=4.605]

[44] Kim J, Lee JM, **Choi KH**, Rhee TM, Hwang D, Park J, Ahn C, Park TK, Yang JH, Song YB, Choi JH, Hahn JY, Choi SH, Gwon HC. Differential Clinical Outcomes Between Angiographic Complete Versus Incomplete Coronary Revascularization, According to the Presence of Chronic Kidney Disease in the Drug-Eluting Stent Era. **J Am Heart Assoc.** 2018 Feb 15;7(4). pii: e007962. [IF=4.450]

[45] Shin D, Lee JM, Lee SH, Hwang D, **Choi KH**, Kim HK, Doh JH, Nam CW, Shin ES, Hoshino M, Murai T, Yonetsu T, Mejía-Rentería H, Kakuta T, Escaned J, Koo BK. Non-randomized comparison between revascularization and deferral for intermediate coronary stenosis with abnormal fractional flow reserve and preserved coronary flow reserve. **Sci Rep.** 2021 Apr 28;11(1):9126. doi: 10.1038/s41598-021-88732-4. [IF=4.379]

[46] Cha JJ, Hong SJ, Joo HJ, Park JH, Yu CW, Ahn TH, Kim HS, Chun WJ, Hur SH, Han SH, Rha SW, Chae IH, Jeong JO, Heo JH, Yoon J, **Choi KH**, Song YB, Gwon HC, Park JS, Hong MK, Doh JH, Cha KS, Kim DI, Lee SY, Chang K, Hwang BH, Choi SY, Jeong MH, Nam CW, Koo BK, Lim DS. Differential Factors for Predicting Outcomes in Left Main versus Non-Left Main Coronary Bifurcation Stenting. **J Clin Med.** 2021 Jul 7;10(14):3024. doi: 10.3390/jcm10143024. [IF=4.241]

[47] Park IH, Cho HK, Oh JH, Chun WJ, Park YH, Lee M, Kim MS, **Choi KH**, Kim J, Song YB, Hahn JY, Choi SH, Lee SC, Gwon HC, Choe YH, Jang WJ. Clinical Significance of Serum Lactate in Acute Myocardial Infarction: A Cardiac Magnetic Resonance Imaging Study. **J Clin Med.** 2021 Nov 13;10(22):5278. [IF=4.241]

[48] Lee JM, Rhee TM, Hwang D, Park J, Kim CH, **Choi KH**, Shin ES, Nam CW, Doh JH and Koo BK. Prognostic implication of thermodilution coronary flow reserve in patients with indeterminate pressure-bounded coronary flow reserve. **Int J Cardiol.** 2018 Jun 15;261:24-27. [IF=4.034]

[49] Mejía-Rentería H, Nombela-Franco L, Paradis JM, Lunardi M, Lee JM, Amat-Santos IJ, Veiga Fernandez G, Kalra A, Bansal EJ, de la Torre Hernandez JM, Rodés-Cabau J, Ribichini FL,

Escaned J; **Collaborators**. Functional assessment of coronary stenosis with angiography-based Quantitative Flow Ratio compared with Fractional Flow Reserve in patients with severe aortic stenosis. **EuroIntervention**. 2020 Jul 17;16(4):e285-e292. [IF=3.993]

[50] Hamaya R, Lee JM, Hoshino M, Yonetsu T, Koo BK, Escaned J, Kakuta T; **Collaborators**. Clinical outcomes of Fractional Flow Reserve-Guided Percutaneous Coronary Intervention By Coronary Flow Capacity Status in Stable Lesions. **EuroIntervention**. 2020 Jul 7:EIJ-D-20-00401. [IF=3.993]

[51] Na SJ, Yang JH, Ko RE, Chung CR, Cho YH, **Choi KH**, Kim D, Park TK, Lee JM, Song YB, Choi JO, Hahn JY, Choi SH, Gwon HC. Dopamine versus norepinephrine as the first-line vasopressor in the treatment of cardiogenic shock. **PLoS One**. 2022 Nov 3;17(11):e0277087. [IF=3.752]

[52] Ko RE, Kim S, Lee J, Park S, Bae D, **Choi KH**, Park TK, Chung CR, Yang JH. Clinical phenotypes of delirium in patients admitted to the cardiac intensive care unit. **PLoS One**. 2022 Sep 2;17(9):e0273965. [IF=3.752]

[53] Kim J, Kang D, Park H, Kang M, **Choi KH**, Park TK, Lee JM, Yang JH, Song YB, Choi JH, Choi SH, Gwon HC, Guallar E, Cho J, Hahn JY. Moderate-Intensity Statins Plus Ezetimibe vs. High-Intensity Statins After Coronary Revascularization: A Cohort Study. **Cardiovasc Drugs Ther**. 2021 Sep 17. doi: 10.1007/s10557-021-07256-1. Epub ahead of print. [IF=3.727]

[54] Kim J, Park TK, **Choi KH**, Choi D, Ko YG, Lee JH, Yoon CH, Chae IH, Yu CW, Min PK, Lee SW, Lee SR, Koh YS, Choi SH; Korean Vascular Intervention Society (K-VIS) Endovascular therapy in Lower Limb Artery diseases (ELLA) Registry Investigators. Different association between renal dysfunction and clinical outcomes according to the presence of diabetes in patients undergoing endovascular treatment for peripheral artery disease. **J Vasc Surg**. 2020 Jan;71(1):132-140.e1. [IF=3.405]

[55] Jang AY, Kim M, Oh PC, Suh SY, Lee K, Kang WC, **Choi KH**, Song YB, Gwon HC, Kim HS, Chun WJ, Hur SH, Rha SW, Chae IH, Jeong JO, Heo JH, Yoon J, Hong SJ, Park JS, Hong MK, Doh JH, Cha KS, Kim DI, Lee SY, Chang K, Hwang BH, Choi SY, Jeong MH, Nam CW, Koo BK, Han SH. Long-Term Clinical Outcomes and Its Predictors Between the 1- and 2-Stent Strategy in Coronary Bifurcation Lesions - A Baseline Clinical and Lesion Characteristic-Matched Analysis. **Circ J**. 2022 Aug 25;86(9):1365-1375. [IF=3.350]

[56] Lee JM, Rhee TM, **Choi KH**, Park J, Hwang D, Kim J, Park J, Kim HY, Jung HW, Cho YK, Yoon HJ, Song YB, Hahn JY, Nam CW, Shin ES, Doh JH, Hur SH, Koo BK. Clinical Outcome of Lesions With Discordant Results Among Different Invasive Physiologic Indices - Resting Distal Coronary to Aortic Pressure Ratio, Resting Full-Cycle Ratio, Diastolic Pressure Ratio, Instantaneous Wave-Free Ratio, and Fractional Flow Reserve. *Circ J*. 2019 Oct 25;83(11):2210-2221. [IF=3.025]

[57] Hwang D, Lee JM, Kim HK, **Choi KH**, Rhee TM, Park J, Park TK, Yang JH, Song YB, Choi JH, Hahn JY, Choi SH, Koo BK, Kim YJ, Chae SC, Cho MC, Kim CJ, Gwon HC, Jeong MH, Kim HS; KAMIR Investigators. Prognostic Impact of β -Blocker Dose After Acute Myocardial Infarction. *Circ J*. 2019 Jan 25;83(2):410-417. [IF=3.025]

[58] Kim J, Song YB, Oh JH, Cho DK, Lee JB, Kim SH, Jeong JO, Bae JH, Kim BO, Cho JH, Suh IW, Kim DI, Park HK, Park JS, Choi WG, Lee WS, **Choi KH**, Park TK, Lee JM, Yang JH, Choi JH, Choi SH, Gwon HC, Doh JH, Hahn JY; SMART-DATE Investigators. Effects of Prolonged Dual Antiplatelet Therapy in ST-Segment Elevation vs. Non-ST-Segment Elevation Myocardial Infarction. *Circ J*. 2021 Jan 9. doi: 10.1253/circj.CJ-20-0704. Epub ahead of print. [IF=2.993]

[59] Kang J, Han JK, Yang HM, Park KW, Kang HJ, Gwon HC, Chun WJ, Hur SH, Han SH, Rha SW, Chae IH, Jeong JO, Heo JH, Yoon J, Lim DS, Park JS, Hong MK, Doh JH, Cha KS, Kim DI, Lee SY, Chang K, Hwang BH, Choi SY, Jeong MH, Song YB, **Choi KH**, Hong SJ, Nam CW, Koo BK, Kim HS. Comparison of 2-Stenting Strategies Depending on Sequence or Technique for Bifurcation Lesions in the Second-Generation Drug-Eluting Stent Era - Analysis From the COBIS (Coronary Bifurcation Stenting) III Registry. *Circ J*. 2021 Jun 2. doi: 10.1253/circj.CJ-20-0999. [IF=2.993]

[60] Hwang D, Kim HK, Lee JM, **Choi KH**, Kim J, Rhee TM, Park J, Park TK, Yang JH, Song YB, Choi JH, Hahn JY, Choi SH, Koo BK, Kim YJ, Chae SC, Cho MC, Kim CJ, Gwon HC, Jeong MH, Kim HS; KAMIR Investigators. Effects of Statin Intensity on Clinical Outcome in Acute Myocardial Infarction Patients. *Circ J*. 2018 Mar 23;82(4):1112-1120. [IF=2.895]

[61] De Filippo O, Kang J, Bruno F, Han JK, Saglietto A, Yang HM, Patti G, Park KW, Parma R, Kim HS, De Luca L, Gwon HC, Iannaccone M, Chun WJ, Smolka G, Hur SH, Cerrato E, Han SH, di Mario C, Song YB, Escaned J, **Choi KH**, Helft G, Doh JH, Truffa Giachet A, Hong SJ,

Muscoli S, Nam CW, Gallone G, Capodanno D, Trabattoni D, Imori Y, Dusi V, Cortese B, Montefusco A, Conrotto F, Colonnelli I, Sheiban I, de Ferrari GM, Koo BK, D'Ascenzo F. Benefit of Extended Dual Antiplatelet Therapy Duration in Acute Coronary Syndrome Patients Treated with Drug Eluting Stents for Coronary Bifurcation Lesions (from the BIFURCAT Registry). **Am J Cardiol.** 2021 Oct 1;156:16-23. doi: 10.1016/j.amjcard.2021.07.005. Epub 2021 Aug 2. [IF=2.778]

[62] Gallone G, Kang J, Bruno F, Han JK, De Filippo O, Yang HM, Doronzo M, Park KW, Mittone G, Kang HJ, Parma R, Gwon HC, Cerrato E, Chun WJ, Smolka G, Hur SH, Helft G, Han SH, Muscoli S, Song YB, Figini F, **Choi KH**, Boccuzzi G, Hong SJ, Trabattoni D, Nam CW, Giammaria M, Kim HS, Conrotto F, Escaned J, Di Mario C, D'Ascenzo F, Koo BK, de Ferrari GM. Impact of Left Ventricular Ejection Fraction on Procedural and Long-Term Outcomes of Bifurcation Percutaneous Coronary Intervention. **Am J Cardiol.** 2022 Jun 1;172:18-25. [IF=2.778]

[63] Lee SH, Choi J, Chang YJ, Shin ES, **Choi KH**, Lee JM, Park TK, Yang JH, Song YB, Hahn JY, Choi SH, Gwon HC, Lee SH, Choi JH. Sex difference in long-term clinical outcomes after percutaneous coronary intervention: A propensity-matched analysis of National Health Insurance data in Republic of Korea. **Catheter Cardiovasc Interv.** 2021 Feb 6. doi: 10.1002/ccd.29511. Epub ahead of print. [IF=2.692]

[64] Mejia-Renteria H, Lee JM, **Choi KH**, Lee SH, Wang L, Kakuta T, Koo BK, Escaned J. Coronary microcirculation assessment using functional angiography: Development of a wire-free method applicable to conventional coronary angiograms. **Catheter Cardiovasc Interv.** 2021 Jul 9. doi: 10.1002/ccd.29863. Epub ahead of print. PMID: 34242489. [IF=2.692]

[65] Lee HJ, Mejía-Rentería H, Escaned J, Doh JH, Lee JM, Hwang D, Yuasa S, **Choi KH**, Jang HJ, Jeon KH, Lee J, Nam CW, Shin ES, Koo BK. Prediction of functional results of percutaneous coronary interventions with virtual stenting and quantitative flow ratio. **Catheter Cardiovasc Interv.** 2022 Dec;100(7):1208-1217. [IF=2.585]

[66] Lee JM, **Choi KH**, Doh JH, Nam CW, Shin ES, Hoshino M, Murai T, Yonetsu T, Mejía-Rentería H, Kakuta T, Escaned J, Koo BK. Long-Term Patient Prognostication by Coronary Flow Reserve and Index of Microcirculatory Resistance: International Registry of Comprehensive Physiologic Assessment. **Korean Circ J.** 2020 Oct;50(10):890-903. [IF=2.322]

- [67] Kim J, Lee JM, Choi SH, **Choi KH**, Park TK, Park SJ, Yang JH, Song YB, Hahn JY, Jang MJ, Koo BK, Gwon HC. Comparison of Exercise Performance and Clinical Outcome Between Functional Complete and Incomplete Revascularization. **Korean Circ J**. 2020 May;50(5):406-417. [IF=2.322]
- [68] Kim DY, Cho SW, Park KT, Ahn JH, Park TK, Jang YH, **Choi KH**, Lee JM, Yang JH, Song YB, Choi JH, Choi SH, Gwon HC, Lee SH, Hahn JY. Long-term Outcomes of Clopidogrel Monotherapy versus Prolonged Dual Antiplatelet Therapy beyond 12 Months after Percutaneous Coronary Intervention in High-risk Patients. **J Korean Med Sci**. 2021 Apr 26;36(16):e106. doi: 10.3346/jkms.2021.36.e106. [IF=2.153]
- [69] Jang WJ, Chun WJ, Park IH, **Choi KH**, Song YB, Koo BK, Doh JH, Hong SJ, Nam CW, Gwon HC. Impact of stent designs of second-generation drug-eluting stents on long-term outcomes in coronary bifurcation lesions. **Catheter Cardiovasc Interv**. 2020 Jul 30. doi: 10.1002/ccd.29137. Epub ahead of print. [IF=2.044]
- [70] Kim BS, Yang JH, Jang WJ, Song YB, Hahn JY, Choi JH, **Choi KH**, Kim SH, Chun WJ, Gwon HC and Choi SH. Long-term Survival Benefit of Statin in Patients with Coronary Chronic Total Occlusion without Revascularization. **J Korean Med Sci**. 2018 Apr 13;33(18):e134. [IF=1.588]
- [71] Kim EK, Chang SA, Jang SY, **Choi KH**, Huh EH, Kim JH, Kim SM, Choe YH, Kim DK. Brachial-ankle pulse wave velocity as a screen for arterial stiffness: a comparison with cardiac magnetic resonance. **Yonsei Med J**. 2015 May;56(3):617-24. [IF=1.154]
- [72] Lee CH, Nam C-W, Cho Y-K, Yoon H-J, Kim K-B, Gwon H-C, Kim H-S, Chun WJ, Han SH, Rha S-W, Chae I-H, Jeong J-O, Heo JH, Yoon J, Lim D-S, Park J-S, Hong M-K, Lee SY, Cha KS, Kim D-I, Bae J-W, Chang K, Hwang B-H, Choi S-Y, Jeong MH, **Choi KH**, Song YB, Hong S-J, Doh J-H, Koo B-K and Hur S-H. 5-Year Outcome of Simple Crossover Stenting in Coronary Bifurcation Lesions Compared With Side Branch Opening. **JACC: Asia**. 2021;1:53-64.
- [73] Lee JM, Lee SH, Shin D, **Choi KH**, Hoef TPvd, Kim HK, Samady H, Kakuta T, Matsuo H, Koo B-K, Fearon WF and Escaned J. Physiology-Based Revascularization. **JACC: Asia**. 2021;1:14-36.

[74] Kang J, Bruno F, Rhee TM, De Luca L, Han JK, de Filippo O, Yang HM, Mattesini A, Park KW, Truffa A, Kim HS, Wojciech W, Gwon HC, Gili S, Chun WJ, Helft G, Hur SH, Cortese B, Han SH, Escaned J, Song YB, Chieffo A, **Choi KH**, Gallone G, Doh JH, De Ferrari G, Hong SJ, Quadri G, Nam CW, Koo BK, D'Ascenzo F. Impact of Clinical and Lesion Features on Outcomes After Percutaneous Coronary Intervention in Bifurcation Lesions. **JACC Asia**. 2022 Sep 20;2(5):607-618.

[75] Hong D, Lee SH, Shin D, **Choi KH**, Kim HK, Park TK, Yang JH, Song YB, Hahn JY, Choi SH, Gwon HC, Lee JM. Prognosis and Medical Cost of Measuring Fractional Flow Reserve in Percutaneous Coronary Intervention. **JACC Asia**. 2022 Jul 19;2(5):590-603.