DAFTAR PUSTAKA

- Abbas, A.K., Licthman, A.H. and Pillai, S. (2012) 'Innate immunity', *Philadelphia: Elsevier*, pp. 51–86.
- Abdul El Rahman, H.M., Mahmoud, S.F. and Ezzat, A.W. (2018) 'Mean Platelet Volume versus Total Leukocyte Count and C-Reactive Protein as an Indicator for Mortality in Sepsis', *The Egyptian Journal of Hospital Medicine*, 15(6), pp. 2373–2379.
- Adams, J.S. and Hewison, M. (2008) 'Unexpected actions of vitamin D: New perspectives on the regulation of innate and adaptive immunity', *Nature Clinical Practice Endocrinology and Metabolism*, 4(2), pp. 80–90.

Aguirre, M. et al. (2015) 'Vitamin D deficiency', Medicina, 75(6), pp. 426–427.

- Aksan, A. et al. (2020) 'P431 Vitamin D binding protein in the limelight: IBDrelated inflammation and circulating levels of vitamin D binding protein, total, free and bioavailable 25-hydroxyvitamin D', Journal of Crohn's and Colitis, 14(3), pp. 393–394.
- Al-Daghri, N.M. et al. (2019) 'Efficacy of vitamin D supplementation according to vitamin D-binding protein polymorphisms', *Nutrition*, 63–64(3), pp. 148– 154.
- Al-Tarrah, K. *et al.* (2018) 'Vitamin D status and its influence on outcomes following major burn injury and critical illness', *Burns & Trauma*, 6(2), pp. 1–11.
- Alshahawey, M. (2021) 'A genetic insight into vitamin D binding protein and COVID-19', *Medical Hypotheses*, 149, pp. 2–11. doi:10.1016/j.mehy.2021.110531.
- Angus, D.C. and Wax, R.S. (2001) 'Epidemiology of sepsis: An update', Critical Care Medicine, 29, pp. 5–8.
- Ardehali, S.H. *et al.* (2018) 'Association of admission serum levels of Vitamin D, calcium, Phosphate, magnesium and parathormone with clinical outcomes in neurosurgical ICU patients', *Scientific Reports*, 8(1), pp. 1–8.
- Arnaud, J. and Constans, J. (1993) 'Affinity differences for vitamin D metabolites associated with the genetic isoforms of the human serum carrier protein (DBP)', *Human Genetics*, 92(2), pp. 183–188.
- Atalan, H.K. (2017) 'Serum Vitamin D Level at ICU Admission and Mortality', (January 2015), pp. 193–196.
- Aygencel, G. et al. (2013) 'Is vitamin D insufficiency associated with mortality of critically ill patients?', Critical Care Research and Practice, 15(6), pp. 1–

- Baeke, F. et al. (2010) 'Vitamin D: Modulator of the immune system', Current Opinion in Pharmacology, 10(4), pp. 482–496.
- Barnett, N. *et al.* (2014) 'Vitamin D deficiency and risk of acute lung injury in severe sepsis and severe trauma: A case-control study', *Annals of Intensive Care*, 4(1), pp. 1–10.
- Bartley, J. (2010) 'Vitamin D: Emerging roles in infection and immunity', *Expert Review of Anti-Infective Therapy*, 8(12), pp. 1359–1369.
- Batieha, A. et al. (2011) 'Vitamin D status in Jordan: Dress style and gender discrepancies', Annals of Nutrition and Metabolism, 58(1), pp. 10–18.
- Bayat, M. et al. (2021) 'Association between low serum vitamin d levels and sepsis: A single-center study in tehran, iran', Archives of Clinical Infectious Diseases, 16(1), pp. 4–7.
- Bersten, A.D. and Handy, J.M. (2019) 'Vitamin D deficiency in the intensive care unit', in *Oh* '*S Intensive*, pp. 1115–1121.
- Bikle, D.D. and Schwartz, J. (2019) 'Vitamin D binding protein, total and free Vitamin D levels in different physiological and pathophysiological conditions', *Frontiers in Endocrinology*, 10(5), pp. 1–12.
- Bornstein, S.R. et al. (2002) 'Plasma Leptip Leves are Increased In Survivors of Acute Sepsis : Associated Loss of Diural Rhytm in Cortisol and Leptin Secretion', Journal of Clinical Endocrinology & Metabolism, 87(2), pp. 942–945.
- Bosmann, M. and Ward, P.A. (2013) 'The inflammatory response in sepsis', *Trends in Immunology*, 34(3), pp. 129–136.
- Bouillon, R. et al. (2020) 'Vitamin D Binding Protein: A Historic Overview', Frontiers in Endocrinology, 10(1), pp. 1–21.
- Braithwaite, V.S. *et al.* (2015) 'Vitamin D binding protein genotype is associated with plasma 250HD concentration in West African children', *Bone*, 74, pp. 166–170.
- Braun, A. *et al.* (2011) 'Association of low serum 25-hydroxyvitamin D levels and mortality in the critically ill', *Critical Care Medicine*, 39(4), pp. 671–677.
- Brun-Buisson, C. (2000) 'The epidemiology of the systemic inflammatory response', *Intensive Care Medicine, Supplement*, 26(1), pp. 64–74.
- Cariolou, M. *et al.* (2019) 'Importance of Vitamin D in acute and critically ill children with subgroup analyses of sepsis and respiratory tract infections: A

systematic review and meta-analysis', BMJ Open, 9(5), pp. 1-12.

- Cashman, K.D. et al. (2016) 'Vitamin D deficiency in Europe: Pandemic?', American Journal of Clinical Nutrition, 103(4), pp. 1033–1044.
- Chen, C.H. *et al.* (2018) 'The impact of sepsis on the outcomes of COPD patients: A population-based cohort study', *Journal of Clinical Medicine*, 7, pp. 11–46.
- Chen, C.M. *et al.* (2014) 'Age may not influence the outcome of patients with severe sepsis in intensive care units', *International Journal of Gerontology*, 8(1), pp. 22–26.
- Chen, K.W. *et al.* (2021) 'Prevalence of Vitamin D Deficiency and Associated Factors in Critically III Patients: A Multicenter Observational Study', *Frontiers in Nutrition*, 8(12), pp. 1–9.
- Chen, Z. et al. (2015) 'Association of vitamin D status of septic patients in intensive care units with altered procalcitonin levels and mortality', *Journal of Clinical Endocrinology and Metabolism*, 100(2), pp. 516–523.
- Chishimba, L. *et al.* (2010) 'The vitamin D axis in the lung: A key role for vitamin D-binding protein', *Thorax*, 65(5), pp. 456–462.
- Cognasse, F. et al. (2005) 'Evidence of Toll-like receptor molecules on human platelets', Immunology and Cell Biology, 83(2), pp. 196–198.
- Dahl, B. *et al.* (2003) 'Plasma concentration of Gc-globulin is associated with organ dysfunction and sepsis after injury', *Critical Care Medicine*, 31(1), pp. 152–156.
- Darwin, E., Elfi, E.F. and Elvira, D. (2019) 'Endotel: Fungsi dan Disfungsi', Andalas University Press, pp. 113-6.
- Day, W.S. (2020) 'What is sepsis?', World Sepsis Day, p. 2.
- Dayanand, S. and Pct, K. (2016) 'Evaluation of Usefulness of Quantitative Estimation of Procalcitonin In Diagnosis of Bacterial Sepsis Kulkarni Medical Science', (2277), pp. 48–50.
- Dellinger, R.P. et al. (2013) 'Surviving sepsis campaign: International guidelines for management of severe sepsis and septic shock: 2012', *Critical Care Medicine*, 41(2), pp. 580–637.
- Eachempati, S.R., Hydo, L. and Barie, P.S. (1999) 'Gender-based differences in outcome in patients with sepsis', *Archives of Surgery*, 134(12), pp. 1342–1347.
- Engelman, C.D. et al. (2008) 'Genetic and environmental determinants of 25hydroxyvitamin D and 1,25-dihydroxyvitamin D levels in hispanic and

African Americans', Journal of Clinical Endocrinology and Metabolism, 93(9), pp. 3381–3388.

- Evans, L. et al. (2021) 'Surviving sepsis campaign: international guidelines for management of sepsis and septic shock 2021', Intensive Care Medicine, 47(11), pp. 1181–1247.
- Fawzy, M.S. *et al.* (2019) 'Association of group-specific component exon 11 polymorphisms with bronchial asthma in children and adolescents', *Scandinavian Journal of Immunology*, 89(3), pp. 1–3.
- Feng, R. et al. (2015) 'Lower serum 25 (OH) D concentrations in type 1 diabetes: A meta-analysis', *Diabetes Research and Clinical Practice*, 108(3), pp. 71– 75.
- Garland, C.F. *et al.* (2014) 'Meta-analysis of all-cause mortality according to serum 25-hydroxyvitamin D', *American Journal of Public Health*, 104(8), pp. 43–50.
- Greulich, T. *et al.* (2017) 'Altered blood levels of vitamin D, cathelicidin and parathyroid hormone in patients with sepsis A pilot study', *Anaesthesia and Intensive Care*, 45(1), pp. 36–45.
- Guclu, E., Durmaz, Y. and Karabay, O. (2013) 'Effect of severe sepsis on platelet count and their indices', *African Health Sciences*, 13(2), pp. 333–338.
- Guntur H. A. (2008) 'SIRS, Sepsis dan Syok Septik', Surakarta: Sebelas Maret University Press, pp. 1–14.
- Gyawali, B., Ramakrishna, K. and Dhamoon, A.S. (2019) 'Sepsis: The evolution in definition, pathophysiology, and management', *SAGE Open Medicine*, 7, pp. 1–5.
- Han, J.E. and Ziegler, T.R. (2014) 'Vitamin D supplementation in sepsis and critical illness: Where are we now?', *American Journal of Respiratory and Critical Care Medicine*, 190(5), pp. 483–485.
- Harahap, I.M.A. (2017) 'Pengaruh Asupan Vitamin D Terhadap Kadar 25-Hidroxyvitamin D 25(Oh)D Serum Pada Perempuan Usia 20-40 Tahun Di Desa Aman Damai Kecamatan Sirapit Kabupaten Langkat', Universitas Sumatera Utara, 25, pp. 1–76.
- Harishankar, M. *et al.* (2020) 'Association of rs7041 and rs4588 polymorphisms of vitamin D binding protein gene in pulmonary tuberculosis', *Meta Gene*, 26(1), pp. 5–8.
- Hashemi, S.M.A. *et al.* (2021) 'Human gene polymorphisms and their possible impact on the clinical outcome of SARS-CoV-2 infection', *Archives of Virology*, 166(8), pp. 2089–2108.

- Hertting, O. *et al.* (2010) 'Vitamin D induction of the human antimicrobial peptide cathelicidin in the urinary bladder', *PLoS ONE*, 5(12), pp. 1–9.
- Hewison, M. (2010) 'Vitamin D and the immune system: New perspectives on an old theme', *Endocrinology and Metabolism Clinics of North America*, 39(2), pp. 365–379.
- Hidalgo-Bravo, A. *et al.* (2022) 'Unravelling the Contribution of the rs7041 and rs4588 Polymorphisms of the GC Gene and Serum VDBP Levels for Developing Metabolic Syndrome in the Mexican Population', *International Journal of Molecular Sciences*, 23, pp. 3–11.
- Hillenbrand, A. *et al.* (2016) 'Circulating adipokine levels and prognostic value in septic patients', *Journal of Inflammation (United Kingdom)*, 13(1), pp. 1–7.
- Holmes, C.L., Russell, J.A. and Walley, K.R. (2003) 'Genetic polymorphisms in sepsis and septic shock: Role in prognosis and potential for therapy', *Chest*, 124(3), pp. 1103–1115.
- Hong, K. et al. (2018) 'A monoclonal antibody sandwich ELISA for vitamin Dbinding protein (VDBP) is unaffected by Gc-globulin phenotype peptides and actin and demonstrates reduced levels in sepsis and non-sepsis intensive care patients', *Clinica Chimica Acta*, 484(5), pp. 7–13.
- Hotchkiss, R.S. et al. (2016) 'Sepsis and septic shock', Nature Reviews Disease Primers, pp. 115–89.
- 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.
- Izcovich, A. *et al.* (2020) 'Prognostic factors for severity and mortality in patients infected with COVID-19: A systematic review', *PLoS ONE*, 15(11), pp. 1– 30.
- Jain, A. *et al.* (2016) 'Sequential organ failure assessment scoring and prediction of patient's outcome in Intensive Care Unit of a tertiary care hospital', *Journal of Anaesthesiology Clinical Pharmacology*, 32(3), pp. 364–368.
- Jamsari (2013) 'Rekayasa Genetika untuk Analisis Genom dan Produksi Organisme Transgenik', pp. 95–106.
- Jawad, I., Lukšić, I. and Rafnsson, S.B. (2012) 'Assessing available information on the burden of sepsis: Global estimates of incidence, prevalence and mortality', *Journal of Global Health*, 2(1), pp. 1–9.
- Jean, G., Souberbielle, J.C. and Chazot, C. (2017) 'Vitamin D in chronic kidney disease and dialysis patients', *Nutrients*, 9(4), pp. 1–15.
- Jeng, L. et al. (2009) 'Alterations in vitamin D status and anti-microbial peptide

levels in patients in the intensive care unit with sepsis', *Journal of Translational Medicine*, 7, pp. 1–9.

- Jhang, W.K., Kim, D.H. and Park, S.J. (2020) 'Association of vitamin D deficiency with clinical outcomes in critically ill Korean children', *Nutrition Research and Practice*, 14(1), pp. 12–9.
- Jiang, L. and Cheng, M. (2022) 'Impact of diabetes mellitus on outcomes of patients with sepsis: an updated systematic review and meta-analysis', *Diabetology and Metabolic Syndrome*, 14(1), pp. 1–17.
- Jones, A.E., Trzeciak, S. and Kline, J.A. (2009) 'The Sequential Organ Failure Assessment score for predicting outcome in patients with severe sepsis and evidence of hypoperfusion at the time of emergency department presentation', *Critical Care Medicine*, 37(5), pp. 1649–1654.
- Jones, G. (2022) 'Historical aspects of vitamin D', *Endocrine connections*, (1), pp. 5–13.
- Joyce, D.E. et al. (2001) 'Gene Expression Profile of Antithrombotic Protein C Defines New Mechanisms Modulating Inflammation and Apoptosis', Journal of Biological Chemistry, 276(14), pp. 199–203.
- Kalousova, M. *et al.* (2015) 'Vitamin D binding protein is not involved in vitamin D deficiency in patients with chronic kidney disease', *BioMed Research International*, pp. 15–35.
- Kamel, A.M. et al. (2017) 'Association of vitamin D binding protein polymorphisms with response to therapy in Egyptian chronic hepatitis C patients', Journal of Infection in Developing Countries, 11(10), pp. 781– 790.
- Karcioglu Batur, L. and Hekim, N. (2021) 'The role of DBP gene polymorphisms in the prevalence of new coronavirus disease 2019 infection and mortality rate', *Journal of Medical Virology*, 93(3), pp. 1409–1413.
- Kempker, Jordan A. et al. (2012) 'Vitamin D and sepsis: An emerging relationship', Dermato-Endocrinology, 4(2), pp. 101–108.
- Kempker, Jordan A et al. (2012) 'Vitamin D in sepsis: from basic science to clinical impact', Critical care (London, England), 16(4), p. 316.
- Khilnani, P. (2012) 'Severe sepsis and septic shock', *ICU Protocols: A Stepwise Approach*, pp. 703–707.
- King, E.G. et al. (2014) 'Pathophysiologic mechanisms in septic shock', Laboratory Investigation, 94(1), pp. 4–12.
- Kondo, Y. et al. (2021) 'Impact of Sex Differences on Mortality in Patients With Sepsis After Trauma: A Nationwide Cohort Study', Frontiers in

Immunology, 12(June), pp. 1-6.

- Kotake-Nara, E., Komba, S. and Hase, M. (2021) 'Uptake of Vitamins D2, D3, D4, D5, D6, and D7 solubilized in mixed micelles by human intestinal cells, Caco-2, an enhancing effect of lysophosphatidylcholine on the cellular uptake and estimation of Vitamins D' biological activities', *Nutrients*, 13(4), pp. 5–8.
- Kurnaz, M.M., Kesici, S. and Türkmen, Ü.A. (2020) 'Is Vitamin D Important for Elderly Patients in Intensive Care?', *Journal of Academic Research in Medicine*, 10(2), pp. 117–121.
- Kutlucan, L. *et al.* (2016) 'The predictive effect of initial complete blood count of intensive care unit patients on mortality, length of hospitalization, and nosocomial infections', *European Review for Medical and Pharmacological Sciences*, 20(8), pp. 1467–1473.
- Lafi, Z.M. et al. (2015) 'Association of rs7041 and rs4588 Polymorphisms of the Vitamin D Binding Protein and the rs10741657 Polymorphism of CYP2R1 with Vitamin D Status among Jordanian Patients', Genetic Testing and Molecular Biomarkers, 19(11), pp. 629–636.
- Lambden, S. *et al.* (2019) 'The SOFA score Development, utility and challenges of accurate assessment in clinical trials', *Critical Care*, 23(1), pp. 1–9.
- Lamendola, C.A. et al. (2012) 'Relations between obesity, insulin resistance, and 25-hydroxyvitamin D', American Journal of Clinical Nutrition, 95(5), pp. 1055–1059.
- Lan, S.H. *et al.* (2020) 'Vitamin D supplementation and the outcomes of critically ill adult patients: a systematic review and meta-analysis of randomized controlled trials', *Scientific Reports*, 10(1), pp. 1–7.
- Langer-Gould, A. et al. (2018) 'Vitamin d-binding protein polymorphisms, 25hydroxyvitamin d, sunshine and multiple sclerosis', Nutrients, 10(2), pp. 4– 6.
- Levy, M.M. *et al.* (2015) 'Surviving sepsis campaign: Association between performance metrics and outcomes in a 7.5-year study', *Critical Care Medicine*, 43(1), pp. 3–12.
- Li, C. *et al.* (2017) 'Bioavailable 25(OH)D but Not Total 25(OH)D Is an Independent Determinant for Bone Mineral Density in Chinese Postmenopausal Women', *EBioMedicine*, 15, pp. 184–192.
- Li, Y. and Ding, S. (2020) 'Serum 25-Hydroxyvitamin D and the risk of mortality in adult patients with Sepsis: A meta-analysis', *BMC Infectious Diseases*, 20(1), pp. 1–10.
- Liu, P.T. et al. (2007) 'Cutting Edge: Vitamin D-Mediated Human Antimicrobial

Activity against Mycobacterium tuberculosis Is Dependent on the Induction of Cathelicidin', *The Journal of Immunology*, 179(4), pp. 2060–2063.

- Lopez Payares, G.M. and Ali, F.A. (2015) 'Vitamin D deficiency', *The 5-Minute Clinical Consult Standard 2016: Twenty Fourth Edition*, pp. 266–281.
- M, K. kumar *et al.* (2020) 'Vitamin D Status at Admission and Its Association With Mortality in Children Admitted to the Pediatric Intensive Care Unit', *Cureus*, 12(6), pp. 5–18.
- Macisaac, C.M. et al. (2006) 'Superantigens in sepsis', Int Congr Ser, pp. 121-4.
- Mallah, E.M. *et al.* (2011) 'Plasma concentrations of 25-hydroxyvitamin D among Jordanians: Effect of biological and habitual factors on vitamin D status', *BMC Clinical Pathology*, 11, pp. 1–6. ANDALAS
- Markiewski, M.M., Deangelis, R.A. and Lambris, J.D. (2008) 'Complexity of complement activation in sepsis: Crossroads in Sepsis Research Review Series', *Journal of Cellular and Molecular Medicine*, 12(6), pp. 2245–2254.
- Martin, G.S., Mannino, D.M. and Moss, M. (2006) 'The effect of age on the development and outcome of adult sepsis', *Critical Care Medicine*, 34(1), pp. 15–21.
- Mayr, F.B., Yende, S. and Angus, D.C. (2014) 'Epidemiology of severe sepsis', Virulence, 5(1), pp. 4–11.
- Mehta, S. and Gill, S.E. (2019) 'Improving clinical outcomes in sepsis and multiple organ dysfunction through precision medicine', *Journal of Thoracic Disease*, 11(1), pp. 21–28.
- Meier, U. et al. (2006) 'Gc-globulin: Roles in response to injury', Clinical Chemistry, 52(7), pp. 1247–1253.
- Merx, M.W. and Weber, C. (2007) 'Sepsis and the heart', Circulation, 116(7), pp. 793-802.
- Midwinter, M.J. et al. (2011) 'Management of sepsis', Fundamentals of Surgical Practice, Thrid Edition, 23(3), pp. 248–275.
- Midwinter, M.J. (2011) 'Management of sepsis', *Fundamentals of Surgical Practice, Thrid Edition*, pp. 248–275.
- Mishal, A.A. (2001) 'Effects of different dress styles on vitamin D levels in healthy young Jordanian women', *Osteoporosis International*, 12(11), pp. 931–935.
- Moraes, R.B. *et al.* (2015) 'Vitamin D deficiency is independently associated with mortality among critically ill patients', *Clinics*, 70(5), pp. 326–332.

- Moromizato, T. *et al.* (2014) 'Association of low serum 25-hydroxyvitamin D levels and sepsis in the critically ill', *Critical Care Medicine*, 42(1), pp. 97–107.
- Morrell, C.N. *et al.* (2014) 'Emerging roles for platelets as immune and inflammatory cells', *Blood*, 123(18), pp. 2759–2767.
- Moss, M. (2005) 'Epidemiology of sepsis: Race, sex, and chronic alcohol abuse', *Clinical Infectious Diseases*, 41(2), pp. 1–8.
- Murphy, K. and Weaver, C. (2017) 'The Induced Responses of Innate Immunity', in *Janeway's Imunobiology 9th Edition*, pp. 77–128.
- Musi, N. and Guardado-Mendoza, R. (2014) 'Adipose Tissue as an Endocrine Organ', *Cellular Endocrinology in Health and Disease*, 14, pp. 229–237.
- Nainggolan, M. *et al.* (2020) 'Kesintasan 28 Hari Pasien Sepsis Berdasarkan Kadar Vitamin D Pada Awal Perawatan Di RSUP Dr Sardjito', *Universitas Gajah Mada Press*, pp. 3–18.
- Niedziela, J. *et al.* (2014) 'The obesity paradox in acute coronary syndrome: a meta-analysis', *European Journal of Epidemiology*, 29(11), pp. 801–812.
- Nursyam, E., Amin, Z. and Rumende, C. (2006) 'The effect of vitamin D as supplementary treatment in patients with moderately advanced pulmonary tuberculous lesion', *Acta Medica Indonesia*, 38(1), pp. 125–126.
- Oesman and Setiabudy (2012) 'Fisiologi hemostasis dan fibrinolisis. In: Setiabudy RD, editor. Hemostasis dan Trombosis (5th ed)', *Jakarta: Balai Penerbit FKUI*, pp. 1–15.
- Oh, G.H. *et al.* (2017) 'Mean platelet volume to platelet count ratio as a promising predictor of early mortality in severe sepsis', *Shock*, 47(3), pp. 323–330.
- Orak, M. *et al.* (2018) 'An investigation of the effects of the mean platelet volume, platelet distribution width, platelet/lymphocyte ratio, and platelet counts on mortality in patents with sepsis who applied to the emergency department', *Nigerian Journal of Clinical Practice*, 21(5), pp. 667–671.
- Ortiz-Ruiz, G. and Dueñas-Castell, C. (2017) 'Sepsis, third edition', in Sepsis, Third Edition, pp. 1–171.
- Owens, D.J., Allison, R. and Close, G.L. (2018) 'Vitamin D and the Athlete: Current Perspectives and New Challenges', *Sports Medicine*, 48(3), pp. 3–16.
- Parekh, D. et al. (2017) 'Vitamin D deficiency in human and murine sepsis', *Critical Care Medicine*, 45(2), pp. 282–289.
- Park, Y. et al. (2016) 'Relationship between vitamin D-binding protein

polymorphisms and blood vitamin D level in Korean patients with COPD', *International Journal of COPD*, 11(1), pp. 731–738.

- De Pascale, G. et al. (2016) 'Clinical and microbiological outcome in septic patients with extremely low 25-hydroxyvitamin D levels at initiation of critical care', *Clinical Microbiology and Infection*, pp. 456–457.
- Pierrakos, C. and Vincent, J.L. (2010) 'Sepsis biomarkers: A review', *Critical Care*, 14(1), pp. 1–18.
- Powe, C.E. et al. (2013) 'Vitamin D–Binding Protein and Vitamin D Status of Black Americans and White Americans', New England Journal of Medicine, 369(21), pp. 1991–2000.
- Purwanto, D.S. and Astrawinata, D.A.W. (2018) 'Mekanisme Kompleks Sepsis dan Syok Septik', Jurnal Biomedis (Jbm), 10(3), pp. 143–147.
- Putu, L. and Sundari, R. (2018) 'Defisiensi Vitamin D Pada Obesitas', Sport and Fitness Journal, 6(1), pp. 1–5.
- Quraishi, S.A. and Camargo, C.A. (2012) 'Vitamin D in acute stress and critical illness', *Current Opinion in Clinical Nutrition and Metabolic Care*, 15(6), pp. 625–634.
- Rachmawati, N. and Ihsan, I. (2017) 'Hubungan status vitamin D dengan mortalitas dan lama rawatan pada anak sakit kritis', *Majalah Kedokteran Andalas*, 40(2), p. 82.
- Rahimi, M.H. *et al.* (2019) 'Interactions between vitamin D binding protein variants and major dietary patterns on the odds of metabolic syndrome and its components in apparently healthy adults', *Diabetology and Metabolic Syndrome*, 11(1), pp. 1–11.
- Raith, E.P. et al. (2017) 'Prognostic Accuracy of the SOFA Score, SIRS Criteria, and qSOFA Score for In-Hospital Mortality Among Adults With Suspected Infection Admitted to the Intensive Care Unit', 317(3), pp. 290–300.
- Ratzinger, F. et al. (2017) '25(OH)D and 1,25(OH)D Vitamin D fails to predict sepsis and mortality in a prospective cohort study', Scientific Reports, 7(12), pp. 1–10.
- Rech, M.A., Hunsaker, T. and Rodriguez, J. (2014) 'Deficiency in 25hydroxyvitamin D and 30-day mortality in patients with severe sepsis and septic shock', *American Journal of Critical Care*, 23(5), pp. 5–19.
- Rell, F., Widyastuti, S.K. and Wandia, I.N. (2013) 'Polimorfisme Lokus Mikrosatelit D10S1432 Pada Populasi Monyet Ekor Panjang Di Sangeh Polymorphism of D10S1432 Microsatellite Locus on Long Tailed Macaque Population in Sangeh', *Ilmu dan Kesehatan*, 1(1), pp. 16–21.

- Rhee, C. et al. (2017) 'Incidence and trends of sepsis in US hospitals using clinical vs claims data, 2009-2014', JAMA Journal of the American Medical Association, 318(13), pp. 1241–1249.
- Rowe, T. *et al.* (2016) 'Outcomes of older adults with sepsis at admission to an intensive care unit', *Open Forum Infectious Diseases*, 3(1), pp. 1–6.
- Rozmus, D. *et al.* (2020) 'Vitamin D binding protein (VDBP) and its gene polymorphisms—the risk of malignant tumors and other diseases', *International Journal of Molecular Sciences*, 21(21), pp. 1–21.
- Rozmus, D. et al. (2022) 'Rs7041 and rs4588 Polymorphisms in Vitamin D Binding Protein Gene (VDBP) and the Risk of Diseases', International Journal of Molecular Sciences, 23(2), pp. 14–17.
- Rudd, K.E. et al. (2020) 'Global, regional, and national sepsis incidence and mortality, 1990–2017: analysis for the Global Burden of Disease Study', *The Lancet*, 15(4), pp. 200–211.
- Ruiqiang, Z. et al. (2021) 'Surviving Sepsis Campaign: international guidelines for management of sepsis and septic shock 2021, interpretation and expectation', *Zhonghua Wei Zhong Bing Ji Jiu Yi Xue*, 33(10), pp. 1159– 1164.
- Sagy, M., Al-Qaqaa, Y. and Kim, P. (2013) 'Definitions and pathophysiology of sepsis', *Current Problems in Pediatric and Adolescent Health Care*, 43(10), pp. 260–263.
- Schröder, J. et al. (1998) 'Gender differences in human sepsis', Archives of Surgery, 133(11), pp. 1200–1205.
- Serroukh, Y. et al. (2012) 'Alterations of the erythrocyte membrane during sepsis', Critical Care Research and Practice, 12(2), pp. 1–7.
- Sharma, Z. et al. (2013) 'Sequential organ failure assessment score as prognostic marker in critically ill patients in a tertiary care intensive care unit', *International Journal of Medicine and Public Health*, 3(3), pp. 155–157.
- Shen, Y., Huang, X. and Zhang, W. (2019) 'Platelet-to-lymphocyte ratio as a prognostic predictor of mortality for sepsis: Interaction effect with disease severity - A retrospective study', *BMJ Open*, 9(1), pp. 1–7.
- Shojaei, M. et al. (2019) 'The correlation between serum level of vitamin d and outcome of sepsis patients; A cross-sectional study', Archives of Academic Emergency Medicine, 7(1), pp. 1–6.
- Sidharti Liana, Zinal Rizal, Zulkifli, H.Z. (2020) 'Receptor Interacting Protein Kinase 3 sebagai Prediktor Kematian 28 Hari Pasien Sepsis Di RSUP Dr. Mohammad Hoesin Palembang', Anesthesia & Critical Care, 13(3), pp. 3– 4.

- Siegl, D. *et al.* (2014) 'Obesity-induced hyperleptinemia improves survival and immune response in a murine model of sepsis', *Anesthesiology*, 121(1), pp. 98–114.
- Sim, J.J. et al. (2010) 'Vitamin D deficiency and anemia: A cross-sectional study', Annals of Hematology, 89(5), pp. 447–452.
- Singer, M. et al. (2012) 'The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3)', Acta Medica Okayama, 66(4), pp. 299–305.
- Sinotte, M. *et al.* (2009) 'Genetic polymorphisms of the vitamin D binding protein and plasma concentrations of 25-hydroxyvitamin D in premenopausal women', *American Journal of Clinical Nutrition*, 89(2), pp. 634–640.
- Soejitno, A. and Kuswardhani, R.A.T. (2009) 'Defisiensi vitamin D: mekanisme, implikasi, dan terapi pada lansia', *Cermin Dunia Kedokteran*, 36(2), pp. 81– 83.
- Song, W. et al. (2016) 'GC Gene Polymorphisms and Vitamin D-Binding Protein Levels Are Related to the Risk of Generalized Aggressive Periodontitis', International Journal of Endocrinology, 2016, pp. 2–8.
- Soo, A. *et al.* (2019) 'Describing organ dysfunction in the intensive care unit: A cohort study of 20,000 patients', *Critical Care*, 23(1), pp. 1–15.
- Speeckaert, M. *et al.* (2006) 'Biological and clinical aspects of the vitamin D binding protein (Gc-globulin) and its polymorphism', *Clinica Chimica Acta*, 372(1–2), pp. 33–42.
- Speeckaert, M.M. and Delanghe, J.R. (2021) 'Vitamin D binding protein and endothelial injury after hematopoietic stem cell transplantation: an actin scavenger with a lipid-bound character', *Haematologica*, 106(3), p. 923.
- Suberviola, B. et al. (2019) 'Vitamin D binding protein, but not vitamin D or vitamin D-related peptides, is associated with septic shock mortality', Enfermedades infecciosas y microbiologia clinica (English ed.), 37(4), pp. 239–243.
- Susanti, M. (2018) 'Hubungan Polimorfisme Gen Sitokrom CYP2R1 (Rs10741657) Dengan Kadar Vitamin D Pada Penderita Kanker Payudara Hubungan Polimorfisme Gen Sitokrom CYP2R1 (Rs10741657) Dengan Kadar Vitamin D', Universitas Sumatera Utara Press, 1, pp. 13–28.
- Tambajong, R.N., Lalenoh, D.C. and Kumaat, L. (2016) 'Profil penderita sepsis di ICU RSUP Prof. Dr. R. D. Kandou Manado periode Desember 2014 – November 2015', e-CliniC, 15(2), p. 2.
- Terock, J. *et al.* (2020) 'Vitamin D levels are associated with trait resilience but not depression in a general population sample', *Brain and Behavior*, 10(12), pp. 1–11.

- Tjowanta, A.S. (2018) 'Hubungan 25-hydroxyvitamin D dengan Sepsis pada Anak', *Journal Kesehatan Anak*, 45(6), pp. 449–452.
- Trongtrakul, K. and Feemuchang, C. (2017) 'Prevalence and association of vitamin D deficiency and mortality in patients with severe sepsis', *International Journal of General Medicine*, 10(2), pp. 415–421.
- Upala, S., Sanguankeo, A. and Permpalung, N. (2015) 'Significant association between vitamin D deficiency and sepsis: A systematic review and metaanalysis', *BMC Anesthesiology*, 12(2), pp. 3–7.
- Vardon-Bounes, F. et al. (2019) 'Kinetics of mean platelet volume predicts mortality in patients with septic shock', *PLoS ONE*, 14(10), pp. 1–15.
- Wang, S. et al. (2017) 'The role of increased body mass index in outcomes of sepsis: A systematic review and meta-analysis', BMC Anesthesiology, 17(1), pp. 1–11.
- Wang, T.J. *et al.* (2010) 'Common genetic determinants of vitamin D insufficiency: A genome-wide association study', *The Lancet*, 376(9), pp. 180–188.
- Wang, Y. et al. (2020) 'Effects of a single dose of vitamin D in septic children: a randomized, double-blinded, controlled trial', Journal of International Medical Research, 13(2), pp. 1–8.
- Wang, Z. et al. (2017) 'Association between diabetes mellitus and outcomes of patients with sepsis: A meta-analysis', *Medical Science Monitor*, 23, pp. 3546–3555.
- Wardani, I.S. (2017) 'Tatalaksana Sepsis Berat pada Pasien Lanjut Usia', Jurnal Kedokteran Unram, 7(4), pp. 33–39.
- Watkins, R.R. (2012) 'Investigating the association between vitamin D deficiency and sepsis: Challenges and future prospects', *Expert Review of Anti-Infective Therapy*, 10(7), pp. 723–725.
- Weng, L. et al. (2020) 'Body-mass index and long-term risk of sepsis-related mortality: A population-based cohort study of 0.5 million Chinese adults', *Critical Care*, 24(1), pp. 1–9.
- Winn, W.C. and Koneman, E.W. (2005) 'Medical bacteriology: taxonomy, morphology, physiology, and virulence. In: Winn WC, Koneman EW, Allen SD, Procop GW, Schreckenberger PC, Janda WM, et al, editors. Koneman's Color Atlas and Textbook of Diagnostic Microbiology (6th ed)', *Philadelphia: Lippincott Williams and Wilkins*, pp. 167–207.
- Xiao, D. *et al.* (2020) 'Association between vitamin D status and sepsis in children: A meta-analysis of observational studies', *Clinical Nutrition*, 39(6), pp. 1735–1741.

- Xie, C.N. *et al.* (2018) 'Vitamin D binding protein polymorphisms influence susceptibility to hepatitis C virus infection in a high-risk Chinese population', *Gene*, 679(September), pp. 405–411.
- Xu, J. et al. (2019) 'Association of Sex with Clinical Outcome in Critically Ill Sepsis Patients: A Retrospective Analysis of the Large Clinical Database MIMIC-III', Shock, 52(2), pp. 146–151.
- Yende, S. et al. (2014) 'Risk of Cardiovascular Events in Survivors of Severe Sepsis', 189, pp. 1065–1074.
- Yim, S. et al. (2007) 'Induction of cathelicidin in normal and CF bronchial epithelial cells by 1,25-dihydroxyvitamin D3', Journal of Cystic Fibrosis, 6(6), pp. 403–410.
- Yoo, J.W. *et al.* (2020) 'Serum vitamin D binding protein level, but not serum total, bioavailable, free vitamin D, is higher in 30-days survivors than in nonsurvivors with sepsis', *Medicine*, 99(25), pp. 3–7.
- Yousefzadeh, P., Shapses, S.A. and Wang, X. (2014) 'Vitamin D binding protein impact on 25-hydroxyvitamin D levels under different physiologic and pathologic conditions', *International Journal of Endocrinology*, 14(2), pp. 5–9.
- Yun, C. et al. (2017) 'Vitamin D deficiency prevalence and risk factors among pregnant Chinese women', Public Health Nutrition, 20(10), pp. 1746–1754.
- Zaccone, V. *et al.* (2020) 'The Prognostic Role of Procalcitonin in Critically Ill Patients Admitted in a Medical Stepdown Unit: A Retrospective Cohort Study', *Scientific Reports*, 10(1), pp. 1–8.
- Zampieri, F.G. *et al.* (2014) 'An increase in mean platelet volume after admission is associated with higher mortality in critically ill patients', *Annals of Intensive Care*, 4(1), pp. 1–8. DIAJAAN
- Zanetti, M. (2004) 'Cathelicidins, multifunctional peptides of the innate immunity', *Journal of Leukocyte Biology*, 75(1), pp. 39–48.
- Zhang, H.B. *et al.* (2016) 'Diagnostic values of red cell distribution width, platelet distribution width and neutrophil-lymphocyte count ratio for sepsis', *Experimental and Therapeutic Medicine*, 12(4), pp. 2215–2219.
- Zhang, T.P. *et al.* (2021) 'Association of vitamin D pathway genes polymorphisms with pulmonary tuberculosis susceptibility in a Chinese population', *Genes and Nutrition*, 16(1), pp. 5–9.
- Zhang, X., Gao, B. and Xu, B. (2020) 'No association between the vitamin Dbinding protein (DBP) gene polymorphisms (rs7041 and rs4588) and multiple sclerosis and type 1 diabetes mellitus: A meta-analysis', *PLoS ONE*, 15(11), pp. 1–10.

- Zhang, Y. et al. (2012) 'The GC, CYP2R1 and DHCR7 genes are associated with vitamin D levels in northeastern Han Chinese children', Swiss Medical Weekly, 142(7), pp. 1–6.
- Zhu, M. *et al.* (2016) 'The association between vitamin D and COPD risk, severity, and exacerbation: An updated systematic review and meta-analysis', *International Journal of COPD*, 11(1), pp. 2597–2607.

