

DAFTAR PUSTAKA

- Abdellah, A.T., Mohamed, A.D., Hendawi, H.A., & Omera, M.A. (2017). Clinical and laboratory characteristics of short-term mortality in Egyptian patients with acute heart failure. *Egypt. Hear. J.* 69 : 201–208. Available at: <https://doi.org/10.1016/j.ehj.2017.02.003>
- Aimo, A., Castiglione, V., Borrelli, C., Saccaro, L.F., Franzini, M., Masi, S., *et al.* (2020). Oxidative stress and inflammation in the evolution of heart failure: From pathophysiology to therapeutic strategies. *Eur. J. Prev. Cardiol.* 27 : 494–510. Available at: <https://doi.org/10.1177/2047487319870344>
- Alon, D., Stein, G. Y., Korenfeld, R., & Fuchs, S. (2013). Predictors and outcomes of infection-related hospital admissions of heart failure patients. *PloS one*, 8(8), e72476. <https://doi.org/10.1371/journal.pone.0072476>
- Anand, I.S., & Gupta, P. (2018). Anemia and Iron Deficiency in Heart Failure: Current Concepts and Emerging Therapies. *Circulation* 138 : 80–98. Available at: <https://doi.org/10.1161/CIRCULATIONAHA.118.030099>
- Arques, S., & Ambrosi, P. (2011). Human serum albumin in the clinical syndrome of heart failure. *J. Card. Fail.* 17 : 451–458. Available at: <https://doi.org/10.1016/j.cardfail.2011.02.010>
- Arrigo M, *et al.* (2020). Acute heart failure. *Med.* 12 : 5237–5244. Available at: <https://doi.org/10.1016/j.med.2019.11.004>
- Berry, C., Poppe, K.K., Gamble, G.D., Earle, N.J., Ezekowitz, J.A., Squire, I.B., *et al.* (2016). Prognostic significance of anaemia in patients with heart failure with preserved and reduced ejection fraction: Results from the MAGGIC individual patient data meta-analysis. *QJM An Int. J. Med.* 109 : 377–382. Available at: <https://doi.org/10.1093/qjmed/hcv087>
- Bezati, S., Velliou, M., Ventoulis, I., Simitsis, P., Parissis, J., & Polyzogopoulou, E. (2023). Infection as an under-recognized precipitant of acute heart failure: prognostic and therapeutic implications. *Heart failure reviews*, 28(4), 893–904. <https://doi.org/10.1007/s10741-023-10303-8>
- Boulet, J., Sridhar, V.S., Bouabdallaoui, N., Tardif, J.C., & White, M. (2024). Inflammation in heart failure: pathophysiology and therapeutic strategies. *Inflamm. Res.* 73 : 709–723. Available at: <https://doi.org/10.1007/s00011-023-01845-6>
- Bozkurt, B., Coats, A.J.S., Tsutsui, H., Abdelhamid, C.M., Adamopoulos, S., Albert, N., *et al.* (2021). Universal definition and classification of heart failure: a report of the Heart Failure Society of America, Heart Failure Association of the European Society of Cardiology, Japanese Heart Failure Society and Writing Committee of the Universal Definition o. *Eur. J. Heart Fail.* 23 : 352–380. Available at: <https://doi.org/10.1002/ejhf.2115>
- Castiglione, V., Aimo, A., Vergaro, G., Saccaro, L., Passino, C., & Emdin, M. (2022). Biomarkers for the diagnosis and management of heart failure. *Heart Fail. Rev.* 625–643. Available at: <https://doi.org/10.1007/s10741-021-10105-w>

- Cobas® (2021). Albumin Gen.2 Order information 4–7.
- Don, B.R., & Kaysen, G. (2004). Serum albumin: Relationship to inflammation and nutrition. *Semin. Dial.* 17 : 432–437. Available at: <https://doi.org/10.1111/j.0894-0959.2004.17603.x>
- Drozd, M., Garland, E., Walker, A. M. N., Slater, T. A., Koshy, A., Straw, S., Gierula, J., Paton, M., Lowry, J., Sapsford, R., Witte, K. K., Kearney, M. T., & Cubbon, R. M. (2020). Infection-Related Hospitalization in Heart Failure With Reduced Ejection Fraction: A Prospective Observational Cohort Study. *Circulation. Heart failure*, 13(5), e006746. <https://doi.org/10.1161/CIRCHEARTFAILURE.119.006746>
- Geng, X., Wang, D.W., & Li, H. (2024). The pivotal role of neutrophil extracellular traps in cardiovascular diseases: Mechanisms and therapeutic implications. *Biomed. Pharmacother.* 179. Available at: <https://doi.org/10.1016/j.biopha.2024.117289>
- Heidenreich, P.A., Bozkurt, B., Aguilar, D., Allen, L.A., Byun, J.J., Colvin, M.M., *et al.* (2022). 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines, *Circulation*. Available at: <https://doi.org/10.1161/CIR.0000000000001063>
- Horwich, T.B., Kalantar-Zadeh, K., MacLellan, R.W., & Fonarow, G.C. (2008). Albumin levels predict survival in patients with systolic heart failure. *Am. Heart J.* 155 : 883–889. Available at: <https://doi.org/10.1016/j.ahj.2007.11.043>
- Hu, Z., Wang, J., Xue, Y., Zhang, Q., Xu, Q., Ji, K., *et al.* (2022). The Neutrophil-to-Albumin Ratio as a New Predictor of All-Cause Mortality in Patients with Heart Failure. *J. Inflamm. Res.* 15 : 701–713. Available at: <https://doi.org/10.2147/JIR.S349996>
- Ito, S., & Yamamoto, D. (2010). Mechanism for the color change in bromocresol purple bound to human serum albumin. *Clin. Chim. Acta* 411 : 294–295. Available at: <https://doi.org/10.1016/j.cca.2009.11.019>
- Jobs, A., Simon, R., de Waha, S., Rogacev, K., Katalinic, A., Babaev, V., & Thiele, H. (2018). Pneumonia and inflammation in acute decompensated heart failure: a registry-based analysis of 1939 patients. *European heart journal. Acute cardiovascular care*, 7(4), 362–370. <https://doi.org/10.1177/2048872617700874>
- Kir, D., & Munagala, M. (2022). Restructuring the Heart From Failure to Success: Role of Structural Interventions in the Realm of Heart Failure. *Front. Cardiovasc. Med.* 9 : 1–11. Available at: <https://doi.org/10.3389/fcvm.2022.839483>
- Kristensen, S.L., Martinez, F., Jhund, P.S., Arango, J.L., Belohlavek, J., Boytsov, S., *et al.* (2016). Geographic variations in the PARADIGM-HF heart failure trial. *Eur. Heart J.* 37 : 3167–3174. Available at: <https://doi.org/10.1093/eurheartj/ehw226>
- Kurmani, S., & Squire, I. (2017). Acute Heart Failure: Definition, Classification and Epidemiology. *Curr. Heart Fail. Rep.* 14 : 385–392. Available at: <https://doi.org/10.1007/s11897-017-0351-y>

- Lam, C.S.P. (2015). Heart failure in Southeast Asia: facts and numbers. *ESC Hear. Fail.* 2 : 46–49. Available at: <https://doi.org/10.1002/ehf2.12036>
- Lam, C.S.P., & Solomon, S.D. (2021). Classification of Heart Failure According to Ejection Fraction: JACC Review Topic of the Week. *J. Am. Coll. Cardiol.* 77 : 3217–3225. Available at: <https://doi.org/10.1016/j.jacc.2021.04.070>
- Lee, M.H., Leda, M., Buchan, T., Malik, A., Rigobon, A., Liu, H., *et al.* (2022). Prognostic value of blood pressure in ambulatory heart failure: a meta-analysis and systematic review. Ambulatory blood pressure predicts heart failure prognosis. *Heart Fail. Rev.* 27 : 455–464. Available at: <https://doi.org/10.1007/s10741-021-10086-w>
- Lian, Y., Lai, X., Wu, C., Wang, L., Shang, J.J., Zhang, H., *et al.* (2025). The roles of neutrophils in cardiovascular diseases. *Front. Cardiovasc. Med.* 12 : 1–14. Available at: <https://doi.org/10.3389/fcvm.2025.1526170>
- Lin, Ya, Lin, Yanhan, Yue, J., & Zou, Q. (2022). The neutrophil percentage-to-albumin ratio is associated with all-cause mortality in critically ill patients with acute myocardial infarction. *BMC Cardiovasc. Disord.* 22 : 1–13. Available at: <https://doi.org/10.1186/s12872-022-02559-z>
- Lombardi, C., Peveri, G., Cani, D., Latta, F., Bonelli, A., Tomasoni, D., *et al.* (2020). In-hospital and long-term mortality for acute heart failure: analysis at the time of admission to the emergency department. *ESC Hear. Fail.* 7 : 2650–2661. Available at: <https://doi.org/10.1002/ehf2.12847>
- Luntungan, M., Juzar, D., & Budiono, D. (2022). Neutrophil-Albumin Ratio as a Predictor of in-Hospital Mortality in Patients with Cardiogenic Shock. *Open Access Maced. J. Med. Sci.* 10 : 1731–1735. Available at: <https://doi.org/10.3889/oamjms.2022.8845>
- McDonagh, T.A., Metra, M., Adamo, M., Baumbach, A., Böhm, M., Burri, H., *et al.* (2021). 2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure. *Eur. Heart J.* 42 : 3599–3726. Available at: <https://doi.org/10.1093/eurheartj/ehab368>
- McPherson, Richard A.; Matthew, R. (2022). *Henry's Clinical Diagnosis and Management by Laboratory Methods*, 24th ed. Philadelphia : .
- Miró, Ò., Conde-Martel, A., Llorens, P., Salamanca-Bautista, P., Gil, V., González-Franco, Á., *et al.* (2023). The influence of comorbidities on the prognosis after an acute heart failure decompensation and differences according to ejection fraction: Results from the EAHFE and RICA registries. *Eur. J. Intern. Med.* 111 : 97–104. Available at: <https://doi.org/10.1016/j.ejim.2023.02.026>
- Mosterd, A., & Hoes, A.W. (2007). Clinical epidemiology of heart failure. *Heart* 93 : 1137–1146. Available at: <https://doi.org/10.1136/hrt.2003.025270>
- Papayannopoulos, V. (2018). Neutrophil extracellular traps in immunity and disease. *Nat. Rev. Immunol.* 18 : 134–147. Available at: <https://doi.org/10.1038/nri.2017.105>
- Pohar, R., & MacDougall, D. (2020). Combination Use of Ivabradine with Sacubitril/Valsartan: A Review of Clinical Effectiveness and Guidelines 1–10.

- Regan, J.A., Kitzman, D.W., Leifer, E.S., Kraus, W.E., Fleg, J.L., Forman, D.E., *et al.* (2020). Impact of Age on Comorbidities and Outcomes in Heart Failure with Reduced Ejection Fraction 7 : 1056–1065. Available at: <https://doi.org/10.1016/j.jchf.2019.09.004>. Impact
- Richards, A.M. (2018). N-Terminal B-type Natriuretic Peptide in Heart Failure. *Heart Fail. Clin.* 14 : 27–39. Available at: <https://doi.org/10.1016/j.hfc.2017.08.004>
- Scrutinio, D., Passantino, A., Guida, P., Ammirati, E., Oliva, F., Braga, S.S., *et al.* (2016). Prognostic impact of comorbidities in hospitalized patients with acute exacerbation of chronic heart failure. *Eur. J. Intern. Med.* 34 : 63–67. Available at: <https://doi.org/10.1016/j.ejim.2016.05.020>
- Shirazi, L.F., Bissett, J., Romeo, F., & Mehta, J.L. (2017). Role of Inflammation in Heart Failure. *Curr. Atheroscler. Rep.* 19. Available at: <https://doi.org/10.1007/s11883-017-0660-3>
- Sumantra, I.G. (2019). Tantangan diagnostik dan pengelolaan gagal jantung akut dari subset hemodinamik untuk pengobatan yang tepat. *J. Ilm. Kedokt.* 3 : 14–25.
- Systemex (2024). The white blood cell differential count application ‘DIFF’ [WWW Document].
- Van Linthout, S., & Tschöpe, C. (2017). Inflammation – Cause or Consequence of Heart Failure or Both? *Curr. Heart Fail. Rep.* 14 : 251–265. Available at: <https://doi.org/10.1007/s11897-017-0337-9>
- Wan, J., Zhang, S., Yuan, X., Liu, Y., Cheng, X., Liu, H., *et al.* (2025). Neutrophil-to-albumin ratio as a predictor of mortality in patients with intracerebral hemorrhage: a multicenter retrospective cohort study. *BMC Neurol.* 25. Available at: <https://doi.org/10.1186/s12883-025-04220-6>
- Wang, X., Zhang, Y., Wang, Y., Liu, Jia, Xu, X., Liu, Jiamei, *et al.* (2023). The neutrophil percentage-to-albumin ratio is associated with all-cause mortality in patients with chronic heart failure. *BMC Cardiovasc. Disord.* 23 : 1–9. Available at: <https://doi.org/10.1186/s12872-023-03472-9>
- Xie, H., Jia, P., Wei, L., Ruan, G., Zhang, H., Ge, Y., *et al.* (2024). Evaluation and validation of neutrophil to albumin ratio as a promising prognostic marker for all-cause mortality in patients with cancer: a multicenter cohort study. *Nutrition* 121 : 112365. Available at: <https://doi.org/10.1016/j.nut.2024.112365>
- Yao, J., Xu, X., Gong, K., Tu, H., Xu, Z., Ye, S., *et al.* (2023). Prognostic value of neutrophil count to albumin ratio in patients with decompensated cirrhosis. *Sci. Rep.* 13 : 1–11. Available at: <https://doi.org/10.1038/s41598-023-44842-9>