DAFTAR PUSTAKA

Adusumalli, S., Jolly, E., Chokshi, N.P., Gitelman, Y., Rareshide, C.A.L., Kolansky, D.M., Patel, M.S., 2021. Referral Rates for Cardiac Rehabilitation among Eligible Inpatients after Implementation of a Default Opt-Out Decision Pathway in the Electronic Medical Record. *JAMA Netw. Open* 4: 8–11. doi:10.1001/jamanetworkopen.2020.33472

Alfitian, J., Riedel, B., Ismail, H., Ho, K.M., Xie, S., Zimmer, P., Kammerer, T., Wijeysundera, D.N., Cuthbertson, B.H., Schier, R., 2023. Sex-related differences in functional capacity and its implications in risk stratification before major non-cardiac surgery: a post hoc analysis of the international METS study. *eClinicalMedicine* 64: 102223. doi:10.1016/j.eclinm.2023.102223

Ambrosetti, M., Abreu, A., Corrà, U., Davos, C.H., Hansen, D., Frederix, I., Iliou, M.C., Pedretti, R.F.E., Schmid, J.P., Vigorito, C., Voller, H., Wilhelm, M., Piepoli, M.F., Bjarnason-Wehrens, B., Berger, T., Cohen-Solal, A., Cornelissen, V., Dendale, P., Doehner, W., Gaita, D., Gevaert, A.B., Kemps, H., Kraenkel, N., Laukkanen, J., Mendes, M., Niebauer, J., Simonenko, M., Zwisler, A.D.O., 2021. Secondary prevention through comprehensive cardiovascular rehabilitation: From knowledge to implementation. 2020 update. A position paper from the Secondary Prevention and Rehabilitation Section of the European Association of Preventive Cardiology. *Eur. J. Prev. Cardiol.* 28: 460–495. doi:10.1177/2047487320913379

American College of Sports Medicine, 2014. ACSM's Resource Manual for Guidelines for Exercise Testing and Prescription, 7th Editio. ed. Lippincott Williams & Wilkins, a Wolters Kluwer, Baltimore, Philadelphia.

American Diabetes Association, 2024. 2. Diagnosis and Classification of Diabetes: Standards of Care in Diabetes—2024. *Diabetes Care* 47: S20–S42. doi:10.2337/dc24-S002

Anagnostou, D., Theodorakis, N., Hitas, C., Kreouzi, M., Pantos, I., Vamvakou, G., Nikolaou, M., 2025. Sarcopenia and Cardiogeriatrics: The Links Between Skeletal Muscle Decline and Cardiovascular Aging. *Nutrients* 17: 282. doi:10.3390/nu17020282

Araminta, T.R., Sophianingrum, M., 2023. Preferensi Masyarakat Terhadap Penggunaan Telemedicine Sebagai Pendukung Sarana Kesehatan pada Masa Pandemi Covid-19 di DKI Jakarta. *Tek. PWK (Perencanaan Wil. Kota)* 12: 93–105. doi:10.14710/tpwk.2023.34245

Arena, R., Myers, J., Williams, M.A., Gulati, M., Kligfield, P., Balady, G.J., Collins, E., Fletcher, G., 2007. Assessment of functional capacity in clinical and research settings: A scientific statement from the American Heart Association committee on exercise, rehabilitation, and prevention of the council on clinical cardiology and the council on cardiovascular n. *Circulation* 116: 329–343. doi:10.1161/CIRCULATIONAHA.106.184461

Arso, I.A., Setianto, B.Y., Taufiq, N., Hartopo, A.B., 2014. In-hospital major cardiovascular events between STEMI receiving thrombolysis therapy and primary PCI. *Acta Med. Indones.* 46: 124–130.

Bagaswoto, H.P., Ardelia, Y.P., Setianto, B.Y., 2022. First 24-h Sardjito Cardiovascular Intensive Care (SCIENCE) admission risk score to predict

mortality in cardiovascular intensive care unit (CICU). *Indian Heart J.* 74: 513–518. doi:10.1016/j.ihj.2022.11.002

Baldasseroni, S., Silverii, M.V., Pratesi, A., Burgisser, C., Orso, F., Lucarelli, G., Turrin, G., Ungar, A., Marchionni, N., Fattirolli, F., 2022. Cardiac Rehabilitation in Advanced Age after PCI for acute coronary syndromes: predictors of exercise capacity improvement in the CR-AGE ACS study. *Aging Clin. Exp. Res.* 34: 2195–2203. doi:10.1007/s40520-022-02130-y

Bargehr, J., Thomas, C.S., Oken, K.R., Thomas, R.J., Lopez-Jimenez, F., Trejo-Gutierrez, J.F., 2017. Predictors of Suboptimal Gain in Exercise Capacity After Cardiac Rehabilitation. *Am. J. Cardiol.* 119: 687–691. doi:10.1016/j.amjcard.2016.08.005

Batalik, L., Dosbaba, F., Hartman, M., Batalikova, K., Spinar, J., Palazón-Bru, A., 2020a. Benefits and effectiveness of using a wrist heart rate monitor as a telerehabilitation device in cardiac patients: A randomized controlled trial. *Med. (United States)* 99: E19556. doi:10.1097/MD.0000000000019556

Batalik, L., Filakova, K., Batalikova, K., Dosbaba, F., 2020b. Remotely monitored telerehabilitation for cardiac patients: A review of the current situation. *World J. Clin. Cases* 8: 1818–1831. doi:10.12998/wjcc.v8.i10.1818

Bellet, R.N., Adams, L., Morris, N.R., 2012. The 6-minute walk test in outpatient cardiac rehabilitation: validity, reliability and responsiveness—a systematic review. *Physiotherapy* 98: 277–286. doi:10.1016/j.physio.2011.11.003

Beltrán, P., Domínguez, E., Faraudo, M., Núñez, E., Guri, O., Mollar, A., Sanchis, J., Bayés-genís, A., Núñez, J., 2018. Sacubitril / valsartan and short-term changes in the 6-minute walk test : A pilot study. *Int. J. Cardiol.* 252: 136–139. doi:10.1016/j.ijcard.2017.10.074

Bianchi, S., Maloberti, A., Peretti, A., Garatti, L., Palazzini, M., Occhi, L., Bassi, I., Sioli, S., Biolcati, M., Giani, V., Monticelli, M., Leidi, F., Ruzzenenti, G., Beretta, G., Giannattasio, C., Riccobono, S., 2021. Determinants of Functional Improvement After Cardiac Rehabilitation in Acute Coronary Syndrome. *High Blood Press. Cardiovasc. Prev.* 28: 579–587. doi:10.1007/s40292-021-00473-7

Bigot, M., Guy, J.M., Monpere, C., Cohen-Solal, A., Pavy, B., Iliou, M.C., Bosser, G., Corone, S., Douard, H., Farrokhi, T., Guerder, A., Guillo, P., Houppe, J.P., Pezel, T., Pierre, B., Roueff, S., Thomas, D., Verges, B., Blanchard, J.C., Ghannem, M., Marcadet, D., 2024. Cardiac rehabilitation recommendations of the Group Exercise Rehabilitation Sports – Prevention (GERS-P) of the French Society of Cardiology: 2023 update. *Arch. Cardiovasc. Dis.* 117: 521–541. doi:10.1016/j.acvd.2024.05.119

Blacher, J., Olié, V., Gabet, A., Cinaud, A., Tuppin, P., Iliou, M.-C., Grave, C., 2024. Two-year prognosis and cardiovascular disease prevention after acute coronary syndrome: the role of cardiac rehabilitation—a French nationwide study. *Eur. J. Prev. Cardiol.* 00: 1–9. doi:10.1093/eurjpc/zwae194

Bois, A., Grandela, C., Gallant, J., Mummery, C., Menasché, P., 2025. Revitalizing the heart: strategies and tools for cardiomyocyte regeneration post-myocardial infarction. *npj Regen. Med.* 10: 6. doi:10.1038/s41536-025-00394-2

Bouisset, F., Gerbaud, E., Bataille, V., Coste, P., Puymirat, E., Belle, L., Delmas, C., Cayla, G., Motreff, P., Lemesle, G., Aissaoui, N., Blanchard, D., Schiele, F., Simon, T., Danchin, N., Ferrières, J., 2021. Percutaneous Myocardial Revascularization in Late-Presenting Patients With STEMI. *J. Am. Coll. Cardiol.*

78: 1291–1305. doi:10.1016/j.jacc.2021.07.039

Bracewell, N.J., Plasschaert, J., Conti, C.R., Keeley, E.C., Conti, J.B., 2022. Cardiac rehabilitation: Effective yet underutilized in patients with cardiovascular disease. *Clin. Cardiol.* 45: 1128–1134. doi:10.1002/clc.23911

Braga, M., Nascimento, H., Pinto, R., Araújo, P., Nunes, A., Rodrigues, J., Araújo, V., Parada-Pereira, F., Maciel, M.J., Rocha, A., 2019. Benefits of Cardiac Rehabilitation in Coronary Artery Disease. *J. Cardiopulm. Rehabil. Prev.* 39: 386–390. doi:10.1097/HCR.0000000000000442

Branco, C., Viamonte, S., Matos, C., Magalhães, S., Cunha, I., Barreira, A., Fernandes, P., Torres, S., 2016. Predictors of changes in functional capacity on a cardiac rehabilitation program. *Rev. Port. Cardiol. (English Ed.* 35: 215–224. doi:10.1016/j.repce.2015.09.019

Brouwers, R.W.M., Kemps, H.M.C., Herkert, C., Peek, N., Kraal, J.J., 2022. A 12-week cardiac telerehabilitation programme does not prevent relapse of physical activity levels: long-term results of the FIT@Home trial. *Eur. J. Prev. Cardiol.* 29: E255–E257. doi:10.1093/eurjpc/zwac009

Brown, T.M., Pack, Q.R., Aberegg, E., Brewer, L.C., Ford, Y.R., Forman, D.E., Gathright, E.C., Khadanga, S., Ozemek, C., Thomas, R.J., 2024. Core Components of Cardiac Rehabilitation Programs: 2024 Update: A Scientific Statement from the American Heart Association and the American Association of Cardiovascular and Pulmonary Rehabilitation. *Circulation* 150: e328–e347. doi:10.1161/CIR.0000000000001289

Byrne, R.A., Rossello, X., Coughlan, J.J., Barbato, E., Berry, C., Chieffo, A., Claeys, M.J., Dan, G.A., Dweck, M.R., Galbraith, M., Gilard, M., Hinterbuchner, L., Jankowska, E.A., Jüni, P., Kimura, T., Kunadian, V., Leosdottir, M., Lorusso, R., Pedretti, R.F.E., Rigopoulos, A.G., Gimenez, M.R., Thiele, H., Vranckx, P., Wassmann, S., Wenger, N.K., Ibanez, B., 2023. 2023 ESC Guidelines for the management of acute coronary syndromes. *Eur. Heart J.* 44: 3720–3826. doi:10.1093/eurheartj/ehad191

Calvo-Lopez, M., Arranz, R., Marin, J., Gruosso, D., Andrea, R., Roque, M., Falces, C., Yago, G., Saura, J., 2023. Cardio4Health Study , a Cardiac Telerehabilitation Pilot Program Aimed at Patients After an Ischemic Event : Cross-sectional Study Corresponding Author : *JMIR Cardio* 7: 1–15. doi:10.2196/44179

Carlson, J.J., Johnson, J.A., Franklin, B.A., VanderLaan, R.L., 2000. Program participation, exercise adherence, cardiovascular outcomes, and program cost of traditional versus modified cardiac rehabilitation. *Am. J. Cardiol.* 86: 17–23. doi:10.1016/S0002-9149(00)00822-5

Carrick-Ranson, G., Hastings, J.L., Bhella, P.S., Shibata, S., Fujimoto, N., Palmer, M.D., Boyd, K., Levine, B.D., 2012. Effect of healthy aging on left ventricular relaxation and diastolic suction. *Am. J. Physiol. Circ. Physiol.* 303: H315–H322. doi:10.1152/ajpheart.00142.2012

Cavalcante, S.L., Lopes, S., Bohn, L., Cavero-Redondo, I., Álvarez-Bueno, C., Viamonte, S., Santos, M., Oliveira, J., Ribeiro, F., 2019. Effects of exercise on endothelial progenitor cells in patients with cardiovascular disease: A systematic review and meta-analysis of randomized controlled trials. *Rev. Port. Cardiol.* 38: 817–827. doi:10.1016/j.repc.2019.02.016

Chung, J., Lee, K., 2022. A Comparison of the Validity of Three Exercise Tests for Estimating Maximal Oxygen Uptake in Korean Adults Aged 19–64 Years. *Appl.*

Sci. 12: 1371. doi:10.3390/app12031371

Clark, A.M., King-Shier, K.M., Spaling, M.A., Duncan, A.S., Stone, J.A., Jaglal, S.B., Thompson, D.R., Angus, J.E., 2013. Factors influencing participation in cardiac rehabilitation programmes after referral and initial attendance: Qualitative systematic review and meta-synthesis. *Clin. Rehabil.* 27: 948–959. doi:10.1177/0269215513481046

Conradson, H.E., Chirico, D., King-Shier, K., Rouleau, C., Campbell, T.S., Aggarwal, S., Arena, R., Hauer, T., Hauer, T., Wilton, S.B., Williamson, T.M., 2024. Women's Improvements in Cardiorespiratory Fitness Following Cardiac Rehabilitation Differ by Body Mass Index Category. *CJC Open*. doi:10.1016/j.cjco.2024.12.007

Crossland, H., Skirrow, S., Puthucheary, Z.A., Constantin-Teodosiu, D., Greenhaff, P.L., 2019. The impact of immobilisation and inflammation on the regulation of muscle mass and insulin resistance: different routes to similar end-points. *J. Physiol.* 597: 1259–1270. doi:10.1113/JP275444

Dalal, J.J., Almahmeed, W., Krittayaphong, R., Nicholls, S.J., Soomro, K., Yeo, K.K., 2023. Consensus Recommendations of the Asia Pacific Cardiometabolic Consortium on Secondary Prevention Strategies in Myocardial Infarction: Recommendations on Pharmacotherapy, Lifestyle Modification and Cardiac Rehabilitation. *J. Asian Pacific Soc. Cardiol.* 2. doi:10.15420/japsc.2022.24

de Bakker, M., den Uijl, I., ter Hoeve, N., van Domburg, R.T., Geleijnse, M.L., van den Berg-Emons, R.J., Boersma, E., Sunamura, M., 2020. Association Between Exercise Capacity and Health-Related Quality of Life During and After Cardiac Rehabilitation in Acute Coronary Syndrome Patients: A Substudy of the OPTICARE Randomized Controlled Trial. *Arch. Phys. Med. Rehabil.* 101: 650–657. doi:10.1016/j.apmr.2019.11.017

De Rosa, M.L., Chiariello, M., 2009. Candesartan Improves Maximal Exercise Capacity in Hypertensives: Results of a Randomized Placebo-Controlled Crossover Trial. *J. Clin. Hypertens.* 11: 192–200. doi:10.1111/j.1751-7176.2009.00095.x

Del Buono, M.G., Arena, R., Borlaug, B.A., Carbone, S., Canada, J.M., Kirkman, D.L., Garten, R., Rodriguez-Miguelez, P., Guazzi, M., Lavie, C.J., Abbate, A., 2019. Exercise Intolerance in Patients With Heart Failure: JACC State-of-the-Art Review. *J. Am. Coll. Cardiol.* 73: 2209–2225. doi:10.1016/j.jacc.2019.01.072

Dibben, G., Faulkner, J., Oldridge, N., Rees, K., Thompson, D.R., Zwisler, A.-D., Taylor, R.S., 2021. Exercise-based cardiac rehabilitation for coronary heart disease. *Cochrane Database Syst. Rev.* 2021. doi:10.1002/14651858.CD001800.pub4

Dibben, G.O., Faulkner, J., Oldridge, N., Rees, K., Thompson, D.R., Zwisler, A.D., Taylor, R.S., 2023. Exercise-based cardiac rehabilitation for coronary heart disease: a meta-analysis. *Eur. Heart J.* 44: 452–469. doi:10.1093/eurheartj/ehac747

Dodson, J A, Adhikari, S., Schoenthaler, A., Hochman, J.S., Sweeney, G., George, B., Marzo, K., Jennings, L., Kovell, L., Vorsanger, M., Pena, S., Meng, Y., Varghese, A., Johanek, C., Rojas, M., Mcconnell, R., Whiteson, J., Troxel, A., Dodson, John A, 2025. Rehabilitation at home using mobile health in older adults after hospitalization for ischemic heart disease (RESILIENT): a randomized, controlled trial 1–14. doi:10.1001/jamanetworkopen.2024.53499

Duarte, F., Ricardo, I., Faria, C., Silva, P., Cunha, N., Miguel, S., Pinto, R., Pinto, F., Abreu, A., 2023. Left ventricular ejection fraction and functional capacity: insights from cardiopulmonary exercise testing. *Eur. Hear. J. - Cardiovasc. Imaging* 24: 2023. doi:10.1093/ehjci/jead119.191

Dwiputra, B., Ambari, A.M., Desandri, D.R., Fatrin, S., Zuhdi, N., Radi, B., 2024. The Future of Digital Healthcare in Cardiac Prevention Programme in Indonesia: From Bedside to Boardroom. *J. Asian Pacific Soc. Cardiol.* 3. doi:10.15420/japsc.2023.46

Dwiputra, B., Panjaitan, F., Hindoro, E., Fathoni, N., Santosa, A., 2017. Hospital-based phase III cardiac rehabilitation program improves low density lipoprotein, triglyceride, and fasting blood glucose levels in coronary artery disease patients. *J. Med. Sci. (Berkala Ilmu Kedokteran)* 49: 80–88. doi:10.19106/jmedsci004902201705

Fitzgerald, M.D., Tanaka, H., Tran, Z. V., Seals, D.R., 1997. Age-related declines in maximal aerobic capacity in regularly exercising vs. sedentary women: a meta-analysis. *J. Appl. Physiol.* 83: 160–165. doi:10.1152/jappl.1997.83.1.160

Fleg, J.L., Cooper, L.S., Borlaug, B.A., Haykowsky, M.J., Kraus, W.E., Levine, B.D., Pfeffer, M.A., Pia, I.L., Poole, D.C., Reeves, G.R., Whellan, D.J., Kitzman, D.W., 2015. Exercise training as therapy for heart failure current status and future directions. *Circ. Hear. Fail.* 8: 209–220. doi:10.1161/CIRCHEARTFAILURE.113.001420

Frederix, I., Solmi, F., Piepoli, M.F., Dendale, P., 2017. Cardiac telerehabilitation: A novel cost-efficient care delivery strategy that can induce long-term health benefits. *Eur. J. Prev. Cardiol.* 24: 1708–1717. doi:10.1177/2047487317732274

Fujie, S., Sanada, K., Hamaoka, T., Iemitsu, M., 2022. Time-dependent relationships between exercise training-induced changes in nitric oxide production and hormone regulation. *Exp. Gerontol.* 166: 111888. doi:10.1016/j.exger.2022.111888

Gadager, B.B., Tang, L.H., Ravn, M.B., Doherty, P., Harrison, A., Christensen, J., Taylor, R.S., Zwisler, A.D., Maribo, T., 2022. Benefits of cardiac rehabilitation following acute coronary syndrome for patients with and without diabetes: a systematic review and meta-analysis. *BMC Cardiovasc. Disord.* 22: 1–26. doi:10.1186/s12872-022-02723-5

Gallagher, H., Hendrickse, P.W., Pereira, M.G., Bowen, T.S., 2023. Skeletal muscle atrophy, regeneration, and dysfunction in heart failure: Impact of exercise training. *J. Sport Heal. Sci.* 12: 557–567. doi:10.1016/j.jshs.2023.04.001

Giggins, O.M., Doyle, J., Smith, S., Vavasour, G., Moran, O., Gavin, S., Sojan, N., Boyle, G., 2023. Remotely Delivered Cardiac Rehabilitation Exercise for Coronary Heart Disease: Nonrandomized Feasibility Study. *JMIR Cardio* 7: 1–12. doi:10.2196/40283

Golbus, J.R., Lopez-Jimenez, F., Barac, A., Cornwell, W.K., Dunn, P., Forman, D.E., Martin, S.S., Schorr, E.N., Supervia, M., 2023. Digital Technologies in Cardiac Rehabilitation: A Science Advisory From the American Heart Association. *Circulation* 148: 95–107. doi:10.1161/CIR.0000000000001150

Gulsin, G.S., Henson, J., Brady, E.M., Sargeant, J.A., Wilmot, E.G., Athithan, L., Htike, Z.Z., Marsh, A.-M., Biglands, J.D., Kellman, P., Khunti, K., Webb, D., Davies, M.J., Yates, T., McCann, G.P., 2020. Cardiovascular Determinants of Aerobic Exercise Capacity in Adults With Type 2 Diabetes. *Diabetes Care* 43:

2248–2256. doi:10.2337/dc20-0706

Hambrecht, R., 2007. The Molecular Base of Exercise, in: Perk, J., Gohlke, H., Hellemans, I., Sellier, P., Mathes, P., Monpère, C., McGee, H., Saner, H. (Eds.), Cardiovascular Prevention and Rehabilitation. Springer London, London, pp. 67–76. doi:10.1007/978-1-84628-502-8_12

Hamilton, D.M., Haennel, R.G., 2000. Validity and Reliability of the 6-Minute Walk Test in a Cardiac Rehabilitation Population. *J. Cardiopulm. Rehabil.* 20: 156–164. doi:10.1097/00008483-200005000-00003

Harms, C.A., 2006. Does gender affect pulmonary function and exercise capacity? *Respir. Physiol. Neurobiol.* 151: 124–131. doi:10.1016/j.resp.2005.10.010

Hartopo, A.B., Arso, I.A., Ambari, A.M., Dwiputra, B., Radi, B., 2022. Exercise-based cardiac rehabilitation adaptation protocol during Covid-19 pandemic achieved similar results as compared to non-pandemic usual practice: a single center experience. *J. Med. Sci. (Berkala Ilmu Kedokteran)* 54: 369–375. doi:10.19106/jmedsci005404202207

Hartopo, A.B., Inggriani, M.P., Jhundy, B.W., Fachiroh, J., Rosha, P.T., Wardani, R.K., Dewi, F.S.T., 2023. Modifiable risk factors for coronary artery disease in the Indonesian population: a nested case-control study. *Cardiovasc. Prev. Pharmacother.* 5: 24–34. doi:10.36011/cpp.2023.5.e3

Hartopo, A.B., Mayasari, D.S., Puspitawati, I., Putri, A.K., Setianto, B.Y., 2024. Endothelial-Derived Microparticles Associate with Hospital Major Adverse Cardiovascular Events but not with Long-Term Adverse Events in Acute Myocardial Infarction. *Int J Angiol* 33: 288–296. doi:10.1055/s-0044-1785488

Hertzog, M.A., 2008. Considerations in determining sample size for pilot studies. *Res. Nurs. Health* 31: 180–191. doi:10.1002/nur.20247

Hollenberg, M., Yang, J., Haight, T.J., Tager, I.B., 2006. Longitudinal Changes in Aerobic Capacity: Implications for Concepts of Aging. *Journals Gerontol. Ser. A Biol. Sci. Med. Sci.* 61: 851–858. doi:10.1093/gerona/61.8.851

Houghton, D., Jones, T.W., Cassidy, S., Siervo, M., MacGowan, G.A., Trenell, M.I., Jakovljevic, D.G., 2016. The effect of age on the relationship between cardiac and vascular function. *Mech. Ageing Dev.* 153: 1–6. doi:10.1016/j.mad.2015.11.001

Ibanez, B., James, S., Agewall, S., Antunes, M.J., Bucciarelli-Ducci, C., Bueno, H., Caforio, A.L.P., Crea, F., Goudevenos, J.A., Halvorsen, S., Hindricks, G., Kastrati, A., Lenzen, M.J., Prescott, E., Roffi, M., Valgimigli, M., Varenhorst, C., Vranckx, P., Widimský, P., Baumbach, A., Bugiardini, R., Coman, I.M., Delgado, V., Fitzsimons, D., Gaemperli, O., Gershlick, A.H., Gielen, S., Harjola, V.P., Katus, H.A., Knuuti, J., Kolh, P., Leclercq, C., Lip, G.Y.H., Morais, J., Neskovic, A.N., Neumann, F.J., Niessner, A., Piepoli, M.F., Richter, D.J., Shlyakhto, E., Simpson, I.A., Steg, P.G., Terkelsen, C.J., Thygesen, K., Windecker, S., Zamorano, J.L., Zeymer, U., 2018. 2017 ESC Guidelines for the management of acute myocardial infarction in patients presenting with ST-segment elevation. *Eur. Heart J.* 39: 119–177. doi:10.1093/eurheartj/ehx393

Ikonomidis, I., Aboyans, V., Blacher, J., Brodmann, M., Brutsaert, D.L., Chirinos, J.A., De Carlo, M., Delgado, V., Lancellotti, P., Lekakis, J., Mohty, D., Nihoyannopoulos, P., Parissis, J., Rizzoni, D., Ruschitzka, F., Seferovic, P., Stabile, E., Tousoulis, D., Vinereanu, D., Vlachopoulos, C., Vlastos, D., Xaplanteris, P., Zimlichman, R., Metra, M., 2019. The role of ventricular–arterial

coupling in cardiac disease and heart failure: assessment, clinical implications and therapeutic interventions. A consensus document of the European Society of Cardiology Working Group on Aorta & Peripheral Vascular Diseas. *Eur. J. Heart Fail.* 21: 402–424. doi:10.1002/ejhf.1436

Inbar, O., Oren, A., Scheinowitz, M., Rotstein, A., Dlin, R., Casaburi, R., 1994. Normal cardiopulmonary responses during incremental exercise in 20- to 70-yr-old men. *Med. Sci. Sports Exerc.* 26: 538–46.

Itoh, H., Amiya, E., Jimba, T., Shimbo, M., Narita, K., Taya, M., Kadokami, T., Yasu, T., Oka, H., Sogawa, M., Yokoi, H., Mizutani, K., Miura, S. ichiro, Tokeshi, T., Date, A., Noma, T., Kutsuzawa, D., Usui, S., Sugawara, S., Kanazawa, M., Sekino, H., Nishitani Yokoyama, M., Okumura, T., Ugata, Y., Fujishima, S., Hirabayashi, K., Ishizaki, Y., Kuwahara, K., Kaji, Y., Shimizu, H., Koyama, T., Adachi, H., Kurumatani, Y., Taniguchi, R., Ohori, K., Shiraishi, H., Hasegawa, T., Makita, S., Komuro, I., Kimura, Y., 2024. Efficacy and safety of remote cardiac rehabilitation in the recovery phase of cardiovascular diseases (RecRCR study): A multicenter, nonrandomized, and interventional trial in Japan. *IJC Hear. Vasc.* 52. doi:10.1016/j.ijcha.2024.101421

Jiang, Z.H., Aierken, A., Wu, T.T., Zheng, Y.Y., Ma, Y.T., Xie, X., 2023. Rate pressure product as a novel predictor of long-term adverse outcomes in patients after percutaneous coronary intervention: A retrospective cohort study. *BMJ Open* 13: 1–10. doi:10.1136/bmjopen-2022-067951

Juzar, D.A., Muzakkir, A.F., Ilhami, Y.R., Taufiq, N., Astiawati, T., R A, I.M.J., Pramudyo, M., Priyana, A., Hakim, A., Anjarwani, S., Endang, J., Widyantoro, B., 2022. Management of Acute Coronary Syndrome Indonesia : Insight from One ACS Multicenter Registry. *Indones. J. Cardiol.* 43: 45–55. doi:10.30701/ijc.1406

Keteyian, S.J., Grimshaw, C., Ehrman, J.K., Kerrigan, D.J., Abdul-Nour, K., Lanfear, D.E., Brawner, C.A., 2024. The iATTEND Trial: A Trial Comparing Hybrid Versus Standard Cardiac Rehabilitation. *Am. J. Cardiol.* 221: 94–101. doi:10.1016/j.amjcard.2024.04.034

King, M.L., Thomas, R.J., Cannon, C.P., 2008. AACVPR/ACC/AHA 2007 performance measures on cardiac rehabilitation for referral to and delivery of cardiac rehabilitation/secondary prevention services. *ACC Cardiosource Rev. J.* 17: 32–37. doi:10.1016/j.jacc.2007.04.033

Kochan, A., Lee, T., Moghaddam, N., Milley, G., Singer, J., Cairns, J.A., Wong, G.C., Jentzer, J.C., Van Diepen, S., Alviar, C., Fordyce, C.B., 2023. Reperfusion Delays and Outcomes among Patients with ST-Segment-Elevation Myocardial Infarction with and Without Cardiogenic Shock. *Circ. Cardiovasc. Interv.* 16: 349–357. doi:10.1161/CIRCINTERVENTIONS.122.012810

Kong, H.H., Bang, H.J., Ko, J.U., Lee, G.J., 2017. The differences in cardiac rehabilitation outcomes by age in myocardial infarction: A preliminary study. *Ann. Rehabil. Med.* 41: 1047–1054. doi:10.5535/arm.2017.41.6.1047

Kovacs, G., Olschewski, A., Berghold, A., Olschewski, H., 2012. Pulmonary vascular resistances during exercise in normal subjects: a systematic review. *Eur. Respir. J.* 39: 319–328. doi:10.1183/09031936.00008611

Kraal, J.J., Peek, N., Van den Akker-Van Marle, M.E., Kemps, H.M., 2014. Effects of home-based training with telemonitoring guidance in low to moderate risk patients entering cardiac rehabilitation: short-term results of the FIT@Home

study. *Eur. J. Prev. Cardiol.* 21: 26–31. doi:10.1177/2047487314552606

Kubat, G.B., Bouhamida, E., Ulger, O., Turkel, I., Pedriali, G., Ramaccini, D., Ekinci, O., Ozerklig, B., Atalay, O., Patergnani, S., Nur Sahin, B., Morciano, G., Tuncer, M., Tremoli, E., Pinton, P., 2023. Mitochondrial dysfunction and skeletal muscle atrophy: Causes, mechanisms, and treatment strategies. *Mitochondrion* 72: 33–58. doi:10.1016/j.mito.2023.07.003

Lamotte, M., Fleury, F., Pirard, M., Jamon, A., van de Borne, P., 2010. Acute cardiovascular response to resistance training during cardiac rehabilitation: Effect of repetition speed and rest periods. *Eur. J. Prev. Cardiol.* 17: 329–336. doi:10.1097/HJR.0b013e328332efdd

Lee, Y.-H., Hur, S.-H., Sohn, J., Lee, H.-M., Park, N.-H., Cho, Y.-K., Park, H.-S., Yoon, H.-J., Kim, H., Nam, C.-W., Kim, Y.-N., Kim, K.-B., 2013. Impact of Home-Based Exercise Training with Wireless Monitoring on Patients with Acute Coronary Syndrome Undergoing Percutaneous Coronary Intervention. *J. Korean Med. Sci.* 28: 564. doi:10.3346/jkms.2013.28.4.564

Leistner, D.M., Dietrich, S., Erbay, A., Steiner, J., Abdelwahed, Y., Siegrist, P.T., Schindler, M., Skurk, C., Haghikia, A., Sinning, D., Riedel, M., Landmesser, U., Stähli, B.E., 2020. Association of left ventricular end-diastolic pressure with mortality in patients undergoing percutaneous coronary intervention for acute coronary syndromes. *Catheter. Cardiovasc. Interv.* 96. doi:10.1002/ccd.28839

Leong, D.P., Yusuf, R., Iqbal, R., Avezum, Á., Yusufali, A., Rosengren, A., Chifamba, J., Lanas, F., Diaz, M.L., Miranda, J.J., Davletov, K., Mirrakhimov, E., Yeates, K., Khatib, R., Alhabib, K.F., Gulec, S., Paucar, M.J., Lopez-Lopez, J.P., Mohan, V., Gupta, R., Soman, B., Lakshmi, P.V.M., Poirier, P., Teo, K., Zatonska, K., Mat-Nasir, N., Artamonova, G., Hu, B., Liu, Z., Liu, X., Dans, A., Rangarajan, S., Yusuf, S., 2025. The burden of cardiovascular events according to cardiovascular risk profile in adults from high-income, middle-income, and low-income countries (PURE): a cohort study. *Lancet Glob. Heal.* 13: e1406–e1414. doi:10.1016/S2214-109X(25)00155-X

Letnes, J.M., Nes, B.M., Wisløff, U., 2023. Age-related decline in peak oxygen uptake: Cross-sectional vs. longitudinal findings. A review. *Int. J. Cardiol. Cardiovasc. Risk Prev.* 16: 200171. doi:10.1016/j.ijcrp.2023.200171

Li, X., Zhao, L., Xu, T., Shi, G., Li, J., Shuai, W., Yang, Yanqun, Yang, Yang, Tian, W., Zhou, Y., 2023. Cardiac telerehabilitation under 5G internet of things monitoring: a randomized pilot study. *Sci. Rep.* 13: 18886. doi:10.1038/s41598-023-46175-z

Lindstrom, M., DeCleene, N., Dorsey, H., Fuster, V., Johnson, C.O., LeGrand, K.E., Mensah, G.A., Razo, C., Stark, B., Varieur Turco, J., Roth, G.A., 2022. Global Burden of Cardiovascular Diseases and Risks Collaboration, 1990-2021. *J. Am. Coll. Cardiol.* 80: 2372–2425. doi:10.1016/j.jacc.2022.11.001

Liu, S., Meng, X., Li, G., Gokulnath, P., Wang, J., Xiao, J., 2022. Exercise Training after Myocardial Infarction Attenuates Dysfunctional Ventricular Remodeling and Promotes Cardiac Recovery. *Rev. Cardiovasc. Med.* 23. doi:10.31083/j.rcm2304148

Makita, S., Yasu, T., Akashi, Y.J., Adachi, H., Izawa, H., Ishihara, S., Iso, Y., Ohuchi, H., Omiya, K., Ohya, Y., Okita, K., Kimura, Y., Koike, A., Kohzuki, M., Koba, S., Sata, M., Shimada, K., Shimokawa, T., Shiraishi, H., Sumitomo, N., Takahashi, T., Takura, T., Tsutsui, H., Nagayama, M., Hasegawa, E., Fukumoto,

Y., Furukawa, Y., Miura, S.I., Yasuda, S., Yamada, S., Yamada, Y., Yumino, D., Yoshida, T., Adachi, T., Ikegame, T., Izawa, K.P., Ishida, T., Ozasa, N., Osada, N., Obata, H., Kakutani, N., Kasahara, Y., Kato, M., Kamiya, K., Kinugawa, S., Kono, Y., Kobayashi, Y., Koyama, T., Sase, K., Sato, S., Shibata, T., Suzuki, N., Tamaki, D., Yamaoka-Tojo, M., Nakanishi, M., Nakane, E., Nishizaki, M., Higo, T., Fujimi, K., Honda, T., Matsumoto, Y., Matsumoto, N., Miyawaki, I., Murata, M., Yagi, S., Yanase, M., Yamada, M., Yokoyama, M., Watanabe, N., Itoh, H., Kimura, T., Kyo, S., Goto, Y., Nohara, R., Hirata, K.I., 2023. Erratum: JCS/JACR 2021 Guideline on Rehabilitation in Patients With Cardiovascular Disease. *Circ. J.* 87: 937. doi:10.1253/circj.CJ-66-0214

Mapelli, M., Mattavelli, I., Paolillo, S., Salvioni, E., Magrì, D., 2023. Effects of sacubitril / valsartan on exercise capacity : a prognostic improvement that starts during uptitration. *Eur. J. Clin. Pharmacol.* 79: 1173–1184. doi:10.1007/s00228-023-03527-y

Mezzani, A., 2017. Cardiopulmonary exercise testing: Basics of methodology and measurements. *Ann. Am. Thorac. Soc.* 14: S3–S11. doi:10.1513/AnnalsATS.201612-997FR

Mirzai, S., Carbone, S., Batsis, J.A., Kritchevsky, S.B., Kitzman, D.W., Shapiro, M.D., 2024. Sarcopenic Obesity and Cardiovascular Disease: An Overlooked but High-Risk Syndrome. *Curr. Obes. Rep.* 13: 532–544. doi:10.1007/s13679-024-00571-2

Mitchell, C., Rahko, P.S., Blauwet, L.A., Canaday, B., Finstuen, J.A., Foster, M.C., Horton, K., Ogunyankin, K.O., Palma, R.A., Velazquez, E.J., 2019. Guidelines for Performing a Comprehensive Transthoracic Echocardiographic Examination in Adults: Recommendations from the American Society of Echocardiography. *J. Am. Soc. Echocardiogr.* 32: 1–64. doi:10.1016/j.echo.2018.06.004

Nakayama, A., Ishii, N., Mantani, M., Samukawa, K., Tsuneta, R., Marukawa, M., Ohno, K., Yoshida, A., Hasegawa, E., Sakamoto, J., Hori, K., Takahashi, S., Komuro, K., Hiruma, T., Abe, R., Norimatsu, T., Shimbo, M., Tajima, M., Nagasaki, M., Kawahara, T., Nanasato, M., Ikemage, T., Isobe, M., 2023. Remote Cardiac Rehabilitation With Wearable Devices. *Korean Circ. J.* 53: 727–743. doi:10.4070/kcj.2023.0242

Norekvål, T.M., Bale, M., Bedane, H.K., Hole, T., Ingul, C.B., Munkhaugen, J., 2023. Cardiac rehabilitation participation within 6 months of discharge in 37 136 myocardial infarction survivors: a nationwide registry study. *Eur. J. Prev. Cardiol.* 1–4. doi:10.1093/eurjpc/zwad350

Nozaki, Y.O., Yatsu, S., Ogita, M., Wada, H., Takahashi, D., Nishio, R., Yasuda, K., Takeuchi, M., Takahashi, N., Sonoda, T., Shitara, J., Tsuboi, S., Dohi, T., Suwa, S., Miyauchi, K., Minamino, T., 2024. Outcome after primary percutaneous coronary intervention for ST-segment-elevation myocardial infarction complicated by cardiogenic shock. *J. Cardiol.* 84: 189–194. doi:10.1016/j.jjcc.2024.02.005

Nurwahyuni, A., Soewondo, P., Nadjib, M., Farianti, Y., Novi Mukhlisa, M., Wahyuningsih, H., Ridhawaty Mangunsong, E., Arum Handarbeni Sayekti, S., Sari, K., Megraini, A., 2023. Health Care Spending for Cardiovascular Disease under National Health Insurance Scheme in Indonesia Before and During COVID-19: Descriptive Analysis and Policy Recommendations. *J. Indones. Heal. Policy Adm.* 8: 79–88. doi:10.7454/ihpa.v8i2.6851

Oh, S., Kim, J.H., Cho, K.H., Kim, M.C., Sim, D.S., Hong, Y.J., Ahn, Y., Jeong, M.H., 2023. Renin-Angiotensin-Aldosterone System Inhibitions and Cardiovascular Outcomes in Acute Myocardial Infarction With Renal Impairment. *Mayo Clin. Proc.* 98: 1310–1322. doi:10.1016/j.mayocp.2023.02.007

Ohtera, S., Kato, G., Ueshima, H., Mori, Y., Nakatani, Y., Ozasa, N., Nakayama, T., Kuroda, T., 2021. A nationwide survey on participation in cardiac rehabilitation among patients with coronary heart disease using health claims data in Japan. *Sci. Rep.* 11: 1–9. doi:10.1038/s41598-021-99516-1

Paluch, A.E., Boyer, W.R., Franklin, B.A., Laddu, D., Lobelo, F., Lee, D.C., Mcdermott, M.M., Swift, D.L., Webel, A.R., Lane, A., 2024. Resistance Exercise Training in Individuals With and Without Cardiovascular Disease: 2023 Update: A Scientific Statement From the American Heart Association. *Circulation* 149: E217–E231. doi:10.1161/CIR.0000000000001189

Patel, P.S., Heller, S., Larson, K.F., Elfessi, N.M., Sydo, N., Carta, K.G., Hussain, N., Allison, T.G., Newman, D.B., 2025. Fitness and Mortality Outcomes Associated With Supramaximal Peak Heart Rate on Treadmill Exercise Stress Testing. *Am. J. Cardiol.* 250: 54–60. doi:10.1016/j.amjcard.2025.05.004

Patel, S.H., Yue, F., Saw, S.K., Foguth, R., Cannon, J.R., Shannahan, J.H., Kuang, S., Sabbaghi, A., Carroll, C.C., 2019. Advanced Glycation End-Products Suppress Mitochondrial Function and Proliferative Capacity of Achilles Tendon-Derived Fibroblasts. *Sci. Rep.* 9: 12614. doi:10.1038/s41598-019-49062-8

Pavasini, R., Biscaglia, S., Barbato, E., Tebaldi, M., Dudek, D., Escaned, J., Casella, G., Santarelli, A., Guiducci, V., Gutierrez-Ibanes, E., Di Pasquale, G., Politi, L., Saglietto, A., D'Ascenzo, F., Campo, G., 2020. Complete revascularization reduces cardiovascular death in patients with ST-segment elevation myocardial infarction and multivessel disease: systematic review and meta-analysis of randomized clinical trials. *Eur. Heart J.* 41: 4103–4110. doi:10.1093/eurheartj/ehz896

Peretti, A., Maloberti, A., Garatti, L., Palazzini, M., Triglione, N., Occhi, L., Sioli, S., Sun, J.W., Moreo, A., Beretta, G., Giannattasio, C., Riccobono, S., 2020. Functional Improvement After Outpatient Cardiac Rehabilitation in Acute Coronary Syndrome Patients is Not Related to Improvement in Left Ventricular Ejection Fraction. *High Blood Press. Cardiovasc. Prev.* 27: 225–230. doi:10.1007/s40292-020-00374-1

Prabhu, N. V., Maiya, A.G., Prabhu, N.S., 2020. Impact of Cardiac Rehabilitation on Functional Capacity and Physical Activity after Coronary Revascularization: A Scientific Review. *Cardiol. Res. Pract.* 2020: 1–9. doi:10.1155/2020/1236968

Price, K.J., Gordon, B.A., Bird, S.R., Benson, A.C., 2016. A review of guidelines for cardiac rehabilitation exercise programmes: Is there an international consensus? *Eur. J. Prev. Cardiol.* 23: 1715–1733. doi:10.1177/2047487316657669

Pugliese, N.R., Balletti, A., Armenia, S., De Biase, N., Faita, F., Mengozzi, A., Paneni, F., Ruschitzka, F., Virdis, A., Ghiadoni, L., Taddei, S., Williams, B., Antonini-Canterin, F., Masi, S., 2022. Ventricular-Arterial Coupling Derived From Proximal Aortic Stiffness and Aerobic Capacity Across the Heart Failure Spectrum. *JACC Cardiovasc. Imaging* 15: 1545–1559. doi:10.1016/j.jcmg.2022.03.024

Pugliese, N.R., Pieroni, A., De Biase, N., Di Fiore, V., Nesti, L., Agostoni, P., Dini,

F.L., 2023. Impact of diabetes on cardiopulmonary function: the added value of a combined cardiopulmonary and echocardiography stress test. *Heart Fail. Rev.* 28: 645–655. doi:10.1007/s10741-021-10194-7

Quiriarte, H., Noland, R.C., Stampley, J.E., Davis, G., Li, Z., Cho, E., Kim, Y., Doiron, J., Spielmann, G., Ghosh, S., Shah, S.J., Irving, B.A., Lefer, D.J., Allerton, T.D., 2024. Exercise Therapy Rescues Skeletal Muscle Dysfunction and Exercise Intolerance in Cardiometabolic HFpEF. *JACC Basic to Transl. Sci.* 9: 1409–1425. doi:https://doi.org/10.1016/j.jacbts.2024.07.009

Radi, B., Tiksnadi, B.B., Ambari, A.M., Dwiputra, B., Sarvasti, D., Setianto, B., Santoso, A., Arso, I.A., Ardiana, M., Ridwan, M., 2019. Panduan Rehabilitasi Kardiovaskular, Edisi Pert. ed. Perhimpunan Dokter Spesialis Kardiovaskular Indonesia (PERKI), Jakarta.

Rakhmawati, A., Achmad, I.N., Hartopo, A.B., Anggrahini, D.W., Arso, I.A., Emoto, N., Dinarti, L.K., 2020. Exercise Program Improves Functional Capacity and Quality of Life in Uncorrected Atrial Septal Defect-Associated Pulmonary Arterial Hypertension: A Randomized-Control Pilot Study. *Ann. Rehabil. Med.* 44: 468–480. doi:10.5535/arm.20100

Rao, S. V., O'Donoghue, M.L., Ruel, M., Rab, T., Tamis-Holland, Jaqueline E., Alexander, J.H., Baber, U., Baker, H., Cohen, M.G., Cruz-Ruiz, M., Davis, L.L., de Lemos, J.A., DeWald, T.A., Elgendy, I.Y., Feldman, D.N., Goyal, A., Isiadinso, I., Menon, V., Morrow, D.A., Mukherjee, D., Platz, E., Promes, S.B., Sandner, S., Sandoval, Y., Schunder, R., Shah, B., Stopyra, J.P., Talbot, A.W., Taub, P.R., Williams, M.S., Jneid, H., Beavers, C.J., Beckie, T., Blankenship, J., Diercks, D., Lo, B., Louis, C., Merchant, F.M., Nazir, N.T., So, D., Tomey, M., Welt, F., Otto, C.M., Beckman, J.A., Armbruster, A., Blumer, V., de las Fuentes, L., Deswal, A., Ferrari, V.A., Fremes, S.E., Gaudino, M., Hernandez, A.F., Jneid, H., Johnson, H.M., Jones, W.S., Khan, S.S., Khazanie, P., Kittleson, M.M., Palaniappan, L., Sharma, G., Shimbo, D., Tamis-Holland, Jacqueline E., Woo, Y.J., Ziaeian, B., Biga, C., Gates, C.C., Kovacs, R.J., Turco, J.V., Saraco, M.J., Ronan, G.D., Patterson, L., Getchius, T.S.D., Abdullah, A.R., Churchwell, K., Brown, N., Jessup, M., Sapio, N.A., Singh, R.R., Nedungadi, P., St. Laurent, P., Hundley, J., 2025. 2025 ACC/AHA/ACEP/NAEMSP/SCAI Guideline for the Management of Patients With Acute Coronary Syndromes: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines, Circulation. doi:10.1161/CIR.0000000000001309

Ritchey, M.D., Maresh, S., Mcneely, J., Shaffer, T., Jackson, S.L., Keteyian, S.J., Brawner, C.A., Whooley, M.A., Chang, T., Stolp, H., Schieb, L., Wright, J., 2020. Tracking Cardiac Rehabilitation Participation and Completion Among Medicare Beneficiaries to Inform the Efforts of a National Initiative. *Circ. Cardiovasc. Qual. Outcomes* 13: E005902. doi:10.1161/CIRCOUTCOMES.119.005902

Rogers, M.A., Hagberg, J.M., Martin, W.H., Ehsani, A.A., Holloszy, J.O., 1990. Decline in VO2max with aging in master athletes and sedentary men. *J. Appl. Physiol.* 68: 2195–2199. doi:10.1152/jappl.1990.68.5.2195

Rosalinda, V., Arso, I.A., Anggrahini, D.W., 2020. Pengaruh Program Latihan Fisik di Rumah Dengan Supervisi Berbasis Media Sosial Pada Program Rehabilitasi Jantung Terhadap Kapasitas Fungsional Pasien Gagal Jantung Dengan Fraksi

Ejeksi Yang Menurun. Universitas Gadjah Mada.

Ross, R., Blair, S.N., Arena, R., Church, T.S., Després, J.P., Franklin, B.A., Haskell, W.L., Kaminsky, L.A., Levine, B.D., Lavie, C.J., Myers, J., Niebauer, J., Sallis, R., Sawada, S.S., Sui, X., Wisløff, U., 2016. Importance of Assessing Cardiorespiratory Fitness in Clinical Practice: A Case for Fitness as a Clinical Vital Sign: A Scientific Statement from the American Heart Association, Circulation. doi:10.1161/CIR.0000000000000461

Saklica, D., Vardar-Yagli, N., Saglam, M., Yuce, D., Ates, A.H., Yorgun, H., 2025. The Impact of Technology-Based Cardiac Rehabilitation on Exercise Capacity and Adherence in Patients with Coronary Artery Disease: An Artificial Intelligence Analysis. *Arq. Bras. Cardiol.* 122: 1–11. doi:10.36660/abc.20240765

Salzwedel, A., Jensen, K., Rauch, B., Doherty, P., Metzendorf, M.-I., Hackbusch, M., Völler, H., Schmid, J.-P., Davos, C.H., 2020. Effectiveness of comprehensive cardiac rehabilitation in coronary artery disease patients treated according to contemporary evidence based medicine: Update of the Cardiac Rehabilitation Outcome Study (CROS-II). *Eur. J. Prev. Cardiol.* 27: 1756–1774. doi:10.1177/2047487320905719

Scalise, R.F.M., De Sarro, R., Caracciolo, A., Lauro, R., Squadrito, F., Carerj, S., Bitto, A., Micari, A., Bella, G. Di, Costa, F., Irrera, N., 2021. Fibrosis after Myocardial Infarction: An Overview on Cellular Processes, Molecular Pathways, Clinical Evaluation and Prognostic Value. *Med. Sci.* 9: 16. doi:10.3390/medsci9010016

Scarlatescu, A.I., Micheu, M.M., Petre, I.G., Oprescu, N., Mihail, A.M., Cojocaru, I.D., Vatasescu, R.G., 2024. Left Ventricular-Arterial Coupling as an Independent Predictor of Adverse Events in Young Patients with ST Elevation Myocardial Infarction—A 3D Echocardiographic Study. *Biomedicines* 12: 105. doi:10.3390/biomedicines12010105

Scherrenberg, M., Kemps, H.M.C., Dendale, P., Snoek, J.A., 2024. Cardiac telerehabilitation : current status and future perspectives. *Netherlands Hear. J.* 32: 31–37. doi:10.1007/s12471-023-01833-9

Serrano, N., Hyatt, J.P.K., Houmard, J.A., Murgia, M., Katsanos, C.S., 2023. Muscle fiber phenotype: a culprit of abnormal metabolism and function in skeletal muscle of humans with obesity. *Am. J. Physiol. - Endocrinol. Metab.* 325: E723–E733. doi:10.1152/ajpendo.00190.2023

Shan, R., Ding, J., Weng, D., Spaulding, E.M., Wongvibulsin, S., Lee, M.A., Demo, R., Marvel, F.A., Martin, S.S., 2020. American Journal of Preventive Cardiology Early blood pressure assessment after acute myocardial infarction : Insights using digital health technology. *Am. J. Prev. Cardiol.* 3: 100089. doi:10.1016/j.ajpc.2020.100089

Shawon, M.S.R., Hsu, B., Chard, R., Nicholson, I.A., Elias, V.L., Nicola, L.K., Moore, C.R., Hirschhorn, A.D., Jorm, L.R., Mungovan, S.F., 2024. Six-minute walk test distance at time of hospital discharge is strongly and independently associated with all-cause mortality following cardiac surgery. *Sci. Rep.* 14: 1–10. doi:10.1038/s41598-024-52601-7

Shimono, Y., Nakamura, K., Nagai, T., Ishizaka, S., Omote, K., Yasui, Y., Aoyagi, H., Tamaki, Y., Mizuguchi, Y., Takenaka, S., Sato, T., Kamiya, K., Anzai, T., 2024. Prognostic value of peak heart rate on cardiopulmonary exercise testing in

patients with chronic heart failure. *Eur. Heart J.* 45. doi:10.1093/eurheartj/ehae666.866

Singh, H., Esht, V., Shaphe, M.A., Rathore, N., Chahal, A., Kashoo, F.Z., 2023. Relationship between body mass index and cardiorespiratory fitness to interpret health risks among sedentary university students from Northern India: A correlation study. *Clin. Epidemiol. Glob. Heal.* 20: 101254. doi:10.1016/j.cegh.2023.101254

Smith, J.A.B., Murach, K.A., Dyar, K.A., Zierath, J.R., 2023. Exercise metabolism and adaptation in skeletal muscle. *Nat. Rev. Mol. Cell Biol.* 24: 607–632. doi:10.1038/s41580-023-00606-x

Sohn, S., Jeon, J., Lee, J.E., Park, S.H., Kang, D.O., Park, E.J., Lee, D.I., Choi, J.Y., Roh, S.Y., Na, J.O., Choi, C.U., Kim, J.W., Rha, S.W., Park, C.G., Lee, S., Kim, E.J., 2025. Prognostic value of the six-minute walk test in patients with cardiovascular disease. *Sci. Rep.* 15: 1–7. doi:10.1038/s41598-025-04480-9

Spaulding, E.M., Marvel, F.A., Lee, M.A., Yang, W.E., Demo, R., Wang, J., Xun, H., Shah, L., Weng, D., Fashanu, O.E., Carter, J., Sheidy, J., McLin, R., Flowers, J., Majmudar, M., Elgin, E., Vilarino, V., Lumelsky, D., Bhardwaj, V., Padula, W., Allen, J.K., Martin, S.S., 2019. Corrie health digital platform for self-management in secondary prevention after acute myocardial infarction: Micore rationale and design. *Circ. Cardiovasc. Qual. Outcomes* 12: 1–11. doi:10.1161/CIRCOUTCOMES.119.005509

Sugiharto, F., Nuraeni, A., Trisyani, Y., Melati Putri, A., Aghnia Armansyah, N., 2023. Barriers to Participation in Cardiac Rehabilitation Among Patients with Coronary Heart Disease After Reperfusion Therapy: A Scoping Review. *Vasc. Health Risk Manag.* 19: 557–570. doi:10.2147/VHRM.S425505

Sumimoto, T., Jikuhara, T., Hattori, T., Yuasa, F., Kaida, M., Hikosaka, M., Takehana, K., Tamura, T., Sugiura, T., Iwasaka, T., 1997. Importance of left ventricular diastolic function on maintenance of exercise capacity in patients with systolic dysfunction after anterior myocardial infarction. *Am. Heart J.* 133: 87–93. doi:10.1016/S0002-8703(97)70252-7

Sunamura, M., Ter Hoeve, N., Van Den Berg-Emons, R.J.G., Boersma, E., Van Domburg, R.T., Geleijnse, M.L., 2018. Cardiac rehabilitation in patients with acute coronary syndrome with primary percutaneous coronary intervention is associated with improved 10-year survival. *Eur. Hear. J. - Qual. Care Clin. Outcomes* 4: 168–172. doi:10.1093/ehjqcco/qcy001

Takahashi, E.A., Schwamm, L.H., Adeoye, O.M., Alabi, O., Jahangir, E., Misra, S., Still, C.H., 2022. An Overview of Telehealth in the Management of Cardiovascular Disease: A Scientific Statement from the American Heart Association. *Circulation* 146: E558–E568. doi:10.1161/CIR.0000000000001107

Tedjasukmana, D., 2017. Return to Work in Patients with Acute Coronary Syndrome. *Indones. J. Phys. Med. Rehabil.* 6: 23–24. doi:10.36803/ijpmr.v6i02.159

Thomas, R.J., 2024. Cardiac Rehabilitation — Challenges, Advances, and the Road Ahead. *N. Engl. J. Med.* 390: 830–841. doi:10.1056/NEJMra2302291

Thomas, R.J., Beatty, A.L., Beckie, T.M., Brewer, L.P.C., Brown, T.M., Forman, D.E., Franklin, B.A., Keteyian, S.J., Kitzman, D.W., Regensteiner, J.G., Sanderson, B.K., Whooley, M.A., 2019. Home-Based Cardiac Rehabilitation: A Scientific Statement From the American Association of Cardiovascular and Pulmonary Rehabilitation, the American Heart Association, and the American

College of Cardiology. *J. Am. Coll. Cardiol.* 74: 133–153. doi:10.1016/j.jacc.2019.03.008

Thomas, R.J., Sapir, O., Gomes, P.F., Iftikhar, U., Smith, J.R., Squires, R.W., 2023. Advances, Challenges, and Progress in Cardiac Rehabilitation in Chronic CVD Management. *Curr. Atheroscler. Rep.* 25: 247–256. doi:10.1007/s11883-023-01100-7

Thrane, P.G., Olesen, K.K.W., Thim, T., Gyldenkerne, C., Mortensen, M.B., Kristensen, S.D., Maeng, M., 2023. Mortality Trends After Primary Percutaneous Coronary Intervention for ST-Segment Elevation Myocardial Infarction. *J. Am. Coll. Cardiol.* 82: 999–1010. doi:10.1016/j.jacc.2023.06.025

Tiller, C., Reindl, M., Holzknecht, M., Klapfer, M., Beck, A., Henninger, B., Mayr, A., Klug, G., Reinstadler, S.J., Metzler, B., 2019. Biomarker assessment for early infarct size estimation in ST-elevation myocardial infarction. *Eur. J. Intern. Med.* 64: 57–62. doi:10.1016/j.ejim.2019.03.001

Timmis, A., Kazakiewicz, D., Townsend, N., Huculeci, R., Aboyans, V., Vardas, P., 2023. Global epidemiology of acute coronary syndromes. *Nat. Rev. Cardiol.* 20: 778–788. doi:10.1038/s41569-023-00884-0

Tognola, C., Myriam Intravaia, R.C., Senini, E., Pezzoli, S., Riccio, A., Gualini, E., Fabbri, S., Bellantonio, V., Politi, F., Campana, M., Fucile, I., Mancusi, C., Golia, E., Cesaro, A., De Luca, N., Calabrò, P., Giannattasio, C., Maloberti, A., 2025. Secondary prevention and extreme cardiovascular risk evaluation (SEVERE-0): Prevalence of extreme cardiovascular risk in cardiological rehabilitation patients and its impact on functional improvement. *Nutr. Metab. Cardiovasc. Dis.* 35: 103712. doi:10.1016/j.numecd.2024.08.006

Tsai, K.-Z., Lai, S.-W., Hsieh, C.-J., Lin, C.-S., Lin, Y.-P., Tsai, S.-C., Chung, P.-S., Lin, Y.-K., Lin, T.-C., Ho, C.-L., Han, C.-L., Kwon, Y., Hsieh, C.-B., Lin, G.-M., 2019. Association between mild anemia and physical fitness in a military male cohort: The CHIEF study. *Sci. Rep.* 9: 11165. doi:10.1038/s41598-019-47625-3

Tsao, C.W., Aday, A.W., Almarzooq, Z.I., Anderson, C.A.M., Arora, P., Avery, C.L., Baker-Smith, C.M., Beaton, A.Z., Boehme, A.K., Buxton, A.E., Commodore-Mensah, Y., Elkind, M.S.V., Evenson, K.R., Eze-Nliam, C., Fugar, S., Generoso, G., Heard, D.G., Hiremath, S., Ho, J.E., Kalani, R., Kazi, D.S., Ko, D., Levine, D.A., Liu, J., Ma, J., Magnani, J.W., Michos, E.D., Mussolino, M.E., Navaneethan, S.D., Parikh, N.I., Poudel, R., Rezk-Hanna, M., Roth, G.A., Shah, N.S., St-Onge, M.P., Thacker, E.L., Virani, S.S., Voeks, J.H., Wang, N.Y., Wong, N.D., Wong, S.S., Yaffe, K., Martin, S.S., 2023. Heart Disease and Stroke Statistics - 2023 Update: A Report from the American Heart Association, Circulation. doi:10.1161/CIR.0000000000001123

Uribe-Heredia, G., Arroyo-Espliguero, R., Viana-Llamas, M.C., Piccone-Saponara, L.G., Álvaro-Fernández, H., García-Magallón, B., Torán-Martínez, C., Silva-Obregón, A., Izquierdo-Alonso, J.L., 2020. Type 2 Diabetes Mellitus, Glycated Hemoglobin Levels, and Cardiopulmonary Exercise Capacity in Patients with Ischemic Heart Disease. *J. Cardiopulm. Rehabil. Prev.* 40: 167–173. doi:10.1097/HCR.0000000000000451

Valentini, M., Revera, M., Bilo, G., Caldara, G., Savia, G., Styczkiewicz, K., Parati, S., Gregorini, F., Faini, A., Branzi, G., Malfatto, G., Magrì, D., Agostoni, P., Parati, G., 2012. Effects of Beta-Blockade on Exercise Performance at High

Altitude: A Randomized, Placebo-Controlled Trial Comparing the Efficacy of Nebivolol versus Carvedilol in Healthy Subjects. *Cardiovasc. Ther.* 30: 240–248. doi:10.1111/j.1755-5922.2011.00261.x

van Empel, V.P.M., Kaye, D.M., Borlaug, B.A., 2014. Effects of Healthy Aging on the Cardiopulmonary Hemodynamic Response to Exercise. *Am. J. Cardiol.* 114: 131–135. doi:10.1016/j.amjcard.2014.04.011

van Mierlo, R.F.R., Houben, V.J.G., Rikken, S.A.O.F., Gómez-Doblas, J.J., Lozano-Torres, J., van 't Hof, A.W.J., 2024. Cardiac (tele)rehabilitation in routine clinical practice for patients with coronary artery disease: protocol of the REHAB + trial. *Front. Cardiovasc. Med.* 11: 1–10. doi:10.3389/fcvm.2024.1387148

Varnfield, M., Karunanithi, M., Lee, C., Honeyman, E., Arnold, D., Ding, H., Smith, C., Walters, D.L., 2014. Smartphone-based home care model improved use of cardiac rehabilitation in postmyocardial infarction patients: results from a randomised controlled trial. *Heart* 100: 1770–1779. doi:10.1136/heartjnl-2014-305783

Verdicchio, C., Freene, N., Hollings, M., Maiorana, A., Briffa, T., Gallagher, R., Hendriks, J.M., Abell, B., Brown, A., Colquhoun, D., Howden, E., Hansen, D., Reading, S., Redfern, J., 2023. A Clinical Guide for Assessment and Prescription of Exercise and Physical Activity in Cardiac Rehabilitation. A CSANZ Position Statement. *Hear. Lung Circ.* 32: 1035–1048. doi:10.1016/j.hlc.2023.06.854

Vilela, E.M., Ladeiras Lopes, R., Torres, S., João, A., Ribeiro, J., Primo, J., Fontes-Carvalho, R., Campos, L., Miranda, F., Nunes, J.P.L., Teixeira, M., Braga, P., 2020. Differential Impact of a Cardiac Rehabilitation Program on Functional Parameters in Elderly versus Non-Elderly Myocardial Infarction Survivors. *Cardiology* 145: 98–105. doi:10.1159/000504875

Visseren, F., Mach, F., Smulders, Y.M., Carballo, D., Koskinas, K.C., Bäck, Maria, Benetos, A., Biffi, A., Boavida, J.M., Capodanno, D., Cosyns, B., Crawford, C.A., Davos, C.H., Desormais, I., Di Angelantonio, E., Duran, O.H.F., Halvorsen, S., Richard Hobbs, F.D., Hollander, M., Jankowska, E.A., Michal, M., Sacco, S., Sattar, N., Tokgozoglu, L., Tonstad, S., Tsioufis, K.P., van Dis, I., van Gelder, I.C., Wanner, C., Williams, B., De Backer, G., Regitz-Zagrosek, V., Aamodt, A.H., Abdelhamid, M., Aboyans, V., Albus, C., Asteggiano, R., Bäck, Magnus, Borger, M.A., Brotons, C., Celutkiene, J., Cikes, M., Cosentino, F., Dagres, N., De Backer, T., De Bacquer, D., Delgado, V., Ruijter, H. Den, Dendale, P., Drexel, H., Falk, V., Fauchier, L., Ference, B.A., Ferrières, J., Ferrini, M., Fisher, M., Fliser, D., Giampaoli, S., Gielen, S., Graham, I., Jennings, C., Jorgensen, T., Kautzky-Willer, A., Kavousi, M., Koenig, W., Konradi, A., Kotecha, D., Lettino, M., Lewis, B.S., Linhart, A., Løchen, M.L., Makrilakis, K., Mancia, G., Marques-Vidal, P., McEvoy, J.W., McGreavy, P., Merkely, B., Neubeck, L., Nielsen, J.C., Perk, J., Petersen, S.E., Petronio, A.S., Piepoli, M., Pogosova, N.G., Prescott, E.I.B., Ray, K.K., Reiner, Z., Richter, D.J., Rydén, L., Shlyakhto, E., Sitges, M., Sousa-Uva, M., Sudano, I., Tiberi, M., Touyz, R.M., Ungar, A., Monique Verschuren, W.M., Wiklund, O., Wood, D., Zamorano, J.L., Hammoudi, N., Zelveian, P., Siostrzonek, P., Alakbarov, E., Pavlova, O., De Sutter, J., Dilic, M., Gotcheva, N., Skoric, B., Moustra, H.H., Cifkova, R., Bovin, A., Zarif, B., Viigimaa, M., Hekkala, A.M., Kownator, S., Pagava, Z., Landmesser, U., Grassos, H., Szabados, E., Andersen, K., John

William McEvoy, Zafrir, B., Barilla, F., Ibrahimi, P., Mirrakhimov, E., Mintale, I., Arnaout, S., Slapikas, R., Banu, C., Abela, M., Rudi, V., Boskovic, A., Alami, M., Kemps, H.M.C., Bosevski, M., Solberg, E.E., Zdrojewski, T., Carlos Rabaçal, Gaita, D., Belenkov, Y., Bertelli, L., Giga, V., Pella, D., Fras, Z., Dalmau, R., Kiessling, A., Pfister, O., Marjeh, Y.B., Abdessalem, S., OnerOzdogan, Nesukay, E., Patel, R., Mullabayeva, G., 2021. 2021 ESC Guidelines on cardiovascular disease prevention in clinical practice. *Eur. Heart J.* 42: 3227–3337. doi:10.1093/eurheartj/ehab484

Vriz, O., Fadl Elmula, F.E.M., Antonini-Canterin, F., 2021. Noninvasive Assessment of Ventricular-Arterial Coupling in Heart Failure. *Heart Fail. Clin.* 17: 245–254. doi:10.1016/j.hfc.2020.12.003

Wang, W., Zhang, Q., 2021. Diagnostic value of scoring model of treadmill exercise test combined with dynamic electrocardiogram for latent coronary heart disease. *J. Electrocardiol.* 69: 82–86. doi:10.1016/j.jelectrocard.2021.01.013

Whitman, M., Jenkins, C., Sabapathy, S., Adams, L., 2019. Comparison of Heart Rate Blood Pressure Product Versus Age-Predicted Maximum Heart Rate as Predictors of Cardiovascular Events During Exercise Stress Echocardiography. *Am. J. Cardiol.* 124: 528–533. doi:10.1016/j.amjcard.2019.05.027

Wicks, J.R., Oldridge, N.B., 2016. How Accurate Is the Prediction of Maximal Oxygen Uptake with Treadmill Testing? *PLoS One* 11: e0166608. doi:10.1371/journal.pone.0166608

Witharana, P., Chang, L., Maier, R., Ogundimu, E., Wilkinson, C., Athanasiou, T., Akowuah, E., 2024. Feasibility study of rehabilitation for cardiac patients aided by an artificial intelligence web-based programme: a randomised controlled trial (RECAP trial)—a study protocol. *BMJ Open* 14. doi:10.1136/bmjopen-2023-079404

Zhang, Y., Cao, H.X., Jiang, P., Tang, H.Q., 2018. Cardiac rehabilitation in acute myocardial infarction patients after percutaneous coronary intervention. *Med. (United States)* 97. doi:10.1097/MD.0000000000009785

Zhong, W., Fu, C., Xu, L., Sun, X., Wang, S., He, C., Wei, Q., 2023. Effects of home-based cardiac telerehabilitation programs in patients undergoing percutaneous coronary intervention: a systematic review and meta-analysis. *BMC Cardiovasc. Disord.* 23: 1–13. doi:10.1186/s12872-023-03120-2

Zuo, X., Li, X., Tang, K., Zhao, R., Wu, M., Wang, Y., Li, T., 2023. Sarcopenia and cardiovascular diseases: A systematic review and meta-analysis. *J. Cachexia. Sarcopenia Muscle* 14: 1183–1198. doi:10.1002/jcsm.13221