Daftar Pustaka

1. Abbas, A.K., Lichtman, A.H. and Pillai, S., 2016. Pengenalan Antigen dalam Sistem Imun Adaptif. In: Abbas, A.K., Lichtman, A.H. and Pillai, S., (eds.) *Imunologi Dasar Abbas*. Elsevier, singapore.
2. Abbas, A.K., Lichtman, Andrew H. and Pillai, S., 2017. Cells and Tissues of Immune System. In: Abbas, A.K., Lichtman, Andew H and Pillai, S., (eds.) *Cellular and Molecular Immunology*. Elsevier, Philadelphia, pp. 13–37.
3. Abel, L. and Casanova, J.-L., 2024. Human determinants of age-dependent patterns of death from infection. *Immunity*, 57(7), pp.1457–1465. Available at: https://www.sciencedirect.com/science/article/pii/S1074761324002747.
4. Adams, T.L. et al., 2019. 10 - Essentials of Hematology. In: Coté, C.J., Lerman, J. and Anderson, B.J., (eds.) *A Practice of Anesthesia for Infants and Children (Sixth Edition)*. Elsevier, Philadelphia, pp. 217-239.e8.
5. Agnello, L. et al., 2021. The Value of a Complete Blood Count (CBC) for Sepsis Diagnosis and Prognosis. *Diagnostics*, 11(10), p.1881. Available at: https://www.mdpi.com/2075-4418/11/10/1881.
6. Agnes, M., Widjajanto, P.H. and Damayanti, W., 2018. Impact of malnutrition on febrile neutropenia in children with acute lymphoblastic leukemia during induction phase chemotherapy. *Paediatrica Indonesiana*, 58(6), pp.298–304.
7. Aisyi, M. et al., 2020. Sepsis in Children with Acute Lymphoblastic Leukemia. *Indonesian Journal of Cancer*, 14(4), p.121.
8. Alaggio, R. et al., 2022. The 5th edition of the World Health Organization Classification of Haematolymphoid Tumours: Lymphoid Neoplasms. *Leukemia*, 36(7), pp.1720–1748. Available at: https://doi.org/10.1038/s41375-022-01620-2.
9. An, H. et al., 2024. Persistent CD19+ B cell lymphopenia in critically ill COVID-19 patients 50 days after symptom onset. *Frontiers in Cellular and Infection Microbiology*, Volume 14-2024. Available at: https://www.frontiersin.org/journals/cellular-and-infection-microbiology/articles/10.3389/fcimb.2024.1488607.
10. Andi Cahyadi et al., 2023. Region Variation of Hematological Malignancies and Solid Tumors in Children in East Java. *Asian Journal of Health Research*, 2(1), pp.27–33.
11. André, S. et al., 2022. T cell apoptosis characterizes severe Covid-19 disease. *Cell Death & Differentiation*, 29, pp.1–14.
12. Anggraini, D., Hasni, D. and Amelia, R., 2022. *Pathogenesis of Sepsis*,
13. Arini, I.A., Masyeni, S. and Widhidewi, N.W., 2024. Relationship between neutrophil-lymphocyte ratio and platelet-lymphocyte ratio with the severity

of COVID-19. *Narra J*, 4(1), p.e262. Available at: https://narraj.org/main/article/view/262.

14. Athale, U. et al., 2019. Management of chronic myeloid leukemia in children and adolescents: Recommendations from the Children's Oncology Group CML Working Group. *Pediatric Blood & Cancer*, 66(9), p.e27827. Available at: https://doi.org/10.1002/pbc.27827.
15. Bochennek, K. et al., 2016. Infectious complications in children with acute myeloid leukemia: decreased mortality in multicenter trial AML-BFM 2004. *Blood Cancer Journal*, 6(1), pp.e382–e382. Available at: https://doi.org/10.1038/bcj.2015.110.
16. Buonacera, A., Stancanelli, B., Colaci, M. and Malatino, L., 2022. Neutrophil to Lymphocyte Ratio: An Emerging Marker of the Relationships between the Immune System and Diseases. *International Journal of Molecular Sciences*, 23(7). Available at: https://www.mdpi.com/1422-0067/23/7/3636.
17. Cicchinelli, S. et al., 2024. PAMPs and DAMPs in Sepsis: A Review of Their Molecular Features and Potential Clinical Implications. *International Journal of Molecular Sciences*, 25(2). Available at: https://www.mdpi.com/1422-0067/25/2/962.
18. Çorbacıoğlu, Ş.K. and Aksel, G., 2023. Receiver operating characteristic curve analysis in diagnostic accuracy studies: A guide to interpreting the area under the curve value. *Turkish Journal of Emergency Medicine*, 23(4). Available at: https://journals.lww.com/tjem/fulltext/2023/23040/receiver_operating_characteristic_curve_analysis.1.aspx.
19. Dahlan, M.S., 2010. *Besar Sampel dan Cara Pengambilan Sampel dalam Penelitian Kedokteran dan Kesehatan* 3rd ed. Suslia, A., (ed.), Salemba Medika, Jakarta.
20. Davidson, S.M., Tauho, K.D., Renyoet, B.S. and Wijaya, C.D.P., 2025. Vitamin D Intake, Probiotic Intake, and Infection Incidence and Nutritional Status in Children Aged 24–59 Months. *Jurnal Keperawatan Profesional (KEPO)*, 6(2), pp.269–280.
21. Davies, K. and McLaren, J.E., 2024. Destabilisation of T cell-dependent humoral immunity in sepsis. *Clinical Science*, 138(1), pp.65–85. Available at: https://doi.org/10.1042/CS20230517.
22. Farma Meylina, T. and Santoso, J., 2024. Uji Efektivitas Ekstrak Daun Kedondong Bangkok (Spondias Dulcis Forts) Terhadap Bakteri Staphylococcus Aureus Dan Pseudomonas Aeruginosa. *Jurnal Kesehatan Republik Indonesia*, 1(9).
23. Febriani, T.B., Dwi Lestari, R. and Nugraheti, P.M., 2024. Characteristics of Urinary Tract Infection in 1-17 Years Old Children. *Jurnal Aisyah: Jurnal Ilmu Kesehatan*, 9(2), pp.1259–1272.

24. Gay, L. et al., 2021. Sexual Dimorphism and Gender in Infectious Diseases. *Frontiers in Immunology*, Volume 12-2021. Available at: https://www.frontiersin.org/journals/immunology/articles/10.3389/fimmu.2021.698121.
25. Hansen, B.A. et al., 2020. Febrile Neutropenia in Acute Leukemia. Epidemiology, Etiology, Pat hophysiology and Treatment. *Mediterranean Journal of Hematology and Infectious Diseases*, 11(1).
26. Hasibuan, B.S., Dasatjipta, G., Lubis, B.M. and Sanny, S., 2024. Role of neutrophil-to-lymphocyte ratio and platelet-to-lymphocyte ratio in diagnosing neonatal sepsis. *Narra J*, 4(2).
27. Hassan, M. et al., 2010. Hospital Length of Stay and Probability of Acquiring Infection. *International Journal of Pharmaceutical and Healthcare Marketing*, 4, pp.324–338.
28. Hermon, M.M. et al., 2021. Pediatric infection and sepsis in five age subgroups: single-center registry. *Wiener Medizinische Wochenschrift*, 171(1), pp.29–35. Available at: https://doi.org/10.1007/s10354-020-00787-6.
29. Ho, F.D. V. et al., 2024. The Burden of Hematologic Malignancies in Southeast Asia from 1990 to 2021: Estimates from the Global Burden of Disease Study. *Blood*, 144(Supplement 1), pp.7755–7755.
30. Hortová-Kohoutková, M. et al., 2020. Phagocytosis–Inflammation Crosstalk in Sepsis: New Avenues for Therapeutic Intervention. *Shock*, 54(5). Available at: https://journals.lww.com/shockjournal/fulltext/2020/11000/phagocytosis_inflammation_crosstalk_in_sepsis__new.4.aspx.
31. Hotchkiss, R.S., Monneret, G. and Payen, D., 2013. Sepsis-induced immunosuppression: from cellular dysfunctions to immunotherapy. *Nature Reviews Immunology*, 13(12), pp.862–874. Available at: https://doi.org/10.1038/nri3552.
32. Ilboudo, A.K. et al., 2024. Predictors of severity and prolonged hospital stay of viral acute respiratory infections (ARI) among children under five years in Burkina Faso, 2016–2019. *BMC Infectious Diseases*, 24(1), p.331. Available at: https://doi.org/10.1186/s12879-024-09219-x.
33. Jensen, I.J., Sjaastad, F. V, Griffith, T.S. and Badovinac, V.P., 2018. Sepsis-Induced T Cell Immunoparalysis: The Ins and Outs of Impaired T Cell Immunity. *The Journal of Immunology*, 200(5), pp.1543–1553. Available at: https://doi.org/10.4049/jimmunol.1701618.
34. Joudeh, N. et al., 2023. Epidemiology and source of infection in cancer patients with febrile neutropenia: an experience from a developing country. *BMC Infectious Diseases*, 23(1), p.106.

35. Li, D. and Wu, M., 2021. Pattern recognition receptors in health and diseases. *Signal Transduction and Targeted Therapy*, 6(1), p.291. Available at: https://doi.org/10.1038/s41392-021-00687-0.
36. Li, T. et al., 2020. Association of Neutrophil–Lymphocyte Ratio and the Presence of Neonatal Sepsis. *Journal of Immunology Research*, 2020(1), p.7650713. Available at: https://doi.org/10.1155/2020/7650713.
37. Liesveld, J.L. and Lichtman, M.A., 2016. Acute Myelogenous Leukemia . In: Kaushansky, K. et al., (eds.) *Williams Hematology*. McGraw-Hill Education, New York, pp. 1373–1436.
38. Longo, D.L., 2010. Malignancies of Lymphoid Cells. In: Longo, D.L. et al., (eds.) *Harrison's Hematology and Oncology*. McGraw-Hill Education, New York, pp. 182–190.
39. Lopez, J. and Tait, S.W.G., 2015. Mitochondrial apoptosis: killing cancer using the enemy within. *British Journal of Cancer*, 112(6), pp.957–962. Available at: https://doi.org/10.1038/bjc.2015.85.
40. Majid, H. et al., 2024. Spectrum of infections in different regimens of post-induction chemotherapy in acute myeloid leukemia (de-novo): A comparative retrospective study. *Heliyon*, 10(3), p.e24561. Available at: https://www.sciencedirect.com/science/article/pii/S2405844024005929.
41. Malik, I.A. et al., 2017. Sepsis and Acute Myeloid Leukemia: A Population-Level Study of Comparative Outcomes of Patients Discharged From Texas Hospitals. *Clinical Lymphoma Myeloma and Leukemia*, 17(12), pp.e27–e32. Available at: https://www.sciencedirect.com/science/article/pii/S2152265017306833.
42. Martins, P.S. et al., 2001. Neutrophil apoptosis, phagocytosis and oxidative metabolism in septic patients. *Critical Care*, 5(1), p.P056. Available at: https://doi.org/10.1186/cc1124.
43. Mekonnen, G.K. et al., 2024. Relative Burden of Neglected Tropical Diseases Among School-Age Children in Rural and Urban Slum Settings in Eastern Ethiopia. *Preprints*. Available at: https://doi.org/10.20944/preprints202410.1719.v1.
44. Mellors, J., Tipton, T., Longet, S. and Carroll, M., 2020. Viral Evasion of the Complement System and Its Importance for Vaccines and Therapeutics. *Frontiers in Immunology*, 11.
45. Menteri Kesehatan Republik Indonesia, 2021. Pedoman Nasional Pelayanan Kedokteran Tata Laksana Sepsis pada Anak. *Kementerian Kesehatan Republik Indonesia*, pp.10–44.
46. Milot, E., Fotouhi-Ardakani, N. and Filep, J.G., 2012. Myeloid nuclear differentiation antigen, neutrophil apoptosis and sepsis. *Frontiers in Immunology*, Volume 3-2012. Available at: https://www.frontiersin.org/journals/immunology/articles/10.3389/fimmu.2012.00397.

47. Morales, F., Montserrat-de la Paz, S., Leon, M.J. and Rivero-Pino, F., 2023. Effects of Malnutrition on the Immune System and Infection and the Role of Nutritional Strategies Regarding Improvements in Children's Health Status: A Literature Review. *Nutrients*, 16(1), p.1.
48. Muennichow, C.E. et al., 2018. Clinical outcome, healthcare cost and length of hospital stay among patients with bloodstream infections and acute leukemia in a cancer center in eastern india. *Infection control and hospital epidemiology*, 39(8), pp.1013–1014.
49. Murni, I.K. et al., 2022. Risk factors for healthcare-associated infection among children in a low-and middle-income country. *BMC Infectious Diseases*, 22(1), p.406. Available at: https://doi.org/10.1186/s12879-022-07387-2.
50. Noseykina, E.M., Schepetkin, I.A. and Atochin, D.N., 2021. Molecular Mechanisms for Regulationof Neutrophil Apoptosis under Normal and Pathological Conditions. *Journal of Evolutionary Biochemistry and Physiology*, 57(3), pp.429–450. Available at: https://doi.org/10.1134/S0022093021030017.
51. Nurrizky, A. and Nurhayati, F., 2018. PERBANDINGAN ANTROPOMETRI GIZI BERDASARKAN BB/U, TB/U, DAN IMT/U SISWA SD KELAS BAWAH ANTARA DATARAN TINGGI DAN DATARAN RENDAH DI KABUPATEN PROBOLINGGO. *Jurnal Pendidikan Olahraga dan Kesehatan*, 6(1).
52. Nutt, S.L., Hodgkin, P.D., Tarlinton, D.M. and Corcoran, L.M., 2015. The generation of antibody-secreting plasma cells. *Nature Reviews Immunology*, 15(3), pp.160–171. Available at: https://doi.org/10.1038/nri3795.
53. Okbasilasie, S.B., Hailemichael, S.T., Ghebriel, T.M. and Gebreyesus, T.G., 2024. Assessing the prevalence of tinea capitis in primary school children and identification of etiologic agents, in sub zone Gala-Nefhi, Eritrea. *Discover Medicine*, 1(1), p.106. Available at: https://doi.org/10.1007/s44337-024-00122-7.
54. Owen, Judith A, Punt, J., Stranford, S.A. and Jones, P.P., 2013a. B-Cell Development. In: Schultz, L. et al., (eds.) *Kuby Immunology 7th Edition*. W. H. Freeman and Company, new york, pp. 329–356.
55. Owen, Judith A, Punt, J., Stranford, S.A. and Jones, P.P., 2013b. Effector Responses: Cell- and Antibody-Mediated Immunity. In: Schultz, L. et al., (eds.) *Kuby Immunology 7th Edition*. W. H. Freeman and Company, new york, pp. 415–450.
56. Owen, Judith A., Punt, J., Stranford, S.A. and Jones, P.P., 2013. T-Cell Development. In: Schultz, L. et al., (eds.) *Kuby Immunology 7th Edition*. W. H. Freeman and Company, new york, pp. 299–328.
57. Öztekin Güntaş, Ş. et al., 2023. Microbiologically Documented Infection-related Mortality in Children with Acute Leukemia: A Single-center Experience. *The Journal of Pediatric Academy*.

58. P, D.S., C, B.M. and Diederik, van de B., 2022. Sex and Gender Differences in Bacterial Infections. *Infection and Immunity*, 90(10), pp.e00283-22. Available at: https://doi.org/10.1128/iai.00283-22.
59. Pagliaro, L. et al., 2024. Acute lymphoblastic leukaemia. *Nature Reviews Disease Primers*, 10(1), p.41. Available at: https://doi.org/10.1038/s41572-024-00525-x.
60. Panda, S.K., Nayak, M.K., Rath, S. and Das, P., 2021. The Utility of the Neutrophil-Lymphocyte Ratio as an Early Diagnostic Marker in Neonatal Sepsis. *Cureus*, 13(1), p.e12891. Available at: http://dx.doi.org/10.7759/cureus.12891.
61. Peakman, M. and Vergani, D., 2009. Acquired Immunity : antigen receptor. In: Peakman, M. and Vergani, D., (eds.) *Basic and Clinical Immunology E-Book*. Churchill Livingstone, pp. 35–38.
62. Perdana, A.B., Saputra, F. and Aisyi, M., 2020. Update on Diagnosis of Childhood Acute Lymphoblastic Leukemia (ALL) in Indonesia. *Indonesian Journal of Cancer*, 14(4), p.115.
63. Pieper, K., Grimbacher, B. and Eibel, H., 2013. B-cell biology and development. *Journal of Allergy and Clinical Immunology*, 131(4), pp.959–971. Available at: https://linkinghub.elsevier.com/retrieve/pii/S009167491300256X.
64. Purba, A.K.R. et al., 2020. The burden and costs of sepsis and reimbursement of its treatment in a developing country: An observational study on focal infections in Indonesia. *International Journal of Infectious Diseases*, 96, pp.211–218. Available at: https://www.sciencedirect.com/science/article/pii/S1201971220302940.
65. Putter, J.S. and Seghatchian, J., 2023. T-cell lymphocytopenia: An omnipresent predictor of morbidity and mortality in consequence of SARS-CoV disease and influenza A infections. *Cytokine*, 165, p.156163. Available at: https://www.sciencedirect.com/science/article/pii/S1043466623000418.
66. Resende, C.B. et al., 2020. Neutrophil activity in sepsis: a systematic review. *Brazilian Journal of Medical and Biological Research*, 53(12). Available at: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0100-879X2020001200601&tlng=en.
67. Rychlik, K. et al., 2025. Superficial Fungal Infections in Children—What Do We Know? *Journal of Clinical Medicine*, 14(20), p.7380. Available at: https://www.mdpi.com/2077-0383/14/20/7380.
68. Sachetto Nigel, A.T.A.; M., 2023. Monocyte Tissue Factor Expression: Lipopolysaccharide Induction and Roles in Pathological Activation of Coagulation. *Thrombosis and Haemostasis*, 123(11), pp.1017–1033. Available at: http://www.thieme-connect.de/products/ejournals/abstract/10.1055/a-2091-7006.

69. Sender, R. et al., 2023. The total mass, number, and distribution of immune cells in the human body. *Proceedings of the National Academy of Sciences*, 120(44), p.e2308511120. Available at: https://doi.org/10.1073/pnas.2308511120.
70. Şenol, H.B., Tüfekçi Gürocak, Ö., Yılmaz, Ş. and Ören, H., 2025. Clinical and laboratory characteristics of children with leukemia: a 34-year single-center experience. *The Turkish Journal of Pediatrics*, 67(4), pp.559–568. Available at: https://turkjpediatr.org/article/view/6171.
71. Sheehy, J., Gallanagh, M., Sullivan, C. and Lane, S., 2025. Clinical prediction models for febrile neutropenia and its outcomes: a systematic review. *Supportive Care in Cancer*, 33(7), p.537. Available at: https://doi.org/10.1007/s00520-025-09562-y.
72. Sheshachalam, A. et al., 2014. Granule Protein Processing and Regulated Secretion in Neutrophils. *Frontiers in Immunology*, 5. Available at: https://www.frontiersin.org/journals/immunology/articles/10.3389/fimmu.2014.00448.
73. Singh, G., Tucker, E.W. and Rohlwink, U.K., 2022. Infection in the Developing Brain: The Role of Unique Systemic Immune Vulnerabilities. *Frontiers in Neurology*, Volume 12-2021. Available at: https://www.frontiersin.org/journals/neurology/articles/10.3389/fneur.2021.805643.
74. Sinha, P. et al., 2021. Food for thought: addressing undernutrition to end tuberculosis. *The Lancet Infectious Diseases*, 21(10), pp.e318–e325. Available at: https://doi.org/10.1016/S1473-3099(20)30792-1.
75. Song, M., Graubard, B.I., Rabkin, C.S. and Engels, E.A., 2021. Neutrophil-to-lymphocyte ratio and mortality in the United States general population. *Scientific Reports*, 11(1), p.464. Available at: https://doi.org/10.1038/s41598-020-79431-7.
76. Sri, P. et al., 2016. *KONSENSUS Diagnosis dan Tata Laksana Sepsis pada Anak IKATAN DOKTER ANAK INDONESIA 2016* 1st ed., Badan Penerbit Ikatan Dokter Anak Indonesia.
77. Starikova, E.A. et al., 2025. Activation of the Coagulation Cascade as a Universal Danger Sign. *Current Issues in Molecular Biology*, 47(2). Available at: https://www.mdpi.com/1467-3045/47/2/108.
78. Sukrisman, L., 2021. Isolat Bakteri pada Surveilans Bakterial dan Demam Neutropenia pada Pasien Leukemia Akut Dewasa di Rumah Sakit Cipto Mangunkusumo. *Jurnal Penyakit Dalam Indonesia*, 8(1), p.32.
79. Sun, L. et al., 2023. T cells in health and disease. *Signal Transduction and Targeted Therapy*, 8(1), p.235. Available at: https://doi.org/10.1038/s41392-023-01471-y.
80. Supriyadi, E. et al., 2024. Infection-related mortality and infection control practices in childhood acute myeloid leukemia in a limited resource setting: Experience with the Indonesian national protocol. *Belitung Nursing*

Journal, 10(2), pp.185–191. Available at: https://www.belitungraya.org/BRP/index.php/bnj/article/view/3139.

81. Taj, M. et al., 2015. Clinical and Microbiological Profile of Pathogens in Febrile Neutropenia in Hematological Malignancies: A Single Center Prospective Analysis. *Journal of Oncology*, 2015(1), p.596504. Available at: https://doi.org/10.1155/2015/596504.
82. Theilgaard-Mönch, K., Porse, B.T. and Borregaard, N., 2006. Systems biology of neutrophil differentiation and immune response. *Current Opinion in Immunology*, 18(1), pp.54–60. Available at: https://www.sciencedirect.com/science/article/pii/S0952791505002037.
83. Van Tine, B.A. and Jacoby, M.A., 2025. *The Washington manual hematology and oncology subspecialty consult* Fifth edition., Wolters Kluwer, Philadelphia, PA.
84. Tobón, G.J., Izquierdo, J.H. and Cañas, C.A., 2013. B Lymphocytes: Development, Tolerance, and Their Role in Autoimmunity—Focus on Systemic Lupus Erythematosus. *Autoimmune Diseases*, 2013(1), p.827254. Available at: https://doi.org/10.1155/2013/827254.
85. Uzan, M.M., Balcı, U.G. and Yılmazer, T.T., 2025. Neutrophil/Lymphocyte Ratio as a Marker of Infections in Patients Hospitalized in the Oncology Palliative Care Service. *The Anatolian Journal of General Medical Research*.
86. Wah Goh, L.P. et al., 2023. The prevalence of hospital-acquired infections in Southeast Asia (1990-2022). *Journal of Infection in Developing Countries*, 17(2), pp.139–146.
87. Wang, J. et al., 2021. Upregulated PD-L1 delays human neutrophil apoptosis and promotes lung injury in an experimental mouse model of sepsis. *Blood*, 138(9), pp.806–810. Available at: https://doi.org/10.1182/blood.2020009417.
88. Wang, Z. et al., 2024. Lymphopenia in sepsis: a narrative review. *Critical Care*, 28(1), p.315. Available at: https://doi.org/10.1186/s13054-024-05099-4.
89. Wiersinga, W.J. and Seymour, C.W., 2018. *Handbook of Sepsis* 1st ed. Seymour, C.W. and Wiersinga, W.J., (eds.), Springer International Publishing AG part of Springer Nature, Cham.
90. Williams, J.C., Ford, M.L. and Coopersmith, C.M., 2023. Cancer and sepsis. *Clinical Science*, 137(11), pp.881–893. Available at: https://doi.org/10.1042/CS20220713.
91. Yin, Xuejiao, Hu, Xuelian, Tong, Hongyan and You, Liangshun, 2023. Trends in mortality from infection among patients with hematologic malignancies: differences according to hematologic malignancy subtype. *Therapeutic Advances in Chronic Disease*, 14, p.20406223231173892. Available at: https://doi.org/10.1177/20406223231173891.

92. Zhang, N. et al., 2023. Global burden of hematologic malignancies and evolution patterns over the past 30 years. *Blood Cancer Journal*, 13(1), p.82. Available at: https://doi.org/10.1038/s41408-023-00853-3.
93. Zhou, Y.-Y. and Sun, B.-W., 2022. Recent advances in neutrophil chemotaxis abnormalities during sepsis. *Chinese Journal of Traumatology*, 25(6), pp.317–324. Available at: https://www.sciencedirect.com/science/article/pii/S1008127522000621.
94. Zhu, C. et al., 2022. Dysregulation of neutrophil death in sepsis. *Frontiers in Immunology*, Volume 13-2022. Available at: https://www.frontiersin.org/journals/immunology/articles/10.3389/fimmu.2022.963955.