Korelasi antara Coronary Artery Calcium Score pada CT Jantung dan Duke Treadmill Score pada Pasien
Angina Pektoris Stabil
Nadia Primivita Dirgahayu, Dr. dr. Nurhuda Hendra Setyawan, Sp.Rad, M.Sc.; dr. Anita Ekowati Sp. Rad., Subsp. TR
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Acampa, W., Assante, R., & Zampella, E. (2016). The role of treadmill exercise testing in women. *Journal of Nuclear Cardiology* 23. Available at: https://doi.org/10.1007/s12350-016-0596-y

Adelhoefer, S., Uddin, S.M.I., Osei, A.D., Obisesan, O.H., Blaha, M.J., & Dzaye, O. (2020). Coronary Artery Calcium Scoring: New Insights into Clinical Interpretation—Lessons from the CAC Consortium. *https://doi.org/10.1148/ryct.2020200281* 2. Available at: https://doi.org/10.1148/RYCT.2020200281

Andrews, J., Psaltis, P.J., Bartolo, B.A.D., Nicholls, S.J., & Puri, R. (2018). Coronary arterial calcification: A review of mechanisms, promoters and imaging. *Trends Cardiovasc. Med.* 28 : 491–501. Available at: https://doi.org/10.1016/j.tcm.2018.04.007

Azevedo, C.F., Rochitte, C.E., & Lima, J.A. (2012). Coronary artery calcium score and coronary computed tomographic angiography for cardiovascular risk stratification. *Arq. Bras. Cardiol.* 98. Available at: https://doi.org/10.1590/S0066-782X2012000600012

Banerjee, A., Newman, D.R., Van Den Bruel, A., & Heneghan, C. (2012). Diagnostic accuracy of exercise stress testing for coronary artery disease: A systematic review and meta-analysis of prospective studies. *International Journal of Clinical Practice*. Available at: https://doi.org/10.1111/j.1742-1241.2012.02900.x

Bangalore, S., Fakheri, R., Wandel, S., Toklu, B., Wandel, J., & Messerli, F.H. (2017). Renin angiotensin system inhibitors for patients with stable coronary artery disease without heart failure: Systematic review and meta-analysis of randomized trials. *BMJ (Online)*. Available at: https://doi.org/10.1136/bmj.j4

Bavishi, C., Argulian, E., Chatterjee, S., & Rozanski, A. (2016). CACS and the Frequency of Stress-Induced Myocardial Ischemia during MPI A Meta-Analysis. *JACC Cardiovasc. Imaging* 9 : 580–589. Available at: https://doi.org/10.1016/j.jcmg.2015.11.023

Benjamin, E.J., Virani, S.S., Callaway, C.W., Chamberlain, A.M., Chang, A.R., Cheng, S., *et al.* (2018). Heart disease and stroke statistics - 2018 update: A report from the American Heart Association. *Circulation* 137. Available at: https://doi.org/10.1161/CIR.0000000000000558

Berman, D.S., Arnson, Y., & Rozanski, A. (2016). Coronary Artery Calcium Scanning: The Agatston Score and Beyond. *JACC Cardiovasc. Imaging*. Available at: https://doi.org/10.1016/j.jcmg.2016.05.020

Korelasi antara Coronary Artery Calcium Score pada CT Jantung dan Duke Treadmill Score pada Pasien
Angina Pektoris Stabil
Nadia Primivita Dirgahayu, Dr. dr. Nurhuda Hendra Setyawan, Sp.Rad, M.Sc.; dr. Anita Ekowati Sp. Rad., Subsp. TR
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Biavati, F., Saba, L., Boussoussou, M., Kofoed, K.F., Benedek, T., Donnelly, P., *et al.* (2024). Coronary Artery Calcium Score Predicts Major Adverse Cardiovascular Events in Stable Chest Pain. *https://doi.org/10.1148/radiol.231557* 310. Available at: https://doi.org/10.1148/RADIOL.231557

Bruning, R.S., & Sturek, M. (2015). Benefits of Exercise Training on Coronary Blood Flow in Coronary Artery Disease Patients. *Progress in Cardiovascular Diseases* 57. Available at: https://doi.org/10.1016/j.pcad.2014.10.006

Budoff, M.J., Mayrhofer, T., Ferencik, M., Bittner, D., Lee, K.L., Lu, M.T., *et al.* (2017). Prognostic Value of Coronary Artery Calcium in the PROMISE Study (Prospective Multicenter Imaging Study for Evaluation of Chest Pain). *Circulation* 136 : 1993–2005. Available at: https://doi.org/10.1161/CIRCULATIONAHA.117.030578

Chang, S.M., Nabi, F., Xu, J., Pratt, C.M., Mahmarian, A.C., Frias, M.E., *et al.* (2015). Value of CACS compared with ETT and myocardial perfusion imaging for predicting long-term cardiac outcome in asymptomatic and symptomatic patients at low risk for coronary disease: Clinical implications in a multimodality imaging world. *JACC: Cardiovascular Imaging* 8. Available at: https://doi.org/10.1016/j.jcmg.2014.11.008

Cheong, B.Y.C., Wilson, J.M., Spann, S.J., Pettigrew, R.I., Preventza, O.A., & Muthupillai, R. (2021). Coronary artery calcium scoring: an evidence-based guide for primary care physicians. *J. Intern. Med.* Available at: https://doi.org/10.1111/joim.13176

Collins, R., Peto, R., Hennekens, C., Doll, R., Bubes, V., Buring, J., *et al.* (2009). Aspirin in the primary and secondary prevention of vascular disease: collaborative meta-analysis of individual participant data from randomised trials. *The Lancet* 373. Available at: https://doi.org/10.1016/S0140-6736(09)60503-1

Collins, R., Reith, C., Emberson, J., Armitage, J., Baigent, C., Blackwell, L., *et al.* (2016). Interpretation of the evidence for the efficacy and safety of statin therapy. *The Lancet*. Available at: https://doi.org/10.1016/S0140-6736(16)31357-5

Dahlan, M. (2016). Besar Sampel dalam Penelitian Kedokteran dan Kesehatan, Sagung Seto.

El Mahdiui, M., Smit, J.M., van Rosendael, A.R., Jukema, J.W., Bax, J.J., & Scholte, A.J.H.A. (2021). Relationship between coronary artery calcification and myocardial ischemia on computed tomography myocardial perfusion in patients with stable chest pain. *Journal of Nuclear Cardiology* 28 : 1707–1714. Available at: https://doi.org/10.1007/s12350-019-01869-8

Fletcher, G.F., Ades, P.A., Kligfield, P., Arena, R., Balady, G.J., Bittner, V.A., *et al.* (2013). Exercise standards for testing and training: A scientific statement

UNIVERSITAS GADJAH MADA
Korelasi antara Coronary Artery Calcium Score pada CT Jantung dan Duke Treadmill Score pada Pasien Angina Pektoris Stabil
Nadia Primivita Dirgahayu, Dr. dr. Nurhuda Hendra Setyawan, Sp.Rad, M.Sc.; dr. Anita Ekowati Sp. Rad., Subsp. TR
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

from the American heart association. *Circulation* 128. Available at: https://doi.org/10.1161/CIR.0b013e31829b5b44

Garner, K.K., Pomeroy, W., & Arnold, J.J. (2017). Exercise Stress Testing: Indications and Common Questions. *American family physician* 96.

Ghosh, R.M., Gates, G.J., Walsh, C.A., Schiller, M.S., Pass, R.H., & Ceresnak, S.R. (2015). The Prevalence of Arrhythmias, Predictors for Arrhythmias, and Safety of Exercise Stress Testing in Children. *Pediatric Cardiology* 36. Available at: https://doi.org/10.1007/s00246-014-1053-9

Gillen, C., & Goyal, A. (2025). Stable Angina.

Gorman, M.W., & Feigl, E.O. (2012). Control of coronary blood flow during exercise. *Exercise and Sport Sciences Reviews* 40. Available at: https://doi.org/10.1097/JES.0b013e3182348cdd

Greenland, P., Blaha, M.J., Budoff, M.J., Erbel, R., & Watson, K.E. (2018a). Coronary Calcium Score and Cardiovascular Risk. *J. Am. Coll. Cardiol.* Available at: https://doi.org/10.1016/j.jacc.2018.05.027

Greenland, P., Blaha, M.J., Budoff, M.J., Erbel, R., & Watson, K.E. (2018b). Coronary Calcium Score and Cardiovascular Risk. *J. Am. Coll. Cardiol.* Available at: https://doi.org/10.1016/j.jacc.2018.05.027

Guirguis-Blake, J.M., Evans, C. V., Senger, C.A., O'Connor, E.A., & Whitlock, E.P. (2016). Aspirin for the primary prevention of cardiovascular events: A systematic evidence review for the U.S. preventive services task force. *Annals of Internal Medicine*. Available at: https://doi.org/10.7326/M15-2113

Günaydin, Z.Y., Bektas, O., Gürel, Y.E., Karagöz, A., Kaya, A., Kiris, T., *et al.* (2016). The value of the Duke treadmill score in predicting the presence and severity of coronary artery disease. *Kardiologia Polska* 74. Available at: https://doi.org/10.5603/KP.a2015.0143

Haile, L., Goss, F.L., Andreacci, J.L., Nagle, E.F., & Robertson, R.J. (2019). Affective and metabolic responses to self-selected intensity cycle exercise in young men. *Physiology and Behavior* 205. Available at: https://doi.org/10.1016/j.physbeh.2019.02.012

Hennekens, C.H., Pfeffer, M.A., Newcomer, J.W., Jellinger, P.S., & Garber, A. (2014). Treatment of diabetes mellitus: The urgent need for multifactorial interventions. *American Journal of Managed Care* 20.

Huang, W., Huang, Z., Koh, N.S.Y., Ho, J.S., Chua, T.S.J., & Tan, S.Y. (2020a). Adding coronary calcium score to exercise treadmill test: An alternative to refine coronary artery disease risk stratification in patients with intermediate risk chest pain. *Global Heart* 15 : 1–8. Available at: https://doi.org/10.5334/GH.766

UNIVERSITAS GADJAH MADA
Korelasi antara Coronary Artery Calcium Score pada CT Jantung dan Duke Treadmill Score pada Pasien Angina Pektoris Stabil
Nadia Primivita Dirgahayu, Dr. dr. Nurhuda Hendra Setyawan, Sp.Rad, M.Sc.; dr. Anita Ekowati Sp. Rad., Subsp. TR
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Huang, W., Huang, Z., Koh, N.S.Y., Ho, J.S., Chua, T.S.J., & Tan, S.Y. (2020b). Adding Coronary Calcium Score to Exercise Treadmill Test: An Alternative to Refine Coronary Artery Disease Risk Stratification in Patients with Intermediate Risk Chest Pain. *Glob. Heart* 15. Available at: https://doi.org/10.5334/GH.766

Ibáñez, B., Heusch, G., Ovize, M., & Van De Werf, F. (2015). Evolving therapies for myocardial ischemia/reperfusion injury. *Journal of the American College of Cardiology*. Available at: https://doi.org/10.1016/j.jacc.2015.02.032

Kim, N., Hwang, H.J., & Yang, I.H. (2024). Assessing Cardiovascular Risk with Coronary Artery Calcium and Carotid Intima-Media Thickness in Patients with Negative Stress Echocardiography. *Biomedicines* 12. Available at: https://doi.org/10.3390/biomedicines12092151

Kloner, R.A., & Chaitman, B. (2017). Angina and Its Management. *Journal of Cardiovascular Pharmacology and Therapeutics*. Available at: https://doi.org/10.1177/1074248416679733

Koopman, M.Y., Willemsen, R.T.A., Van Der Harst, P., Van Bruggen, R., Gratama, J.W.C., Braam, R., *et al.* (2022). The Diagnostic and Prognostic Value of Coronary Calcium Scoring in Stable Chest Pain Patients: A Narrative Review. *Rofo* 194 : 257–265. Available at: https://doi.org/10.1055/A-1662-5711

Kreiner, M., Okeson, J.P., Michelis, V., Lujambio, M., & Isberg, A. (2007). Craniofacial pain as the sole symptom of cardiac ischemia: A prospective multicenter study. *Journal of the American Dental Association* 138. Available at: https://doi.org/10.14219/jada.archive.2007.0024

Laukkanen, J.A., & Kurl, S. (2012). Blood pressure responses during exercise testingis up best for prognosis? *Annals of Medicine*. Available at: https://doi.org/10.3109/07853890.2011.560180

Miller, T.D., Askew, J.W., & Anavekar, N.S. (2014). Noninvasive stress testing for coronary artery disease. *Cardiology Clinics*. Available at: https://doi.org/10.1016/j.ccl.2014.04.008

Nasir, K., & Clouse, M. (2012). Role of nonenhanced multidetector CT coronary artery calcium testing in asymptomatic and symptomatic individuals. *Radiology*. Available at: https://doi.org/10.1148/radiol.12110810

Nicoll, R., Zhao, Y., Ibrahimi, P., Olivecrona, G., & Henein, M. (2016). Diabetes and Hypertension Consistently Predict the Presence and Extent of Coronary Artery Calcification in Symptomatic Patients: A Systematic Review and Meta-Analysis. *Int. J. Mol. Sci.* 17. Available at: https://doi.org/10.3390/IJMS17091481

Nicoll, R., Zhao, Y., Wiklund, U., Diederichsen, A., Mickley, H., Ovrehus, K., *et al.* (2017). Diabetes and male sex are key risk factor correlates of the extent of

UNIVERSITAS GADJAH MADA
Korelasi antara Coronary Artery Calcium Score pada CT Jantung dan Duke Treadmill Score pada Pasien Angina Pektoris Stabil
Nadia Primivita Dirgahayu, Dr. dr. Nurhuda Hendra Setyawan, Sp.Rad, M.Sc.; dr. Anita Ekowati Sp. Rad., Subsp. TR
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

coronary artery calcification: A Euro-CCAD study. *J. Diabetes Complications* 31 : 1096–1102. Available at: https://doi.org/10.1016/j.jdiacomp.2017.03.013

Osawa, K., Nakanishi, R., & Budoff, M. (2024). Coronary Artery Calcification. *StatPearls - NCBI Bookshelf*. Available at: https://doi.org/10.1016/j.gheart.2016.08.001

Osborne-Grinter, M., Ali, A., & Williams, M.C. (2024). Prevalence and clinical implications of coronary artery calcium scoring on non-gated thoracic computed tomography: a systematic review and meta-analysis. *Eur. Radiol.* 34 : 4459–4474. Available at: https://doi.org/10.1007/S00330-023-10439-Z

PERKENI (2022). Pedoman Pengelolaan dan Pencegahan Diabetes Melitus Tipe 2 Dewasa di Indonesia. Jakarta : PB PERKENI.

PERKENI (2021). Pengelolaan Dislipidemia Di Indonesia 2021. *PB Perkeni*.

Poehling, C.P., & Llewellyn, T.L. (2019). The Effects of Submaximal and Maximal Exercise on Heart Rate Variability. *International Journal of Exercise Science* 12. Available at: https://doi.org/10.70252/avuq4684

Rahsepar, A.A., & Arbab-Zadeh, A. (2015). Cardiac CT vs. Stress Testing in Patients with Suspected Coronary Artery Disease: Review and Expert Recommendations. *Current Cardiovascular Imaging Reports*. Available at: https://doi.org/10.1007/s12410-015-9344-y

Rozanski, A., Cohen, R., & Uretsky, S. (2013). The coronary calcium treadmill test: A new approach to the initial workup of patients with suspected coronary artery disease. *Journal of Nuclear Cardiology*. Available at: https://doi.org/10.1007/s12350-013-9763-6

Santulli, G. (2025). The 2025 AHA/ACC hypertension guidelines: implications for cardiovascular and renal risk in patients with diabetes. *Cardiovascular Diabetology – Endocrinology Reports* 11. Available at: https://doi.org/10.1186/s40842-025-00239-3

Sarwar, A., Shaw, L.J., Shapiro, M.D., Blankstein, R., Hoffman, U., Cury, R.C., *et al.* (2009). Diagnostic and Prognostic Value of Absence of Coronary Artery Calcification. *JACC Cardiovasc. Imaging* 2. Available at: https://doi.org/10.1016/j.jcmg.2008.12.031

Sharman, J.E., & Lagerche, A. (2015). Exercise blood pressure: Clinical relevance and correct measurement. *Journal of Human Hypertension*. Available at: https://doi.org/10.1038/jhh.2014.84

Shreya, D., Zamora, D.I., Patel, G.S., Grossmann, I., Rodriguez, K., Soni, M., *et al.* (2021a). Coronary Artery Calcium Score - A Reliable Indicator of Coronary Artery Disease? *Cureus*. Available at: https://doi.org/10.7759/cureus.20149

UNIVERSITAS GADJAH MADA
Korelasi antara Coronary Artery Calcium Score pada CT Jantung dan Duke Treadmill Score pada Pasien Angina Pektoris Stabil
Nadia Primivita Dirgahayu, Dr. dr. Nurhuda Hendra Setyawan, Sp.Rad, M.Sc.; dr. Anita Ekowati Sp. Rad., Subsp. TR
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Shreya, D., Zamora, D.I., Patel, G.S., Grossmann, I., Rodriguez, K., Soni, M., *et al.* (2021b). Coronary Artery Calcium Score - A Reliable Indicator of Coronary Artery Disease? *Cureus*. Available at: https://doi.org/10.7759/cureus.20149

Sotos-Prieto, M., Bhupathiraju, S.N., Mattei, J., Fung, T.T., Li, Y., Pan, A., *et al.* (2015). Changes in diet quality scores and risk of cardiovascular disease among US men and women. *Circulation* 132. Available at: https://doi.org/10.1161/CIRCULATIONAHA.115.017158

Tian, W.B., Zhang, W. Sen, Jiang, C.Q., Liu, X.Y., Jin, Y.L., Lam, T.H., *et al.* (2022). Aortic arch calcification and risk of all-cause mortality and cardiovascular disease: The Guangzhou Biobank Cohort Study. *Lancet Reg. Health West. Pac.* 23. Available at: https://doi.org/10.1016/j.lanwpc.2022.100460

Vusvitasari, R., Nugroho, S., & Akbar, S. (2020). Kajian Hubungan Koefisien Korelasi Pearson (ρ), Spearman-. *Journal Statistika*.

Wang, X., Le, E.P.V., Rajani, N.K., Hudson-Peacock, N.J., Pavey, H., Tarkin, J.M., *et al.* (2019). A zero coronary artery calcium score in patients with stable chest pain is associated with a good prognosis, despite risk of non-calcified plaques. *Open Heart* 6. Available at: https://doi.org/10.1136/OPENHRT-2018-000945

Whelton, P.K., Carey, R.M., Aronow, W.S., Casey, D.E., Collins, K.J., Himmelfarb, C.D., *et al.* (2018). 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ ASH/ASPC/NMA/PCNA guideline for the prevention, detection, evaluation, and management of high blood pressure in adults a report of the American College of Cardiology/American Heart Association Task Force on Clinical practice guidelines. *Hypertension*. Available at: https://doi.org/10.1161/HYP.0000000000000065

Yilmaz, E.S., & Uzun, O. (2021). Low-dose thrombolysis for submassive pulmonary embolism. *Journal of Investigative Medicine* 69. Available at: https://doi.org/10.1136/jim-2021-001816

Zellweger, M.J. (2019). Risk stratification in coronary artery disease: a patient-tailored approach over the ischaemic cascade. *Swiss medical weekly* 149. Available at: https://doi.org/10.4414/smw.2019.20014