



DAFTAR PUSTAKA

- Anna Jacob, E.J.P. 2022. Significance of Platelet indices in dengue fever patients. *Int. J. Med. Sci. Clin. Res. Rev. Online*, 05(05):531–539.
- Anupam, B., Prasit Kumar, G., Utpal, G., Saswati, M. 2019. Utility of Mean Platelet Volume to Predict Significant Thrombocytopenia and Complications in Dengue. *Int. J. Trop. Dis.*, 2(4).
- Beatrice, C., I Wayan Bikin Suryawan, Anak Agung Made Sucipta. 2022. Hubungan nilai mean platelet volume dengan derajat klinis demam berdarah dengue di RSUD Wangaya Kota Denpasar. *Intisari Sains Medis*, 13(1):336–340.
- Chaloemwong, J., Tantiworawit, A., Rattanathammee, T., Hantrakool, S., Chai-Adisaksopha, C., Rattarittamrong, E., Norasetthada, L. 2018. Useful clinical features and hematological parameters for the diagnosis of dengue infection in patients with acute febrile illness: A retrospective study. *BMC Hematol.*, 18(1):1–10.
- Chan, A.S., Rout, A. 2020. Use of Neutrophil-to-Lymphocyte and Platelet-to-Lymphocyte Ratios in COVID-19. *J. Clin. Med. Res.*, 12(7):448–453.
- Chao, C.-H., Wu, W.-C., Lai, Y.-C., Tsai, P.-J., Perng, G.-C., Lin, Y.-S., Yeh, T.-M. 2019. Dengue virus nonstructural protein 1 activates platelets via Toll-like receptor 4, leading to thrombocytopenia and hemorrhage. *PLOS Pathog.* Edited by R.J. Kuhn, 15(4):e1007625.
- Chatterjee, A.B., Matti, M., Kulkarni, V. 2020. Role of platelet parameters in dengue fever in children. *Pediatr. Oncall*, 17(1):12–15.
- Clark KB, Noisakran S, Onlamoon N, Hsiao HM, Roback J, Villinger F, Ansari AA, P.G. 2012. Multiploid CD61+ Cells are the Pre-dominant cell lineage infected during acute dengue virus infection in bone marrow. *PLoS One*, 7(12). Available at: <https://pubmed.ncbi.nlm.nih.gov/23300812/> e52902.
- Dewi, S.R., Sukorini, U., Intansari, U.S. 2018. Correlation of enhancement Mean Platelet Volume (MPV) with severity of dengue infection. *IOP Conf. Ser. Mater. Sci. Eng.*, 434(1):3–7.
- Dhivyanarayani, M., Gomathi, R., Veronica, J., Gunasekaran, A. 2023. Evaluation of the efficacy of neutrophil-to-lymphocyte and platelet-to-lymphocyte ratios in prognosis and severity of dengue fever in children. *Eur. & Clinical Medicine*, 10(03):951–958.
- Erdal, E., İnanır, M. 2019. Platelet-to-lymphocyte ratio (PLR) and Plateletcrit (PCT) in young patients with morbid obesity. *Rev. Assoc. Med. Bras.*, 65(9):1182–1187.
- Eren, S.H., Zengin, S., Büyüktuna, S.A., Gözel, M.G. 2016. Clinical severity in forecasting platelet to lymphocyte ratio in Crimean – Congo hemorrhagic fever patients. *J. Med. Microbiol.*, 1100–1104.
- Falconar, A.K.I. 1997. The dengue virus nonstructural-1 protein (NS1) generates antibodies to common epitopes on human blood clotting, integrin/adhesin proteins and binds to human endothelial cells: potential implications in haemorrhagic fever pathogenesis. *Arch. Virol.*, 142(5):897–916.



- Faridah, I.N., Dania, H., Chen, Y.H., Supadmi, W., Purwanto, B.D., Heriyanto, M.J., Aufa, M.A., Chang, W.C., Perwitasari, D.A. 2022. Dynamic Changes of Platelet and Factors Related Dengue Haemorrhagic Fever: A Retrospective Study in Indonesian. *Diagnostics*, 12(4):1–12.
- Florence Salvatory Kalabamu, S.M. 2021. Use of Haematological Changes as a Predictor of Dengue Infection among Suspected Cases at Kairuki Hospital in Dar Es Salaam, Tanzania: A Retrospective Cross Sectional Study. *East African Heal. Res. J.*, 5(1):99–105.
- Gupta, B.K., Nehara, H.R., Meena, S.L., Parmar, S. 2016. Evaluation of Platelet Indices in Patients With Dengue Infections. *Int. J. Sci. Res.*, 5(7):78–81.
- Harapan, H., Michie, A., Mudatsir, M., Sasmono, R.T., Imrie, A. 2019. Epidemiology of dengue hemorrhagic fever in Indonesia: Analysis of five decades data from the National Disease Surveillance. *BMC Res. Notes*, 12(1):4–9.
- Ho, T.S., Wang, S.M., Lin, Y.S., Liu, C.C. 2013. Clinical and laboratory predictive markers for acute dengue infection. *J. Biomed. Sci.*, 20(1):1–8.
- Huy, B.V., Toàn, N.V. 2022. Prognostic indicators associated with progresses of severe dengue. *PLoS One*, 17(1 January):1–11.
- Indumathi, S., Anoosha, K., Lakshmi, V. 2019. Assessment of Platelet Indices as Prognostic Markers in Seropositive Cases of Dengue. *J. Med. Sci. Clin. Res.*, 7(9):322–326.
- Kementerian Kesehatan Republik Indonesia. 2020. *Pedoman Nasional Pelayanan Kedokteran Tata Laksana Infeksi Dengue Pada Dewasa*. Indonesia.
- Kementerian Kesehatan Republik Indonesia. 2021. *Pedoman Nasional Pelayanan Kedokteran Tata Laksana Infeksi Dengue Anak dan Remaja*. Indonesia.
- Khatri, S., Sabeena, S., Arunkumar, G., Mathew, M. 2018. Utility of Platelet Parameters in Serologically Proven Dengue Cases with Thrombocytopenia. *Indian J. Hematol. Blood Transfus.*, 34(4):703–706.
- Kuczera, D., Assolini, J.P., Tomiotto-Pellissier, F., Pavanelli, W.R., Silveira, G.F. 2018. Highlights for Dengue Immunopathogenesis: Antibody-Dependent Enhancement, Cytokine Storm, and Beyond. *J. Interf. Cytokine Res.*, 38(2):69–80.
- Kularatnam, G.A.M., Jasinge, E., Gunasena, S., Samaranayake, D., Senanayake, M.P., Wickramasinghe, V.P. 2019. Evaluation of biochemical and haematological changes in dengue fever and dengue hemorrhagic fever in Sri Lankan children: A prospective follow up study. *BMC Pediatr.*, 19(1):1–9.
- Kumar, N., Swamy, M., Chakraborti, S., Kini, J., Singh, T., Sahay, B., Singh, S. 2018. Correlation of Mean Platelet Volume and Platelet Distribution Width in Risk Categories of Dengue Fever- a Pilot Study. *J. Evol. Med. Dent. Sci.*, 7(02):142–145.
- Lam, P.K., Ngoc, T. Van, Thu Thuy, T.T., Hong Van, N.T., Nhu Thuy, T.T., Hoai Tam, D.T., Dung, N.M., Hanh Tien, N.T., Thanh Kieu, N.T., Simmons, C., Wills. 2017. The value of daily platelet counts for predicting dengue shock syndrome: Results from a prospective observational study of 2301 Vietnamese children with dengue. *PLoS Negl. Trop. Dis.*, 11(4):1–20.



- Lien, T.S., Chan, H., Sun, D.S., Wu, J.C., Lin, Y.Y., Lin, G.L., Chang, H.H. 2021. Exposure of Platelets to Dengue Virus and Envelope Protein Domain III Induces Nlrp3 Inflammasome-Dependent Platelet Cell Death and Thrombocytopenia in Mice. *Front. Immunol.*, 12(April):1–13.
- Malavige, G.N., Ogg, G.S. 2017. Pathogenesis of vascular leak in dengue virus infection. *Immunology*, 151(3):261–269.
- Manoharan, A., Sinha, P. 2017. Role of mean platelet volume in dengue fever—aproxgnostic marker. *Intl J Res Rev*, 4(6):72–77.
- Mapalagamage, M., Handunnetti, S.M., Wickremasinghe, A.R., Premawansa, G., Thillainathan, S., Fernando, T., Kanapathipillai, K., Silva, A.D. De, Premawansa, S. 2020. High Levels of Serum Angiopoietin 2 and Angiopoietin 2/1 Ratio at the Critical Stage of Dengue Hemorrhagic Fever in Patients and Association with Clinical and Biochemical Parameters. *Am. Soc. Microbiol.*, 58(4).
- Mapalagamage, M., Weiskopf, D., Sette, A., De Silva, A.D. 2022. Current Understanding of the Role of T Cells in Chikungunya, Dengue and Zika Infections. *Viruses*, 14(2):242.
- Mariko, R., Rachmawati, N., Amelin, F., Hadinegoro, S.R. 2022. The Role of Angiopoietin-2 on Plasma Leakage in the Critical Phase and Convalescence of Dengue Virus Infection in Children. *Open Access Maced. J. Med. Sci.*, 10(A):675–679.
- Mathews, S., Rajan, A., Soans, S. 2018. Prognostic value of rise in neutrophil to lymphocyte ratio and platelet to lymphocyte ratio in predicting the mortality in pediatric intensive care. *J. Pediatr. Crit. Care*, 5(8):71.
- de Matos, A.M., Carvalho, K.I., Rosa, D.S., Villas-Boas, L.S., da Silva, W.C., Rodrigues, C.L. de L., Oliveira, O.M.N.P.F., Levi, J.E., Araújo, E.S.A., Pannuti, C.S., Luna, E.J.A., Kallas, E.G. 2015. CD8+ T Lymphocyte Expansion, Proliferation and Activation in Dengue Fever. *PLoS Negl. Trop. Dis.*, 9(2):1–14.
- Nanaware, N., Banerjee, A., Bagchi, S.M., Bagchi, P., Mukherjee, A. 2021. Dengue virus infection: A tale of viral exploitations and host responses. *Viruses*, 13(10).
- Ojha, A., Nandi, D., Batra, H., Singhal, R., Annarapu, G.K., Vikram, N.K., Guchhait, P. 2017. Platelet activation determines the severity of thrombocytopenia in dengue infection. *Nat. Publ. Gr.*, (January):1–10.
- Pai Jakribettu, R., Boloor, R., Thaliath, A., Yesudasan George, S., George, T., Ponadka Rai, M., Rafique Sheikh, U., Avabratha, K.S., Baliga, M.S. 2015. Correlation of clinicohaematological parameters in paediatric dengue: A retrospective study. *J. Trop. Med.*, 2015.
- Pathak, B., Chakravarty, A., Krishnan, A. 2021. High viral load positively correlates with thrombocytopenia and elevated haematocrit in dengue infected paediatric patients. *J. Infect. Public Health*, 14(11):1701–1707.
- Qian, F., Zhou, W., Liu, Y., Ge, Z., Lai, J., Zhao, Z., Feng, Y., Lin, L., Shen, Y., Zhang, Z., Zhang, W., Fan, T., Zhao, Y., Chen, Z. 2023. High C-reactive protein to lymphocyte ratio predicts mortality outcomes of patients with severe fever with thrombocytopenia syndrome: A multicenter study in



- China. *J. Med. Virol.*, 95(2).
- Quirino-Teixeira, A.C., Andrade, F.B., Pinheiro, M.B.M., Rozini, S.V., Hottz, E.D. 2022. Platelets in dengue infection: more than a numbers game. *Platelets*, 33(2):176–183.
- Ralapanawa, U., Alawattegama, A.T.M., Gunrathne, M., Tennakoon, S., Kularatne, S.A.M., Jayalath, T. 2018. Value of peripheral blood count for dengue severity prediction. *BMC Res. Notes*, 11(1):4–9.
- Rathore, A., Farouk, F.S., John, A.L. 2020. Risk factors and biomarkers of severe dengue. *Curr. Opin. Virol.*, 43:1–8.
- Rini, T.Y., Abadi, S., Katu, S., Bakri, S., Rasyid, H., Kasim, H., Fachruddin, A., Halim, R. 2020. European Journal of Molecular & Clinical Medicine Association of bacterial/viral infections with neutrophil-lymphocyte ratio, monocyte-lymphocyte ratio, and platelet-lymphocyte ratio in patients presenting with fever. *Eur. J. Mol. Clin. Med.*, 7(3):1500–1509.
- Rivino, L. 2018. *Dengue and Zika: Control and Antiviral Treatment Strategies*. Edited by R. Hilgenfeld and S.G. Vasudevan. Singapore: Springer Singapore (Advances in Experimental Medicine and Biology).
- Roy, S.K., Bhattacharjee, S. 2021. Dengue virus: Epidemiology, biology, and disease aetiology. *Can. J. Microbiol.*, 67(10):687–702.
- Sánchez-Vargas, L.A., Hernández-Flores, K.G., Thomas-Dupont, P., Izaguirre-Hernández, I.Y., Sánchez-Marce, E.E., Remes-Ruiz, R., Fonseca-Coronado, S., Hernández-Romano, P.A., Flores-Collins, M.E., Vivanco-Cid, H. 2020. Characterization of the il-17 and cd4+ th17 cells in the clinical course of dengue virus infections. *Viruses*, 12(12):1435.
- da Silva, N.S., Undurraga, E.A., Verro, A.T., Nogueira, M.L. 2018. Comparison between the traditional (1997) and revised (2009) WHO classifications of dengue disease: a retrospective study of 30 670 patients. *Trop. Med. Int. Heal.*, 23(12):1282–1293.
- Silveira, G.F., Wowk, P.F., Cataneo, A.H.D., dos Santos, P.F., Delgobo, M., Stimamiglio, M.A., Lo Sarzi, M., Thomazelli, A.P.F.S., Conchon-Costa, I., Pavanelli, W.R., Antonelli, L.R. V, Báfica, A., Mansur, D.S., dos Santos, C.N.D., Bordignon, J. 2018. Human T Lymphocytes Are Permissive for Dengue Virus Replication. *J. Virol.* Edited by M.S. Diamond, 92(10).
- Suwarto, S., Ulhaq, S., Widjaja, B. 2017. Combination of three laboratory data as predictor of severe dengue in adults : a retrospective cohort study. *Universa Med.*, 36(1):19.
- Talukdar, S., Thanachartwet, V., Desakorn, V., Chamnanchan, S., Sahassananda, D., Vangveeravong, M., Kalayanarooj, S. 2021. Predictors of plasma leakage among dengue patients in Thailand: A plasma-leak score analysis. *PLoS One*, 16(7 July 2021):1–21.
- Thach, T.Q., Eisa, H.G., Hmeda, A. Ben, Faraj, H., Thuan, T.M., Abdelrahman, M.M., Awadallah, M.G., Ha, N.X., Noeske, M., Aziz, J.M.A., Nam, N.H., Nile, M. El, Dumre, S.P., Huy, N.T., Hirayama, K. 2021. Predictive markers for the early prognosis of dengue severity: A systematic review and meta-analysis. *PLoS Negl. Trop. Dis.*, 15(10):1–25.



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- Tramontini Gomes de Sousa Cardozo, F., Baimukanova, G., Lanteri, M.C., Keating, S.M., Moraes Ferreira, F., Heitman, J., Pannuti, C.S., Pati, S., Romano, C.M. 2017. Serum from dengue virus-infected patients with and without plasma leakage differentially affects endothelial cells barrier function in vitro. *PLoS One*. Edited by D.-Y. Jin, 12(6):e0178820.
- Upasani, V., Vo, H.T.M., Auerswald, H., Laurent, D., Heng, S., Duong, V., Rodenhuis-Zybert, I.A., Dussart, P., Cantaert, T. 2021. Direct Infection of B Cells by Dengue Virus Modulates B Cell Responses in a Cambodian Pediatric Cohort. *Front. Immunol.*, 11(February):1–13.
- WHO. 2009. Dengue Guidelines for Diagnosis, Treatment, Prevention And Control.in. Elsevier, 257–259.
- WHO. 2011. *Comprehensive guidelines for prevention and control of dengue and dengue haemorrhagic fever*. WHO Reg. Publ. SEARO. Available at: <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Comprehensive+Guidelines+for+Prevention+and+Control+of+Dengue+and+Dengue+Haemorrhagic+Fever#1>.
- Zhang, W., Shen, Y. 2018. Platelet-to-Lymphocyte Ratio as a New Predictive Index of Neurological Outcomes in Patients with Acute Intracranial Hemorrhage: A Retrospective Study. *Med. Sci. Monit.*, 24:4413–4420.