

**DAFTAR PUSTAKA**

- Angele MK, Pratschke S, Hubbard WJ, and Chaudry IH. Gender differences in sepsis, Cardiovascular and immunological aspects. *Virulence* 5:1, 12–19; January 1, 2014
- Asmoro, A.A. Problematika Penanganan Sepsis. UB Press, Malang, 2017. hal. 3
- Assicot M., Gendrel D., Carsin H., Raymond J., Guilbaud J.,Bohuon C., High serum procalcitonin concentrations in patients with sepsis and infection. *Lancet*, 1993, 41:515–518
- Berg D and Gerlac H. Recent Advances in Understanding and Managing Sepsis, [version 1; referees: 3 approved] *F1000Research* 2018, 7(F1000 Faculty Rev):1570 (doi: 10.12688/f1000research.15758.1)
- Bohuon C. Biochemistry of the calcitonin gene :Discoverey of procalcitonin as a remarkable marker of bacterial diseases, new data and trends, 2002. Hal.2-3
- Chaudhury A, Sumant GL, Jayaprada R, Kalawat U, Ramana BV. Procalcitonin in sepsis and bacterial infections. *J Clin Sci Res.* 2013; 2: 216-224.
- Chatterjea, MN. dan Shinde, Rana. *Textbook of Clinical Biochemistry*, 8<sup>th</sup> Ed., Jaypee, New Delhi, 2012. p.369
- Dahlan MS. Besar sampel dan Cara Pengambilan Sampel dalam Penelitian Kedokteran dan Kesehatan, Seri Evidence Based Medicine 2, Edisi 2, Salemba Medika, Jakarta, 2009.
- Daniels, Ron dan Nutbeam, Tim. *ABC of Sepsis*, 1<sup>st</sup> Ed. Blackwell, Singapore, 2010. p. 20-23
- Davis JS, He V, Anstey NM, Condon JR (2014) Long Term Outcomes Following Hospital Admission for Sepsis Using Relative Survival Analysis: A Prospective Cohort Study of 1,092 Patients with 5 Year Follow Up. *PLoS ONE* 9(12): e112224. <https://doi.org/10.1371/journal.pone.0112224>
- Degoricija V, Sharma M, Legac A, Gradišer M, Šefer S and Vučićević Z. Survival Analysis of 314 Episodes of Sepsis in Medical Intensive Care Unit in University Hospital: Impact of Intensive Care Unit Performance and Antimicrobial Therapy. *Croat Med J.* 2006;47:385-97
- Diodato MD, Knoferl MW, Schwacha MG, Bland KI, Chaudry IH: Gender differences in the inflammatory response and survival following haemorrhage and subsequent sepsis. *Cytokine* 2001, 14:162-169.
- Donadello K, Scoletta S, Covajes C, Vincent JL. 2012. sUPAR as a prognostic biomarker in sepsis. *BMC medicine*, 10, 2.
- Donadello K, Scoletta S, Taccone FS, Covajes C, Santoncito C, Cortes, DO, Grazulyte D, Gottin L, Vicent JL. 2014. Soluble urokinase–type plasminogen

- activator receptor as a prognostic biomarker in critically ill patients. *Journal of critical care*, 29, 144-149.
- Eapen DJ, Manocha P, Ghasemzedah N, Patel RS, Al Kaseem H, Hammadah M, Veledar E, Le NA, Pielak T, Thorball CW. 2014. Soluble urokinase plasminogen activator receptor level is an independent predictor of the presence and severity of coronary artery disease and of future adverse events. *Journal of the American Heart Association*, 3, e001118.
- Enocsson H, Wettero J, Skogh T, Sjowall C. 2013. Soluble urokinase plasminogen activator receptor levels reflect organ damage in systemic lupus erythematosus. *Translational Research*, 162, 287-296.
- Epstein, L. Varying estimates of sepsis mortality using death certificates and administrative codes—United States, 1999–2014. *MMWR. Morbidity and mortality weekly report*, 2016, 65.
- Eugen-Olsen J: SUPAR as marker of disease severity and risk of mortality in patient with sepsis. *J Intern Med* 2011,270:29-31
- Eugen-Olsen J, Giamarellos-Bourboulis EJ 2015. sUPAR: the unspecific marker for disease presence, severity and prognosis. *International journal of antimicrobial agents*, 46, S33-S34.
- Evans, T. Diagnosis and management of sepsis. *Clinical Medicine*, 2018, 18 (2) :146-149.
- Finfer, S. and Machado, F.R. The global epidemiology of sepsis. Does It matter that we know so little?, 2016, 228-230.
- Fischbach, F.T. and Dunning, M.B. *A manual of laboratory and diagnostic Tests*, 9<sup>th</sup> Ed. Lippincott Williams & Wilkins, Philadelphia, 2015. p.961-962
- Foucher, Christopher D., Tubben, Robert E. *Lactic Acidosis*, 2017.
- Guntur, H. Sepsis; *PAPDI Edisi ke 6*. Balai Penerbit Fakultas Kedokteran FKUI, Jakarta, 2014. Hal.2889-2895.
- Gussen H, Hohlstein P, Bartneck M, Warzecha KT, Buendgens L, Luedde T, et.al., Neutrophils are a main source of circulating suPAR predicting outcome in critical illness. *Journal of Intensive Care* (2019) 7:26 <https://doi.org/10.1186/s40560-019-0381-5>
- Gotts, J.E. and Matthay, M.A. Sepsis: pathophysiology and clinical management. *Bmj*, 2016, 353: 1585.
- Hajj J, Blaine N, Salavaci J, Jacoby D. The "Centrality of Sepsis": A Review on Incidence, Mortality, and Cost of Care. *Healthcare (Basel)*. 2018;6(3):90. Published 2018 Jul 30. doi:10.3390/healthcare6030090.
- Harvey, RA dan Ferrier, Denise. *Lippincott's Illustrated Reviews Biochemistry* 5<sup>th</sup> Ed. Lipponcott William & Wilkins, Philadelphia, 2011. p.96-104

- Hodges GW, Bang CN, Watchtell K, Eugen-Olsen J, Jeppesen JL. 2015. sUPAR: a new biomarker for cardiovascular disease? *Canadian Journal of Cardiology*, 31, 1293-1302.
- Hoeningl M, Raggam RB, Wagner J, Valentin T, Leitner E, Seeber K, Zollner-Schwetz I, Krammer W, Pruller F, Grisold AJ. 2013. Diagnostic accuracy of soluble urokinase plasminogen activator receptor (sUPAR) for prediction of bacteremia in patients with systemic inflammatory response syndrome. *Clinical biochemistry*, 46, 225-229.
- Hur M, Kim H, Moon WH, Yun MY, Di Somma S. Multimarker approach using procalcitonin, presepsin, galectin-3 and soluble suppression of tumorigenicity 2 for the prediction of mortality in sepsis, *Annals of Intensive Care*, 2017; 7:27
- Infection control: Basic concepts and practices, 2nd Ed, <http://www.hefic.org/oldsite/Manual/toc.htm>, (accessed January, 2018).
- Iskandar A, Arthamin MZ, Anshory M, Indriana K, DiSomma S, Hur M. Comparison between Presepsin and Procalcitonin in Diagnosis of neonatal Sepsis, *The Journal of Maternal-Fetal and Neonatal Medicine*, February 2018.
- James D. Faix (2013) Biomarkers of sepsis, *Critical Reviews in Clinical Laboratory Sciences*, 50:1, 23-36, DOI: 10.3109/10408363.2013.764490
- Joel, J.S. and Ji, S.M. Diagnostic value of procalcitonin and CRP in critically ill patients admitted with suspected sepsis. *Journal of dental anesthesia and pain medicine*, 2015, 15(3), p.135-140.
- Kaplan, Lawrence A., Steven C. Kazmierczak, and Amadeo J. Pesce. *Clinical Chemistry: theory, analysis, correlation* 5<sup>th</sup> Ed.. Mosby, Missouri, 2010, p.11-79
- Khan AA, Singh R and Singh PK. Diagnostic and prognostic significance of procalcitonin in septicaemia, *Int J Adv Med*. 2017 Jun;4(3):630-634
- Kim HS, Yang HT, Hur J, Chun W, Young-Su Ju, Seon-Hee Shin, Hee Jung Kang, and Kyu Man Lee. Procalcitonin Levels within 48 Hours After Burn Injury as a Prognostic Factor. *Annals of Clinical & Laboratory Science*, vol. 42, no. 1, 2012
- Kofoed K, Andersen O, Kronborg G, et al. Use of plasma C-reactive protein, procalcitonin, neutrophils, macrophage inhibitory factor, soluble urokinase-type plasminogen activator receptor, and soluble triggering receptor expressed on myeloid cells-1 in combination to diagnose infections: a prospective study. *Crit Care* 2007;11:R38
- Lavrentieva A, Kontou P, Soulountsi V, Kioumis J, Chrysou O, Bitzani M. Implementation of a procalcitonin-guided algorithm for antibiotic therapy in the burn intensive care unit. *Ann Burns Fire Disasters*. 2015;28(3):163-70.

- Lever, A. and Mackenzie, I. Sepsis: definition, epidemiology, and diagnosis. *Bmj*, 2007, 335(7625) : p.879-883.
- Lie Khie Chen, Lau Chuen-Yen, Chau Nguyen Van Vinh, T. Eoin West, Direk Limmathurotsakul. Utility of SOFA score, management and outcomes of sepsis in Southeast Asia: a multinational multicenter prospective observational study. *Journal of Intensive Care* (2018) 6:9, <https://doi.org/10.1186/s40560-018-0279-7>
- Liu D, Su L, Han G, Yan P, Xie L (2015) Prognostic Value of Procalcitonin in Adult Patients with Sepsis: A Systematic Review and Meta-Analysis. *PLoS ONE* 10(6): e0129450. doi:10.1371/journal.pone.0129450
- Marik, P.E. and Taeb, A.M. SIRS, qSOFA and new sepsis definition. *Journal of thoracic disease*, 2017, 9 (4) : 943.
- Meisner, Michael. Pathobiochemistry and clinical use of procalcitonin. *Jerman: Clinica chimica acta*. 2002. Vol. 323: 17-29
- Mikkelsen, M.E., Miltiades, A.N., Gaieski, D.F., Goyal, M., Fuchs, B.D., Shah, C.V., Bellamy, S.L. and Christie, J.D. Serum lactate is associated with mortality in severe sepsis independent of organ failure and shock. *Critical care medicine*, 2009, 37 (5) : 1670-1677.
- Nasir N, Jamil B, Siddiqui S, Talat N, Khan FA, Hussain R. Mortality in Sepsis and its relationship with Gender. *Pak J Med Sci*. 2015 Sep-Oct;31(5):1201-6. doi: 10.12669/pjms.315.6925. PubMed PMID: 26649014; PubMed Central PMCID: PMC4641283.
- Nasronudin., Suharto. Penyakit Infeksi di Indonesia, Solusi Kini dan Mendatang. *Surabaya : Airlangga University Press*, 2007.
- Nigam, P.K. Correct Blood Sampling for Blood Gas Analysis. *Journal of clinical and diagnostic research: JCDR*, 2016, 10 (10) : BL01
- Novosad, S.A. Vital signs: epidemiology of sepsis: prevalence of health care factors and opportunities for prevention. *MMWR. Morbidity and mortality weekly report*, 2016, 65.
- Rifai, Nader., Horvath., A.R., and Wittwer, C.T. *Tietz Fundamentals of Clinical Chemistry*. Elsevier, Missouri, 2018. p.429
- Miriam Sanderson,<sup>1</sup> Marc Chikhani,<sup>1</sup> Esme Blyth,<sup>2</sup> Sally Wood,<sup>3</sup> Iain K Moppett,<sup>1</sup> Tricia McKeever,<sup>1</sup> and Mark JR Simmonds. Predicting 30-day mortality in patients with sepsis: An exploratory analysis of process of care and patient characteristics. *J Intensive Care Soc*. 2018 Nov; 19(4): 299–304.
- Pierrakos C, Vincent JL. Sepsis Biomarker: a review. *Critical Care* 2010,14:R15. <http://ccforum.com/content/14/1/R15>
- Polzik P, Grønda O, Tavenier J, Martin B. Madsen, and Andersen O. supAR correlates with mortality and clinical severity in patients with necrotizing soft-tissue infections: results from a prospective, observational cohort study.

- Scientific Reports (2019) 9:5098 | <https://doi.org/10.1038/s41598-019-41688-y>
- Shapiro NI, Trzeciak S, Hollander JE, et al. A prospective, multicenter derivation of a biomarker panel to assess risk of organ dysfunction, shock, and death in emergency department patients with suspected sepsis. *Crit Care Med* 2009;37:96–104
- Sakr Y, Rubatto Birri PN, Kotfis K, Nanchal R, Shah B, Kluge S, Schroeder ME, Marshall JC, Vincent JL. Higher Fluid Balance Increases the Risk of Death From Sepsis: Results From a Large International Audit. *Crit Care Med*. 2017 Mar;45(3):386-394. doi: 10.1097/CCM.0000000000002189.
- Schroeder S, Hochreiter M, Koehler T, Schweiger AM, Bein B, Keck FS, von Spiegel T. Procalcitonin (PCT)-guided algorithm reduces length of antibiotic treatment in surgical intensive care patients with severe sepsis: results of a prospective randomized study. *Langenbeck's Arch Surg*. 2009;394(2):221–6.
- Schuetz P, Christ-Crain M, Müller B. Procalcitonin and other biomarkers to improve assessment and antibiotic stewardship in infections. *Swiss Med Wkly*. 2009; 139 (23–24): 318 – 326.
- Schuetz P, Birkhahn R, Sherwin R, Jones AE, Singer A, Kline JA. Serial Procalcitonin Predicts Mortality in Severe Sepsis Patients: Results From the Multicenter Procalcitonin MOnitoring SEpsis (MOSES) Study. *Critical Care Medicine*, 2017(5) Number 5.
- Semeraro, N., Ammollo, C.T., Semeraro, F. and Colucci, M. Sepsis, thrombosis and organ dysfunction. *Thrombosis research*, 2012, 3: .290-295.
- Singer, M., Deutschman, C.S., Seymour, C.W., Shankar-Hari, M., Annane, D., Bauer, M., Bellomo, R., Bernard, G.R., Chiche, J.D., Cooper-Smith, C.M. and Hotchkiss, R.S. The third international consensus definitions for sepsis and septic shock (Sepsis-3). *Jama*, 2016, 315 (8) : 801-810.
- Stassen NA, Leslie-Norfleet LA, Robertson AM, Eichenberger MR, Polk HC Jr. Interferon-gamma gene polymorphisms and the development of sepsis in patients with trauma. *Surgery*. 2002; 132(2):289–292. [PubMed: 12219025]
- Stolz D, Christ-Crain M, Bingisser R, Leuppi J, Miedinger D, Müller C, Huber P, Müller B, Tamm M. Antibiotic treatment of exacerbations of COPD: a randomized, controlled trial comparing procalcitonin-guidance with standard therapy. *Chest*. 2007;131:9–19.
- Sudarmono, P., Aman, A.T., Arif, M., Syarif, A.K., Kosasih, H., Karyana, M., Chotpitayasunondh, T., Vandepitte, W.P., Boonyasiri, A., Lapphra, K. and Chokeyhaibulkit, K. 2017. Causes and outcomes of sepsis in southeast Asia: a multinational multicentre cross-sectional study. 157-167

- Tziolos N, Kotanidou A, Orfanos SE. 2015. Biomarkers in infection and sepsis: Can they really indicate final outcome? *International journal of antimicrobial agents*, 46, S29-S32.
- United States Centers for Disease Control and Prevention. 2018. *Healthcare Professional (HCP) Resources : Sepsis*. 23: 15Z.
- Van Amersfoort ES, Van Berkel TJ, Kuiper J 2003. Receptors, mediators, and mechanisms involved in bacterial sepsis and septic shock. *Clin Microbiol Rev* 16: 379-414.
- van der Poll T, de Waal Malefyt R, Coyle SM, Lowry SF. Antiinflammatory cytokine responses during clinical sepsis and experimental endotoxemia: Sequential measurements of plasma soluble interleukin (IL)-1 receptor type II, IL-10, and IL-13. *J Infect Dis*. 1997; 175(1):118–122. [PubMed: 8985204]
- Wang, Y., Wang, D., Fu, J. and Liu, Y. Predictive value of SOFA, qSOFA score and traditional evaluation index on sepsis prognosis. *Zhonghua wei zhong bing ji jiu yi xue*, 2017, 29 (8) : 700-704.
- Ward, N.S., Levy, M.M. *Sepsis: Definitions, Pathophysiology and the Challenge of Bedside Management*. Humana Press, Switzerland, 2017. p.7-107
- Whicher J., Bienvenu J., Monneret G., : Procalcitonin as an acute phase markers. *Ann Clin Biochem*, 2001, 38:483–93.
- World Health Organization. Fact Sheet : Sepsis (Online), (<https://www.who.int/news-room/fact-sheets/detail/sepsis>, diakses 10 Desember 2018)
- Winters, B.D., Eberlein, M., Leung, J., Needham, D.M., Pronovost, P.J. and Sevransky, J.E. Long-term mortality and quality of life in sepsis: a systematic review. *Critical care medicine*, 2010, 38 (5): 1276-1283.
- Zhang Y, Khalid S, Jiang L. Diagnostic and predictive performance of biomarkers in patients with sepsis in an intensive care unit. *J Int Med Res*. 2019;47(1):44–58. doi:10.1177/0300060518793791