

DAFTAR PUSTAKA

- Anesi, G.L., Liu, V.X., Chowdhury, M., Small, D.S., Wang, W., Delgado, M.K., et al., 2022. Association of ICU Admission and Outcomes in Sepsis and Acute Respiratory Failure 205: 520–528. doi:10.1164/rccm.202106-1350OC
- Barbagelata, E., Cillóniz, C., Dominedò, C., Torres, A., Nicolini, A., & Solidoro, P., 2020. Gender differences in community-acquired pneumonia. *Minerva Med* 153–165. doi:10.23736/S0026-4806.20.06448-4
- Blanco, J., Muriel-bombin, A., Sagredo, V., Taboada, F., Gandía, F., Tamayo, L., et al., 2008. Incidence, organ dysfunction and mortality in severe sepsis : a Spanish multicentre study. *Crit. Care Clin.* 12. doi:https://doi.org/10.1186/cc7157
- Cavallazzi, R., Furmanek, S., Arnold, F.W., Beavin, L.A., Wunderink, R.G., Niederman, M.S., et al., 2020. The Burden of Community-Acquired Pneumonia Requiring Admission to ICU in the United States. *Chest* 158: 1008–1016. doi:10.1016/j.chest.2020.03.051
- CDC, 2025. Risk Factor for Sepsis [WWW Document].
- CDC, 2021. Pneumonia (Ventilator-associated [VAP] and non-ventilatorassociated Pneumonia [PNEU]) Event. *Patient Saf. Compon. Man.* 1–39.
- Ceccato, A., & Torres, A., 2018. Sepsis and community-acquired pneumonia. *Ann. Res. Hosp.* 2: 7–7. doi:10.21037/arh.2018.06.01
- Chen, J., Zhang, F., Liang, L., Pan, X., Zhang, J., & Jin, G., 2025. Impact of underweight status on mortality in sepsis patients : a meta-analysis. doi:10.3389/fmed.2025.1549709
- Chen, Y., Lu, L., Li, X., Liu, B., Zhang, Y., Zheng, Y., et al., 2023. Association between chronic obstructive pulmonary disease and 28 - day mortality in patients with sepsis : a retrospective study based on the MIMIC - III database. *BMC Pulm. Med.* 1–10. doi:10.1186/s12890-023-02729-5
- Ciasullo, A., & Gozdzik, W., 2018. Analysis of *Acinetobacter baumannii* hospital infections in patients treated at the intensive care unit of the University Hospital , Wroclaw , Poland : a 6-year , single-center , retrospective study 629–635.

- Cill, C., Domined, C., Ielpo, A., & Ferrer, M., 2019. Risk and Prognostic Factors in Very Old Patients with Sepsis Secondary to Community-Acquired Pneumonia 1–12.
- Corica, B., Tartaglia, F., Amico, T.D., Francesco, G., & Roberto, R., 2022. Sex and gender differences in community - acquired pneumonia. *Intern. Emerg. Med.* 17: 1575–1588. doi:10.1007/s11739-022-02999-7
- Darkwah, S., Kotey, F.C.N., Ahenkorah, J., Adutwum-ofosu, K.K., & Donkor, E.S., 2024. Sepsis-Related Lung Injury and the Complication of Extrapulmonary Pneumococcal Pneumonia 1–19.
- Esperatti, M., Fuentes, N., Ferrer, M., Ranzani, O.T., Bassi, G.L., Singer, M., et al., 2020. Association between sepsis at ICU admission and mortality in patients with ICU-acquired pneumonia : An infectious second-hit model. *J. Crit. Care* 59: 207–214. doi:10.1016/j.jcrc.2020.06.012
- Evans, L., Rhodes, A., Alhazzani, W., Antonelli, M., Coopersmith, C.M., French, C., et al., 2021. Surviving sepsis campaign: international guidelines for management of sepsis and septic shock 2021. *Intensive Care Med.* 47: 1181–1247. doi:10.1007/s00134-021-06506-y
- Fang, W.F., Fang, Y.T., Huang, C.H., Chen, Y.M., Chang, Y.C., Lin, C.Y., et al., 2020. Risk factors and associated outcomes of ventilator - associated events developed in 28 days among sepsis patients admitted to intensive care unit. *Sci. Rep.* 1–10. doi:10.1038/s41598-020-69731-3
- Ferrer, M., Traverso, C., Cilloniz, C., Gabarrus, A., Ranzani, O., & Polverino, E., 2018. Severe community-acquired pneumonia: Characteristics and prognostic factors in ventilated and non-ventilated patients. *PLoS One* 13: e0191721. doi:10.1371/journal.pone.0191721
- Fleischmann-Struzek, C., & Rudd, K., 2023. Challenges of assessing the burden of sepsis. *Medizinische Klin. - Intensivmed. und Notfallmedizin* 118: 68–74. doi:10.1007/S00063-023-01088-7
- Franquet, T., & Chung, J., 2019. Imaging of Pulmonary Infections, in: Hodler, J., Kubik-Huch, R., & von Schulthess, G. (Eds.), *Diseases of the Chest, Breast, Heart and Vessels 2019-2022: Diagnostic and Interventional Imaging.*

- Springer Berlin Heidelberg, pp. 283–296. doi:10.1007/978-3-030-11149-6_7
- Garvey, M., 2024. Hospital Acquired Sepsis , Disease Prevalence , and Recent Advances in Sepsis Mitigation 1–16.
- Global Sepsis Alliance, 2024. 2030 Global Agenda for Sepsis 1–88.
- Gyawali, B., Ramakrishna, K., & Dhamoon, A.S., 2019. Sepsis : The evolution in definition , pathophysiology , and management. doi:10.1177/2050312119835043
- Holt, R.I.G., Cockram, C.S., Ma, R.C.W., & Luk, A.O.Y., 2024. Diabetes and infection: review of the epidemiology , mechanisms and principles of treatment. *Diabetologia* 67: 1168–1180. doi:10.1007/s00125-024-06102-x
- Honselmann, K.C., Buthut, F., Heuwer, B., Karadag, S., Sayk, F., Kurowski, V., et al., 2015. Long-term mortality and quality of life in intensive care patients treated for pneumonia and / or sepsis ☆ Predictors of mortality and quality of life in patients with sepsis / pneumonia. *J. Crit. Care* 30: 721–726. doi:10.1016/j.jcrc.2015.03.009
- Huang, M., Cai, S., & Su, J., 2019. The Pathogenesis of Sepsis and Potential Therapeutic Targets.
- Husain, A.N., 2011. Robbins Basic Pathology, 9th ed. Saunders: Elsevier,.
- Id, K.S., Eriksson, M., Frithiof, R., Id, R.K., & Id, D.C., 2024. Smoking is associated with higher risk of contracting bacterial infection and pneumonia , intensive care unit admission and death 17: 1–11. doi:10.1371/journal.pone.0302505
- Id, T.R., Sollig, E., Id, S.B., Id, B.M.B., Id, J.P., Id, H.C.P., et al., 2020. PLOS MEDICINE Body mass index and risk of dying from a bloodstream infection : A Mendelian randomization study 324. doi:10.1371/journal.pmed.1003413
- Ikuta, K.S., Swetschinski, L.R., Aguilar, G.R., Sharara, F., Mestrovic, T., Gray, A.P., et al., 2022. Global mortality associated with 33 bacterial pathogens in 2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet* 400: 2221–2248. doi:10.1016/S0140-6736(22)02185-7
- Ji, C., Qin, C., Lin, S., Pang, L., Hu, M., Ma, D., et al., 2026. Risk Factors for Sepsis: a systematic review and meta-analysis. *Front. Infect. Dis. Epidemiol.*

Prev.

- Jones, B.E., Ramirez, J.A., Oren, E., Soni, N.J., Sullivan, L.R., Restrepo, M.I., et al., 2025. Diagnosis and Management of Community-acquired Pneumonia. An Official American Thoracic Society Clinical Practice Guideline, American Journal of Respiratory and Critical Care Medicine. doi:10.1164/rccm.202507-1692st
- Kalil, A.C., Metersky, M.L., Klompas, M., Muscedere, J., Sweeney, D.A., Palmer, L.B., et al., 2016. Management of Adults With Hospital-acquired and Ventilator-associated Pneumonia: 2016 Clinical Practice Guidelines by the Infectious Diseases Society of America and the American Thoracic Society. *Clin. Infect. Dis.* 63: e61–e111. doi:10.1093/cid/ciw353
- Kang, C., Choi, S., Jang, E.J., Joo, S., Jeong, J.H., Oh, S.Y., et al., 2024. Prevalence and outcomes of chronic comorbid conditions in patients with sepsis in Korea : a nationwide cohort study from 2011 to 2016. *BMC Infect. Dis.* 1–11. doi:10.1186/s12879-024-09081-x
- Kaukonen, K.M., Bailey, M., Suzuki, S., Pilcher, D., & Bellomo, R., 2014. Mortality related to severe sepsis and septic shock among critically ill patients in Australia and New Zealand, 2000-2012. *Jama* 311: 1308–1316. doi:10.1001/jama.2014.2637
- Kemenkes RI, 2023. PNPk Tata Laksana Pneumonia Dewasa 1–65.
- Kemenkes RI, 2017. PNPk Tata Laksana Sepsis. *KMK Nomor HK.01.07/MENKES/342/2017*.
- Kim, W.Y., Lee, Y.J., Yeon Lim, S., Ok Koh, S., Choi, W.I., Chan Kim, S., et al., 2013. Clinical characteristics and prognosis of pneumonia and sepsis: Multicenter study. *Minerva Anestesiol.* 79: 1356–1365.
- Ko, R.E., Kang, D., Cho, J., Na, S.J., Chung, C.R., & Lim, S.Y., 2023. Influence of gender on age - associated in - hospital mortality in patients with sepsis and septic shock : a prospective nationwide multicenter cohort study 1–9. doi:10.1186/s13054-023-04515-5
- Koh, G.C.K.W., Peacock, S.J., Poll, T. Van Der, & Wiersinga, W.J., 2012. The impact of diabetes on the pathogenesis of sepsis 379–388.

doi:10.1007/s10096-011-1337-4

- Lee, M.S., Oh, J.Y., Kang, C., Kim, E.S., Park, S., Rhee, C.K., et al., 2018. Guideline for Antibiotic Use in Adults with Community-acquired Pneumonia.
- Levy, M.M., Artigas, A., Phillips, G.S., Rhodes, A., Beale, R., Osborn, T., et al., 2012. Outcomes of the Surviving Sepsis Campaign in intensive care units in the USA and Europe: a prospective cohort study 919–924. doi:10.1016/S1473-3099(12)70239-6
- Li, W., Cai, J., Ding, L., Chen, Y., Wang, X., & Xu, H., 2024. Incidence and risk factors of ventilator-associated pneumonia in the intensive care unit: a systematic review and meta-analysis 16: 5518–5528. doi:10.21037/jtd-24-150
- Lim, W.S., 2021. Pneumonia—Overview. Encyclopedia of Respiratory Medicine. *Encycl. Respir. Med. Second Ed.* 4: 185–197.
- Lwanga, S.K., & Lemeshow, S., 1991. Sample size determination in health studies 55–62.
- Martin-Loeches, I., Torres, A., Nagavci, B., Aliberti, S., Antonelli, M., Bassetti, M., et al., 2023. ERS/ESICM/ESCMID/ALAT guidelines for the management of severe community-acquired pneumonia. *Eur. Respir. J.* 61: 1–20. doi:10.1183/13993003.00735-2022
- Metlay, J.P., Waterer, G.W., Long, A.C., Anzueto, A., Brozek, J., Crothers, K., et al., 2019. Diagnosis and treatment of adults with community-acquired pneumonia. *Am. J. Respir. Crit. Care Med.* 200: E45–E67. doi:10.1164/rccm.201908-1581ST
- Murray, C.J., Ikuta, K.S., Sharara, F., Swetschinski, L., Robles Aguilar, G., Gray, A., et al., 2022. Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis. *Lancet* 399: 629–655. doi:10.1016/S0140-6736(21)02724-0
- Naghavi, M., Vollset, S.E., Ikuta, K.S., Swetschinski, L.R., Gray, A.P., Wool, E. e, et al., 2024. Articles Global burden of bacterial antimicrobial resistance 1990 – 2021 : a systematic analysis with forecasts to 2050. *Lancet* 404: 1199–226. doi:10.1016/S0140-6736(24)01867-1
- Negari, G.S., 2019. Hubungan Profil Klinik Pasien Pneumonia Pengguna Ventilator

- dengan Infeksi Bakteri dan Pola Kepekaannya terhadap Antibiotika di ICU RSUP Sardjito. *Tesis Ghazia* 8: 55.
- Nie, W., Zhang, Y., Ha Jee, S., Jung, K.J., Li, B., & Xiu, Q., 2014. Obesity survival paradox in pneumonia : a. *BMC Med.* 12.
- Othman, A., & Abdelazim, M., 2017. Ventilator-associated pneumonia in adult intensive care unit prevalence and complications. *Egypt. J. Crit. Care Med.* 5: 61–63. doi:10.1016/j.ejccm.2017.06.001
- Pahal, P., Rajasurya, V., & Nguyen, A.D., 2025. Typical Bacterial Pneumonia [WWW Document]. *StatPearls [Internet]. Treasure Isl. StatPearls Publ.*
- Pawlik, J., Tomaszek, L., & Mazurek, H., 2022. Risk Factors and Protective Factors against Ventilator-Associated Pneumonia — A Single-Center Mixed Prospective and Retrospective Cohort Study.
- PDPI, 2022. Pedoman Diagnosis dan Penatalaksanaan Pneumonia Komunitas di Indonesia.
- Pepper, D.J., Sun, J., Welsh, J., Cui, X., Suffredini, A.F., & Eichacker, P.Q., 2016. Increased body mass index and adjusted mortality in ICU patients with sepsis or septic shock : a systematic review and meta-analysis. *Crit. Care.* doi:10.1186/s13054-016-1360-z
- Pierrakos, C., & Vincent, J., 2010. Sepsis biomarkers: a review. *Crit. Care* 14. doi:10.1186/cc8872
- Prescott, H.C., 2026. Surviving Sepsis Campaign : International. doi:10.1097/CCM.0000000000000705
- Qin, C., Ma, D., Pang, L., Hu, M., Lin, S., Zhou, Z., et al., 2025. Prognostic factors of sepsis : a systematic review and meta-analysis.
- Reviono, 2021. Pneumonia; Adakah tempat untuk pemberian antinflamasi, UNS PRESS.
- Rose, N., Agrama, I., Nachtigall, I., Pletz, M.W., Rosendahl, J., Chung, H., et al., 2025. Sex differences in sepsis outcomes across the lifespan : a population-based cohort study in Germany.
- Rudd, K.E., Johnson, S.C., Agesa, K.M., Shackelford, K.A., Tsoi, D., Kievlan, D.R., et al., 2020. Global, regional, and national sepsis incidence and

- mortality, 1990–2017: analysis for the Global Burden of Disease Study. *Lancet* 395: 200–211. doi:10.1016/S0140-6736(19)32989-7
- Shebl, E., & Gulick, P., 2025. Nosocomial Pneumonia, StatPearls Publishing. StatPearls [Internet]. Treasure Island (FL).
- Shoar, S., & Musher, D., 2020. 1498. Etiology of Community-acquired Pneumonia in Adults: A Systematic Review. *Open Forum Infect. Dis.* 7: S751–S751. doi:10.1093/ofid/ofaa439.1679
- Shravya, S., & Ramulu, M., 2025. Prognostic Value of Serum Lactate in Adult Patients with Community-Acquired Pneumonia. *C. J. Geriatr. Med.* Volume 17: 1–6. doi:10.61336/cmejgm/2025-09-01
- Sinapidis, D., Kosmas, V., Vittoros, V., Koutelidakis, I.M., Pantazi, A., Stefos, A., et al., 2018. Progression into sepsis : an individualized process varying by the interaction of comorbidities with the underlying infection 1–9.
- Singer, M., Deutschman, C., Seymour, C., Shankar-Hari, M., Annane, D., Bauer, M., et al., 2016. The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). *JAMA* 315(8): 801–10. doi:10.1001/jama.2016.0287
- Sopena, N., & Sabrià, M., 2005. Multicenter Study of Hospital-Acquired Pneumonia in Non-ICU Patients. *Chest* 127: 213–219. doi:<https://doi.org/10.1378/chest.127.1.213>
- Tacconelli, E., Carrara, E., Savoldi, A., Harbarth, S., Mendelson, M., Monnet, D.L., et al., 2018. Discovery , research , and development of new antibiotics : the WHO priority list of antibiotic-resistant bacteria and tuberculosis 18. doi:10.1016/S1473-3099(17)30753-3
- Tang, A., Shi, Y., Dong, Q., Wang, S., Ge, Y., Wang, C., et al., 2023. Prognostic differences in sepsis caused by gram - negative bacteria and gram - positive bacteria : a systematic review and meta - analysis 1–12. doi:10.1186/s13054-023-04750-w
- Th, S., Stenberg, H., Li, X., Pello-esso, W., L, S.L., Khoshnood, A., et al., 2023. The effects of sociodemographic factors and comorbidities on sepsis : A nationwide Swedish cohort study 35. doi:10.1016/j.pmedr.2023.102326
- Torres, A., Niederman, M.S., Chastre, J., Ewig, S., Fernandez-Vandellos, P.,

- Hanberger, H., et al., 2017. International ERS/ESICM/ESCMID/ALAT guidelines for the management of hospital-acquired pneumonia and ventilator-associated pneumonia. *Eur. Respir. J.* 50. doi:10.1183/13993003.00582-2017
- Toyyibah, I.D., & Rusli, M., 2022. Bacterial Pattern among Sepsis Patients in Internal Medicine Inpatient Ward Dr . Soetomo General Academic Hospital , Surabaya , Indonesia 32: 52–58. doi:10.20473/mbiom.v32i2.2022.52-58
- Turner, N., Sharma-Kuinkel, B., Maskarinec, S., Eichenberger, E., Shah, P., Carugati, M., et al., 2019. Methicillin-resistant *Staphylococcus aureus*: an overview of basic and clinical research. *Nat. Rev. Microbiol.* 17: 203–218.
- Umemura, Y., Ogura, H., Takuma, K., Fujishima, S., Abe, T., Kushimoto, S., et al., 2021. Current spectrum of causative pathogens in sepsis: A prospective nationwide cohort study in Japan. *Int. J. Infect. Dis.* 103: 343–351. doi:10.1016/j.ijid.2020.11.168
- van Daalen, F.V., Boersma, W.G., van de Garde, E.M.W., van der Mooren, F.M., Roescher, N., Schouten, J.A., et al., 2024. Management of community-acquired pneumonia in adults: the 2024 practice guideline, Netherland. *SWAB/NVALT* 1–92.
- Vincent, A., 2009. and Outcomes of Infection in Intensive Care Units. *Jama* 302: 2323–2329.
- Vincent, J., Sakr, Y., Singer, M., Loeches, I.M., Machado, F., & Marshall, J., 2020. Prevalence and Outcomes of Infection Among Patients in Intensive Care Units in 2017. *JAMA* 15: 1478–1487. doi:doi:10.1001/jama.2020.2717
- Vos, T., Barber, R.M., Bell, B., Bertozzi-Villa, A., Biryukof, S., Bolliger, I., et al., 2015. Global Burden of Disease Study 2013 Collaborators. Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990-2013: a systematic analysis for the Global Burd. *Lancet* 386(9995): 743–800. doi:10.1016/S0140-6736(15)60692-4
- Wang, J., Hu, Y., Zeng, J., Li, Q., He, L., & Hao, W., 2023. Exploring the Causality Between Body Mass Index and Sepsis: A Two-Sample Mendelian Randomization Study 68: 1–8. doi:10.3389/ijph.2023.1605548

- Wang, Xinyu, Wei, C., He, D., Huang, D., Zhao, Y., Ran, L., et al., 2025. Incidence and risk factor of sepsis in patients with severe community-acquired pneumonia: a Chinese, single-center, retrospective study. *BMC Infect. Dis.* 25. doi:10.1186/s12879-025-11027-w
- Waterer, G.W., Self, W.H., Courtney, D.M., Grijalva, C.G., Balk, R.A., Girard, T.D., et al., 2018. In-Hospital Deaths Among Adults With Community-Acquired Pneumonia. *Chest* 154: 628–635. doi:10.1016/j.chest.2018.05.021
- WHO, 2024. Bacterial Priority Pathogens List.
- WHO, 2020. GLOBAL REPORT ON THE EPIDEMIOLOGY AND BURDEN OF SEPSIS Current evidence , identifying gaps and future directions.
- Widyasari, D., 2022. Pola Bakteri Patogen Yang Diisolasi dari Pasien Pneumonia Rawat Inap dan Kepekaannya terhadap Antibiotik di Rumah Sakit Akademik Universitas Gadjah Mada. Gadjah Mada.
- Wiersinga, W.J., & Seymour, C.W., 2018. Handbook of sepsis. *Handb. Sepsis* 1–253. doi:10.1007/978-3-319-73506-1
- Wu, K., Luo, Y., Qin, J., & Xu, X., 2023. Factors influencing mortality in ICU hospitalized patients with severe sepsis : A systematic review and meta-analysis 61: 597–605. doi:10.56042/ijeb.v61i08.4373
- Xie, K., Guan, S., Kong, X., Ji, W., Du, C., & Jia, M., 2024. Predictors of mortality in severe pneumonia patients : a systematic review and meta - analysis 1–16. doi:10.1186/s13643-024-02621-1
- Yuki, K., & Koutsogiannaki, S., 2021. International Immunopharmacology Pattern recognition receptors as therapeutic targets for bacterial , viral and fungal sepsis PRRs in sepsis : *Int. Immunopharmacol.* 98: 107909. doi:10.1016/j.intimp.2021.107909
- Zhang, Wendan, Jiang, H., Wu, G., Huang, P., Wang, H., An, H., et al., 2023. The pathogenesis and potential therapeutic targets in sepsis. *MedComm* 4: 1–37. doi:10.1002/mco2.418
- Zimmet, P., Yanijik, C.S., Yoshiike, N., Wu, Z.S., Tan, K., Seidell, J., et al., 2004. Public health Appropriate body-mass index for Asian populations and its implications for policy and intervention strategies. *Lancet* 363: 157–163.