

## DAFTAR PUSTAKA

- Abe Y, at al. A Simple Technic to determine Thrombopoiesis level Using Immature Platelet Fraction (IPF), Thrombosis Research 2006; 118 (4): 463–469. (Abstract)
- Abdullah, Ramatillah, D.L., and Eff, A.R., 2015. Drug Related Problems that Occurred in Patient Sepsis Macrovascular Disease Complications General Hospital Treatment Room Central of the Army (Army Hospital) Gatot Subroto. Global Journal of Medical Research, Vol. XV, Issue III, Version I, p. 11-13
- Adhikari NK, Fowler RA, Bhagwanjee S, Rubenfeld GD. Critical care and the global burden of critical illness in adults. Lancet. 2010; 376(9749):1339–1346. [PubMed: 20934212].
- Alberti C, Brun-Buisson C, Chevret S, et al. Systemic inflammatory response and progression to severe sepsis in critically ill infected patients. Am J Respir Crit Care Med, 2005; 171:461-8.
- Andi Pratiwi. Syok Sepsis. Referay bagian ilmu Anestesi dan terapi intensif, Fakultas Kedokteran Universitas Halu Oleo Kendari. 2015
- Angus DC, van der Poll T. Severe sepsis and septic shock. N Engl J Med. 2013; 369:840-51.
- Angus DC, Linde-Zwirble WT, Lidicker J, et al. Epidemiology of severe sepsis in the Unitedn States: analysis of incidence, outcome, and associated costs of care. Crit Care Med, 2001; 29:1303-10.
- Anna Millizia. Penatalaksanaan Sepsis. *Jurnal Kedokteran Nagroe Medika*. Vol. 2. No. 3. 2019.
- Ansari-Lari MA, Kickler TS, Borowitz MJ. Immature granulocyte measurement using the Sysmex XE-2100: relationship to infection and sepsis. Am J Clin Pathol. 2003;120:795–9.
- Arif, M. (2021) 'Identifikasi Dini Sepsis pada Pasien', *Infinity Scientific Update*, pp. 1–8. doi:IO/0122.05/2021.08/COA.

Athena Anwar & Ika Dharmayanti. Pneumonia pada Anak Balita di Indonesia. *Jurnal Kesehatan Masyarakat Nasional*. Vol 8. No. 8. Mei 2014.

Ayres, L. S., Sgnaolin, V., & Munhoz, T. P. (2019). *Immature granulocytes index as early marker of sepsis*. *International Journal of Laboratory Hematology*, 41(3), 392–396. doi:10.1111/ijlh.12990

Azza Sajid Alkinany. Introduction to human physiologi. Amman: Dar Wael for Publishing and Distribution. 2016.

Batara M, Darmawati S, Prastyanto ME. Keanekaragaman dan Pola Resistensi Bakteri pada Pasien yang Terdiagnosa Sepsis. Med, J Labora. 2018;2:1–5.

Bosch AATM, Biesbroek G, Trzcinski K, et al. Viral and bacterial interaction in the upper respiratory tract. *PLoS Pathogens*, 2013. 9(1).

Briggs, C. and Bain, B.J. (2017) 'Basic Haematological Techniques : Platelet Count', in Bain, B.J., Bates, I., and Laffan, M.A. (eds) *Dacieand Lewis Practical Haematology*. 12th edn. St. Louis, Missouri: Elsevier, pp. 40–42.

Briggs C et al. Assesment of an Immature Platelet Fraction (IPF) in Peripheral Thrombocytopenia, *British Journal of haematology* 2004; 126: 93–99.

Buoro S, Manenti B, Seghezzi M, Dominoni P, Barbui T, Ghirardi A, et al. Innovative haematological parameters for early diagnosis of sepsis in adult patients admitted in intensive care unit. *J Clin Pathol* 2018;71:330-5.

Ceccato A, Torres A, Cilloniz C, et al. Invasive Disease vs Urinary Antigen-Confirmed Pneumococcal Community Acquired Pneumonia. *Chest*, 2017;151:1311-9.

Chen Y, Williams E, Kirk M. Risk factors for acute respiratory infection in australian community. *PLOS ONE*. 2014;9(7):1440-1447.

Croke, L. (2018). Guideline for transmission-based precautions. *AORN Journal*, 108(6), 7–9.

Dahlan Z. 2009. Pneumonia, dalam Sudoyo AW, dkk (editor). Buku Ajar Ilmu Penyakit Dalam Edisi V. Jakarta: Pusat Penerbitan Departemen Ilmu Penyakit Dalam Universitas Indonesia.

Daix T, Jeannet R, Hernandez Padilla AC, Vignon P, Feuillard J, François B. Immature granulocytes can help the diagnosis of pulmonary bacterial infections in patients with severe COVID-19 pneumonia. *J Intensive Care*. 2021 Sep 20;9(1):58. doi: 10.1186/s40560-021-00575-3. PMID: 34544474; PMCID: PMC845173.

Damayanti K & Oyagi R. 2017. Pneumonia. Fakultas Kedokteran Universitas Udayana Denpasar.

De Blasi, R. A. et al. Immature platelet fraction in predicting sepsis in critically ill patients. *Intensive care medicine* 39, 636–643, doi: 10.1007/s00134-012-2725-7 (2013).

Dellinger RP, Levy MM, Rhodes A, Annane D, Gerlach H, Opal SM, et al. Surviving Sepsis Campaign Guidelines Committee including the Pediatric Subgroup. Surviving sepsis campaign: international guidelines for management of severe sepsis and septic shock: 2012. *Crit Care Med*. 2013 Feb;41(2):580-637.

de Stoppelaar SF, van 't Veer C, van der Poll T. The role of platelets in sepsis. *Thromb Haemost*. 2014 Oct;112(4):666-77. doi: 10.1160/TH14-02-0126. Epub 2014 Jun 26. PMID: 24966015.

Diana S. Purwanti & Dalima A.W. Astrawinata. Mekanisme Kompleks Sepsis dan Syok Septik. *Jurnal Biomedik (JBM)*, Volume 10, Nomor 3, NOvember 2018, hlm. 143-151

Diska Hanifah Nurhayati. Faktor Risiko Mortalitas pada Anak dengan *Hospital Acquired Pneumonia* di RSUD. Dr. Soetomo. Skripsi. 2014. Universitas Airlangga Surabaya.

De Blasi RA, Cardelli P, Costante A, Sandri M, Mercieri M, Arcioni R. Immature platelet fraction in predicting sepsis in critically ill patients. *Intensive Care Med*. 2013;39:636–43.

Dr. Trynaadh. Acute respiratory infection (ARI) control programme. Published on 03 October 2018. Available at drtrinadh.wordpress.com

Enz Hubert RM, Rodrigues MV, Andreguetto BD, Santos TM, de Fátima Pereira Gilberti M, de Castro V, et al. Association of the immature platelet fraction with sepsis diagnosis and severity. *Sci Rep* 2015;5:8019

Erica Yola PP, Dina Mulyanti, Evi Umayah Ulfa. Kajian Potensi Penyebaran Mikroorganisme Patogen Penyebab ISPA dan Diare Berdasarkan Kondisi Geografis dan Demografis Wilayah Indonesia. *Bandung Conference Series: Pharmacy*. Vol 2. No. 2. 2022. p:1-4.

Er İ, Cetin C, Baydemir C, Günlemez A. Can immature platelet fraction be an early predictor for congenital pneumonia? *Turk Pediatri Ars*. 2020 Dec 16;55(4):409-417. doi: 10.14744/TurkPediatriArs.2020.98965. PMID: 33414659; PMCID: PMC7750339.

Farkas, J.D. The complete blood count to diagnose septic shock. *J. Thorac. Dis*, 2020; 12:16-21.

Febiyan, Lardo S. Konsep Patogenesis Sepsis pada Ventilator Associated Pneumonia di Intensive Care Unit. *J Indon Med Assoc*. 2018;68:492–500.

Gantner, D., and Mason, C., 2015. Management of Severe Sepsis. *Anaesthesia and Intensive Care Medicine*.

Gonçalo AP, Barbosa IL, Campilho F, Campos A, Mendes C. Predictive value of immature reticulocyte and platelet fractions in hematopoietic recovery of allograft patients. *Transplant Proc*. 2011;43:241–3.

Georgakopoulou VE, Mermigkis D, Mantzouranis K, Damaskos C, Melemeni D, Alafaki EA, Petsinis G, Garmpis N, Karakou E, Garmpi A, Lekkakou A, Sklapani P, Trakas N, Chatzikyriakou R, Tsiafaki X. Evaluation of Immature Platelet Fraction in Lower Respiratory Tract Infections: A Retrospective Study. *Cureus*. 2020 Jul 16;12(7):e9227. doi: 10.7759/cureus.9227. PMID: 32821576; PMCID: PMC7430542.

Georgakopoulou VE, Makrodimitri S, Triantafyllou M, Samara S, Voutsinas PM, Anastasopoulou A, Papageorgiou CV, Spandidos DA, Gkoufa A, Papalexis P, Xenou E, Chelidonis G, Sklapani P, Trakas N,

- Sipsas NV. Immature granulocytes: Innovative biomarker for SARS-CoV-2 infection. *Mol Med Rep.* 2022 Jul;26(1):217. doi: 10.3892/mmr.2022.12733. Epub 2022 May 13.
- Gotts JE, Matthay MA. Sepsis: pathophysiology and clinical management. *British Medical Journal* 2016.
- Hampson P, Dinsdale RJ, Wearn CM, Bamford AL, Uskup JRB, Hazeldine J, dkk. Disfungsi neutrofil, granulosit yang belum matang, dan DNA bebas sel merupakan penanda awal sepsis pada pasien luka bakar: studi kohort observasional prospektif. *Ann Bedah.* 2017; **265**:1241–1249. doi: 10.1097/SLA.0000000000001807.
- Hek E, Rovers MM, Kuyvenhoven MM, et al. Incidence of GP-diagnosed respiratory tract infections according to age, gender and high risk comorbidity: the second dutch national survey of general practice. *Family Practice*, 2006. 23(3): 291-294.
- Honda T, Uehara T, Matsumoto G, Arai S, Sugano M. Neutrophil left shift and white blood cell count as markers of bacterial infection. *Clin Chim Acta.* 2016;457:46–53.
- Jawad I, Luksic I, Snorri, Rafnsson B. Assessing available information on the burden of sepsis: global estimates of incidence, prevalence, and mortality. *J of Glob Health.* 2012;2(1):1-9
- Jeon, K., Lee, N., Jeong, S. et al. Immature granulocyte percentage for prediction of sepsis in severe burn patients: a machine learning-based approach. *BMC Infect Dis* 21, 1258 (2021). <https://doi.org/10.1186/s12879-021-06971-2>
- J. Tu et al., Computational Fluid and Particle Dynamics in the Human Respiratory System, 19 Biological and Medical Physics, Biomedical Engineering. Springer Science+Business Media Dordrecht 2013. DOI 10.1007/978-94-007-4488-2\_2.
- Kang-Birken, S. Lena., 2014. Sepsis and Septic Shock. In: Dipiro, J.T., Talbert, R.L., Yee, G.C., Matzke, G.R., Wells, B.G., and Posey, L.M., Pharmacotherapy A Pathophysiologic Approach. Ninth Edition. United States of America : The McGraw-Hill Companies, Inc., p. 1897-1910.

- Karon, B.S., Tolan, N.V., Wockenfus, A.M., Block, D.R., Baumann, N.A., Brynt, S.C., Clements, C.M. Evaluation of lactate, white blood cell count, neutrophil count, procalcitonin and immature granulocyte count as biomarkers for sepsis in emergency department patients. *Clin. Biochem*, 2017; 50: 956-958.
- Kartika SD, Kumala S, R HU, Subhan A. Analisis Faktor Resiko yang Mempengaruhi Outcome Pasien Sepsis di Rumah Sakit Umum Pusat Fatmawati. 2020;10:17–32.
- Kementerian Kesehatan RI. Riset Kesehatan Dasar. 2013.[cited 2018 December 11]. Available from: <http://www.depkes.go.id/resources/download/general/Hasil%20Riskesdas%202013.pdf>
- Kementerian Kesehatan RI. (2020). Pedoman Pencegahan dan Pengendalian Coronavirus Disease (Covid-19) Revisi 5. Jakarta: Kementerian Kesehatan RI.
- Khodaiji, S. (2019) 'Newer CBC Parameters of Clinical Significance', in Saxena, R. and Pai, H.P. (eds) *Hematopathology Advances in Understanding*. Singapore: Springer, pp. 3–25. doi:[https://doi.org/10.1007/978-981-13-7713-6\\_13](https://doi.org/10.1007/978-981-13-7713-6_13).
- Kunoli J F. 2013. Pengantar Epidemiologi Penyakit Menular Untuk Mahasiswa Kesehatan Masyarakat. Jakarta: TIM
- Larsen SB, Grove EL, Hvas AM, Kristen SD. Platelet turnover in stable coronary artery disease –influence of thrombopoietin and low-grade inflammation. *PLoS One*. 2014;9:e85566.
- Listyaningrum, Rini & Sukorini, Usi. 2015. Analisis beda rerata nilai delta netrofil index (DNI) pada penderita sepsis dan non sepsis di RSUP Dr. Sardjito Yogyakarta. Tesis. Universitas Gadjah Mada: Yogyakarta.
- Liu QH, Song MY, Yang BX, Xia RX. Clinical significance of measuring reticulated platelets in infectious diseases. *Medicine (Baltimore)* 2017;96:e9424.
- Luttfiya MN, Henley E, Chang L. Diagnosis and treatment of community acquired pneumonia. American Family Physician. 2010;73(3):442-50.

- Ma'at, S., 2012. Inflamasi. Airlangga University Press.; pp: 1-25 2
- Mandell LA. Etiologies of acute respiratory tract infection. Clinical Infectious Disease. 2005;42:503-506.
- Mandell LA, Wunderink RG, Anzueto A, et al. Infectious Diseases Society of America/American Thoracic Society consensus guidelines on the management of community-acquired pneumonia in adults. Clin Infect Dis 2007; 44: Suppl. 2, S27–S72.
- Maneghetii A, Upper Respiratory Infections. [Internet]. 2018;[cited 2018 December 11]. Available from: <https://emedicine.medscape.com/article/302460-overview>
- Martin Greg S. Sepsis, severe sepsis and septic shock: changes in Incidence, pathogens and outcomes. Expert Rev Anti Infect Ther. Author manuscript; available in PMC 2013 April 01.
- Martinez R, Menendez R, Reyes S, et al. Factors associated with inflammatory cytokine patterns in community acquired pneumonia. Eur Respir J, 2011;37:393-9.
- McCracken GH Jr. Etiology and treatment of pneumonia. Pediatr Infect Dis J. 2000 Apr;19(4):373-7. doi: 10.1097/00006454-200004000-00032. PMID: 10783038.
- Monteagudo M, et al. Reticulated Platelets as a screening test to identify Thrombocytopenia Aetiology, Q J Med 2008; 101: 549–555.
- Natakusuma, Lucky Yogasatria., Pudjiastuti., & Martuti, Sri. Peran delta neutrophil index sebagai prediktor sepsis pada anak. *Sari Pediatri*, 2019;21(2).
- Noviani, Isti., Prihatni, Delita., & Suraya, Nida. Korelasi antara *Immature Total Ratios* Berdasarkan Sediaan Apus Darah Tepi dan *Immature Granulocyte Ratios* Alat *Hematology Analyzer* pada Sepsis Neonatus. *Jurnal Kedokteran dan Kesehatan*, 20 – 23.
- Novina Aryanti & Juli Soemarsono. Korelasi antara Immature Granulocytes dan Delta He sebagai Penanda Inflamasi Pada Penderita dengan Lekositosis. *Jurnal Ilmiah Kedokteran Wijaya Kusuma*; 2011.5(2) : 1-5.

Oregon Health & Sciences University. 2022. *Immature Platelet Fraction*. [www.ohsu.edu](http://www.ohsu.edu).

Park SH, Ha SO, Cho YU, Park CJ, Jang S, Hong SB. Immature platelet fraction in septic patients: clinical relevance of immature platelet fraction is limited to the sensitive and accurate discrimination of septic patients from non-septic patients, not to the discrimination of sepsis severity. Ann Lab Med. 2016 Jan;36(1):1-8. doi: 10.3343/alm.2016.36.1.1. PMID: 26522752; PMCID: PMC4697337.

PDPI. 2003. Pneumonia komuniti-pedoman diagnosis dan penatalaksaan di Indonesia. Perhimpunan Dokter Paru Indonesia.

Porizka M, Volny L, Kopecky P, Kunstyr J, Waldauf P, Balik M. Granulosit yang belum matang sebagai prediktor sepsis pada pasien yang menjalani operasi jantung. *Berinteraksi Bedah Thorac Cardiovasc*. 2019; 28 :845–851. doi: 10.1093/icvts/ivy360.

Putra IAS. Update Tatalaksana Sepsis. CDK. 2019;46:681–685.

Putra IMP. Pendekatan Sepsis dengan Skor SOFA. 2018;45:606–9.

Qin Wu MD, Ren J, Hu D, Jiang P, Li G, Anjum N, et al. An elevated percentage of reticulated platelet is associated with increased mortality in septic shock patients. Medicine 2015;94:e814.

Rasmaliah. Infeksi saluran pernafasan akut (ISPA) dan penanggulangannya. Universitas Sumatera Utara. 2004.

Ramirez M. Multi organ dysfunction syndrome. Curr Probl Pediatr Adolesc Health Care. 2013;43:273-7.

Rhodes A, Evans L E, Alhazzmi W, Levy M M, Antonelli M, et al. Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock 2016, In : Dellinger R P, et al. Surviving Sepsis Campaign 2016. SCCM and ESICM 2017. Intensive Care Med. London, England, UK, 2017.

RISKESDAS. (2018). Laporan Riskesdas 2018 Kementrian Kesehatan Republik Indonesia. In Laporan Nasional Riskesdas 2018 (Vol. 53, Issue 9, pp. 154–165)

Rudd KE, Johnson SC, Agesa KM, Shackelford KA, Tsoi D, Kievlan DR, et al. Global, regional, and national sepsis incidence and mortality,

- 1990-2017: analysis for the Global Burden of Disease Study. Lancet (London, England). 2020;395(10219):200-11.
- Rodolfo Monteiro, et al. Association of the immature platelet fraction with sepsis diagnosis and severity. *Scientific Reports*. 5:8019.
- Ryotaro Kato dan Michael R. Pinsky. Personalizing blood pressure management in septic shock: *Intensive Care*, 2015. 5:41.
- Said, Mardjanis. Pneumonia. Dalam: Buku Ajar Respirologi Anak. Ikatan Dokter Anak Indonesia (IDAI): Jakarta; 2012. h.350-6.
- Sepsis. Neonatal Handbook. Tersedia dari URL: [http://www.netsvic.org.au/nets/handbook/about.cfm?doc\\_id=883](http://www.netsvic.org.au/nets/handbook/about.cfm?doc_id=883). Diunduh Juni 2013.
- Sepsis Alliance. Sepsis and Pneumonia. Updated October 18, 2022. Available at <https://www.sepsis.org/sepsisand/pneumonia/>
- Singer M, Deutschman CS, Seymour CW, et al. The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). *JAMA* 2016; 315(8): 801-10.
- Suryana A. (2005). *Berbagai Masalah Kesehatan Anak dan Balita*. Khilma: Jakarta.
- Tauseef A, Zafar M, Arshad W, Thirumalareddy J, Sood A, Farooque U, Nair S, Mirza M. Role of immature platelet fraction (IPF) in sepsis patients: A systematic review. *J Family Med Prim Care*. 2021 Jun;10(6):2148-2152. doi: 10.4103/jfmpc.jfmpc\_2293\_20. Epub 2021 Jul 2.
- Vincent JL. The clinical challenge of sepsis identification and monitoring. *PLoS Med*. 2016. <https://doi.org/10.1371/journal.pmed.1002022>.
- Welmann A, Lun A, Lun S. Leucocyte, neutrophil, immature granulocyte counts and Interleukin-6 are superior to procalcitonin, C-reactive protein and delta He for detection of mild inflammation: data from marathon runners producing mild systemic inflammation viable immediately after the run. *J Lab Med* 2010;34(1):53-59.
- Wiland EL, Sandhaus LM, Georgievskaya Z, Hoyen CM, O'Riordan MA, Nock ML. Adult and child automated immature granulocyte

norms are inappropriate for evaluating early-onset sepsis in newborns. *Acta Paediatr.* 2014;103:494–7.

World Health Organization.2007. Pencegahan Dan Pengendalian Infeksi Saluran Pernapasan Akut (ISPA) Yang Cenderung Menjadi Epidemi dan Pandemi Di Fasilitas Pelayanan Kesehatan. Diakses 8 April 2016.  
[http://www.who.int/csr/resources/publications/WHO\\_CDS\\_EPR\\_2007\\_8b\\_ahasa.pdf](http://www.who.int/csr/resources/publications/WHO_CDS_EPR_2007_8b_ahasa.pdf)

World Health Organization. Infeksi saluran pernapasan akut. 2008.  
[https://www.who.int/csr/resources/publications/WHO\\_CDS\\_EPR\\_2007\\_8Bahasal.pdf](https://www.who.int/csr/resources/publications/WHO_CDS_EPR_2007_8Bahasal.pdf)

*World Health Organization.* 2020. Sepsis. Uploade on 26 August 2020. Available at [Sepsis \(who.int\)](#).

Wu Q, Ren J, Hu D, Jiang P, Li G, Anjum N, dkk. Peningkatan persentase trombosit retikulasi dikaitkan dengan peningkatan mortalitas pada pasien syok septik. *Obat-obatan.* 2015; 94 :e814.