

DAFTAR PUSTAKA

- Abbas AK, Lichtman AH, Pillai S. Basic immunology: functions and disorders of the immune system. 7th ed. Philadelphia: Elsevier; 2016.
- Amis, Musakkir. 2017. *Rasio Neutrofil Limfosit Pasien Kanker Paru di RSUP Dr. Wahidin Sudirohusodo Makassar Periode Januari-Desember 2016*. Skripsi Fakultas Kedokteran Universitas Hasanudin 2017.
- Catandella, E., Giraffa, C. M., Marca, S. D., Pulvirenti, A., Alaimo, S., Pisano, M., Terranova, V., Corriere, T., Ronsisvalle, M, L., *et al.* 2017. *Neutrofil to Lymphocyte Ratio: An Emerging Marker Predicting Prognosis in Elderly Adult with Community-Acquired Pneumonia*. The American Geriatrics Society. Volume 65 (8). 1796-1801.
- Dinkes Provinsi Lampung. 2022. Infografis Update Situasi COVID-19 Provinsi Lampung. <https://www.google.com/amp/s/dinkes.lampungprov.go.id/amp/infografis-update-situasi-covid-19-provinsi-lampung-1-januari-2022-pukul-10-00/> (Diakses pada tanggal 1 Januari 2022).
- Esakandari, H., Nabi-Afjadi, M., Fakkari-Afjadi, J., Farahmandian, N., Miresmaeili, S.-M., & Bahreini, E. (2020). A comprehensive review of COVID-19 characteristics. *Biological Procedures Online*, 22(1), 19. <https://doi.org/10.1186/s12575-020-00128-2>
- Shang, W., Dong, J., Ren, Y., Tian, M., Li, W., Hu, J., & Li, Y. (2020). The value of clinical parameters in predicting the severity of COVID-19. *Journal of Medical Virology*, 92(10), 2188–2192. <https://doi.org/10.1002/jmv.26031>
- Susilo, A., Rumende, C. M., Pitoyo, C. W., Santoso, W. D., Yulianti, M., Herikurniawan, H., Sinto, R., Singh, G., Nainggolan, L., Nelwan, E. J., Chen, L. K., Widhani, A., Wijaya, E., Wicaksana, B., Maksum, M., Annisa, F., Jasirwan, C. O. M., & Yunihastuti, E. (2020). Coronavirus Disease 2019: Tinjauan Literatur Terkini. *Jurnal Penyakit Dalam Indonesia*, 7(1), 45.
- Utama, I. M. G. D. L. (2016). Uji Diagnostik C-Reactive Protein, Leukosit, Nilai Total Neutrofil dan Suhu Anak Demam dengan Penyebab yang Tidak Diketahui. *Sari Pediatri*, 13(6), 412.
- Farhan, A. (2020). Hubungan Antara Rasio Neutrofil Limfosit Rasio Dengan Derajat Klinis Pasien Covid-19. *Jurnal Bagus*, 02(01), 402–406.
- Guan, W., Ni, Z., Hu, Y., Liang, W., Ou, C., He, J., Liu, L., Shan, H., Lei, C., Hui, D. S. C., Du, B., Li, L., Zeng, G., Yuen, K. Y., Chen, R., Tang, C., Wang, T., Chen, P., Xiang, J., Zhong, N. 2020. Clinical characteristics of coronavirus disease 2019 in China. *N. Engl. J. Med.* 382(18), 1708–1720.
- Gelzo, M., Cacciapuoti, S., Pinchera, B., De Rosa, A., Cernera, G., Scialò, F., Mormile, M., Fabbrocini, G., Parrella, R., Gentile, I., & Castaldo, G. (2021). Prognostic Role of Neutrophil to Lymphocyte Ratio in COVID-19 Patients:

Still Valid in Patients That Had Started Therapy? *Frontiers in Public Health*, 9(3), 1–5. <https://doi.org/10.3389/fpubh.2021.664108>

Gharagozloo, M., Kalantari, H., Rezaei, A., Maracy, M. R., Salehi, M., Bahador, A., Hassannejad, N., Narimani, M., Sanei, M. H., Bayat, B., & Ghazanfari, H. (2015). CLINICAL STUDY Immune-mediated cochleovestibular disease. *Bratislavsk?? Lek??Rske Listy*, 116(5), 296–301. <https://doi.org/10.4149/BLL>

Kementertian Kesehatan Republik Indonesia. 2020. *Pedoman dan Pencegahan Coronavirus(COVID-19)RevisiKe-5(vol.4)*.

Kementertian Kesehatan Republik Indonesia. 2020. Peta Sebaran COVID-19 Indonesia. (<https://covid19.go.id/peta-sebaran>, Diakses pada tanggal 1 Januari 2020).

Ling, W., & Ling, W. (2020). *Kadar protein C-reaktif pada tahap awal COVID-19.50*, 332–334.

Liu, C. C., & Ahearn, J. M. 2005. Acute-Phase Proteins and Inflammation: immunological and Clinical Implication. *Measuring Immunity*, 131–143.

Liu, F., Li, L., Xu, M., Wu, J., Luo, D., Zhu, Y., Li, B., & Song, X. 2020. Prognostic value of interleukin-6 , C-reactive protein , and procalcitonin in patients with COVID-19. *J. Clin. Virol.* 127, 104370.

Luo, X., Zhou, W., Yan, X., Guo, T., Wang, B., Xia, H., Ye, L., Xiong, J., Jiang, Z., Liu, Y., & Zhang, B. 2020. Prognostic Value of C-Reactive Protein in Patients With Coronavirus 2019. *MedRxiv*, 1–6.

Mila N dkk. 2020. Hubungan Neutrophyl Lymphocyte Ratio Dengan C-Reactive Protein Pada Pasien Stroke Non Hemoragik. *Jurnal Kedokteran Diponegoro.* 9 (2),173-178.

Nasrani, L. (2022). Hubungan neutrophil-lymphocyte ratio, absolute lymphocyte count, dan platelet lymphocyte ratio terhadap derajat keparahan COVID-19. *Intisari Sains Medis | Intisari Sains Medis*, 13(1), 127–130. <https://doi.org/10.15562/ism.v13i1.1241>

Pagana, K.D., Pagana, T. J., & Pagana, T. N. 2019. *Mosby's Diagnostic and Laboratory Test Reference 14th Edition*. Elsevier. United State. 974.

Pantzaris, N. K., Platanaki, C., Pierrakos, C., Karamouzus, V., & Velissaris, D. 2018. *Neutrofil-to-Lymphocyte Ratio Relation to Sepsis Severity Scores and Inflammatory Biomarker in Patients with Community-Acquired Pneumonia: A Case Series*. *Journal of Translational Internal Medicine*. Volume 6 Issue 1. 43-46.

Playfair, J. H. L., & Chain, B. M. 2009. *At a glance Imunologi* (R. Astikawati (ed.)). Erlangga.

- Promptchara E, Ketloy C, Palaga T. Immune responses in COVID-19 and potential vaccines: Lessons learned from SARS and MERS epidemic. *Asian Pac J Allergy Immunol.* 2020;38:1–9.
- Pepys, M. B., Hirschfield, G. M., & Pepys, M. B. (2003). *Protein C-reaktif: pembaruan penting Protein C-reaktif: pembaruan penting.* Juli. <https://doi.org/10.1172/JCI200318921>.
- Pramana, I. G. A. A. S. P., Masyuni, P. U. S., & Surawan, I. D. P. (2021). Nilai rasio neutrofil-limfosit sebagai prediktor kasus COVID-19 serangan berat pada pasien dewasa. *Intisari Sains Medis*, 12(2), 530. <https://doi.org/10.15562/ism.v12i2.1093>
- Purwati, D. (2021). *Korelasi Kadar Interleukin-6 dengan Rasio Neutrofil Limfosit pada Pasien COVID-19 Derajat Berat.* 45.
- Qin, C., Zhou, L., Hu, Z., Zhang, S., Yang, S., Tao, Y., Xie, C., Ma, K., Shang, K., Wang, W., & Tian, D. S. (2020). Dysregulation of immune response in patients with coronavirus 2019 (COVID-19) in Wuhan, China. *Clinical Infectious Diseases*, 71(15), 762–768. <https://doi.org/10.1093/cid/ciaa248>
- Sacher, R. A., and McPherson, R. A. (2004). *Tinjauan Klinik Hasil Pemeriksaan Laboratorium (11th Ed.)*. Penerbit Buku Kedokteran.
- Shang, W., Dong, J., Ren, Y., Tian, M., Li, W., Hu, J., Li, Y. 2020. The value of clinical parameters in predicting the severity of COVID-19. *J. Med. Virol.* 92(10), 2188–2192.
- Shi Y, Wang Y, Shao C, Huang J, Gan J, Huang X, et al. COVID-19 infection: the perspectives on immune responses. *Cell Death Differ.* 2020;27:1451–4.
- Singer, M., Deutschman, C.S., Seymour, C.W., Shankar-Hari, M., Annane, D., Bauer, M., Bellomo, R., Bernard, G.R., Chiche, J.-D., Coopersmith, C.M., Hotchkiss, R.S., Levy, M.M., Marshall, J.C., Martin, G.S., Opal, S.M., Rubenfeld, G.D., van der Poll, T., Vincent, J.-L., Angus, D.C., 2016. *The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3)*. *JAMA* 315, 801.
- Sproston, N. R., & Ashworth, J. J. 2018. Role of C-reactive protein at sites of inflammation and infection. *Front Immunol.* 9, 1–11.
- Susilo A, Rumende GM, Pitoyo GW, Santoso WD, Yulianti M, Herikurniawan, et al. Coronavirus Disease 2019: Tinjauan Literatur Terkini. *J Penyakit Dalam Indonesia.* 2020;7(1): 50.
- Tan, C., Huang, Y., Shi, F., Tan, K., Ma, Q., Chen, Y., Jiang, X., & Li, X. 2020. C-reactive protein correlates with computed tomographic findings and predicts severe COVID-19 early. *J. Med. Virol.* 92(7), 856–862.

- Targher, G., dkk., (2020). *Detrimental Effects of metabolic dysfunction associated fatty liver disease and increased neutrophil-to-lymphocyte ratio on severity of COVID-19*.
- Utama, I. M. G. D. L. (2016) 'Uji Diagnostik C-Reactive Protein, Leukosit, Nilai Total Neutrofil dan Suhu Anak Demam dengan Penyebab yang Tidak Diketahui', *Sari Pediatri*, 13(6), p. 412.
- Wang D, Hu B, Hu C, Zhu F, Liu X, Zhang J, et al. Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus–infected pneumonia in Wuhan, China. *J Am Med Assoc*. 2020;323(11):1061–9..
- Wang, L. 2020. C-reactive protein levels in the early stage of COVID-19. *Med. Mal.Infect*.50(4),332–334.
- World Health Organisation. 2020. Laboratory Testing for Coronavirus Disease 2019 (COVID-19) in Suspected Human Cases. (<https://apps.who.int/iris/handle/10665/331501>, Diakses pada tanggal 15 November 2021).
- World Health Organization. Coronavirus Disease 2019 (Covid-19) situation report [Internet]. WHO. 2019 [cited 1 Januari 2022]
- Wu F, Wang A, Liu M, Wang Q, Chen J, Xia S, et al. Neutralizing antibody responses to SARS-CoV-2 in a COVID-19 recovered patient cohort and their implications.2020.
- Wu, Y., Potempa, L. A., & Kebir, D. El. 2015. C-reactive protein and inflammation : conformational changes affect function. *Biol. Chem*. 396(11), 1181–1197.
- Yang, A, Liu J, Tao W, Li H. The Diagnostic and Predictive Role of NLR, d-NLR, and PLR in COVID-19 Patients. *International Immunopharmacology*. 2020; 84:106504.
- Yang, X., Yu, Y., Xu, J., Shu, H., Xia, J., Liu, H., Wu, Y., Zhang, L., Yu, Z., Fang, M., Yu, T., Wang, Y., Pan, S., Zou, X., Yuan, S., & Shang, Y. 2020. Clinical course and outcomes of critically ill patients with SARS-CoV-2 pneumonia in Wuhan, China: a single-centered, retrospective, observational study. *Lancet Respir. Med*. 8(5), 475–481.
- Yoon B, Son C. Role of the neutrophil-lymphocyte count ratio in the differential diagnosis between pulmonary tuberculosis and bacterial community acquired pneumonia. *Annals of laboratory medicine* 2013, 33: 105-110
- Zhu, N. *et al*. A Novel Coronavirus from Patients with Pneumonia in China, 2019. *N Engl J Med*, doi:10.1056/NEJMoa2001017 (2020).