

DAFTAR PUSTAKA

1. Bhattarai S, Sharma BK, Subedi N, Ranabhat S, Baral MP. Burden of Serious Bacterial Infections and Multidrug-Resistant Organisms in an Adult Population of Nepal: A Comparative Analysis of Minimally Invasive Tissue Sampling Informed Mortality Surveillance of Community and Hospital Deaths. *Clinical Infectious Diseases*. 2022 Jul 14;73:S415–21.
2. WHO Eastern Mediteranian Region. Infectious Disease [Internet]. WHO Eastern Mediteranian Region. [cited 2025 Feb 15]. Available from: <https://www.emro.who.int/health-topics/infectious-diseases/index.html>
3. Cilloniz C, Dela Cruz CS, Dy-Agra G, Pagcatipunan RS, Cilloniz C, Simonds A, et al. World Pneumonia Day 2024: Fighting Pneumonia and Antimicrobial Resistance. *Am J Respir Crit Care Med*. 2024 Dec 1;210(11):1283–5.
4. Kementerian Kesehatan Republik Indonesia. Penggunaan Antibiotik Tanpa Resep Dokter [Internet]. 2023 [cited 2025 Feb 20]. Available from: www.badankebijakan.kemkes.go.id
5. Limato R, Lazarus G, Dernison P, Mudia M, Alamanda M, Nelwan EJ, et al. Optimizing antibiotic use in Indonesia: A systematic review and evidence synthesis to inform opportunities for intervention. Available from: <https://doi.org/10.1016/j.>
6. Naghavi M, Vollset SE, Ikuta KS, Swetschinski LR, Gray AP, Wool EE, et al. Global burden of bacterial antimicrobial resistance 1990–2021: a systematic analysis with forecasts to 2050. *The Lancet*. 2024 Sep;404(10459):1199–226.
7. Gach MW, Lazarus G, Simadibrata DM, Sinto R, Saharman YR, Limato R, et al. Antimicrobial resistance among common bacterial pathogens in Indonesia: a systematic review. *The Lancet Regional Health - Southeast Asia*. 2024 Jul;26:100414.
8. Novelni R, Irwandi, Pratiwi D. Identifikasi dan Uji Resistensi Bakteri Pada Pasien dengan Ulkus diabetikum di Bangsal Interne RSUP DR. M. Djamil Padang. *Jurnal Penelitian Farmasi Indonesia*. 2019 Dec;8:67–74.
9. Chang CH, Chang CH, Huang SH, Lee CS, Ko PC, Lin CY, et al. Epidemiology and outcomes of multidrug-resistant bacterial infection in non-cystic fibrosis bronchiectasis. *Ann Clin Microbiol Antimicrob*. 2024 Dec 1;23(1).
10. Sjahjadi NR, Rasyid R, Rustam E, Restusari L. Prevalensi Kuman Multi Drug Resistance (MDR) di Laboratorium Mikrobiologi RSUP Dr. M. Djamil Padang Periode Januari 2010 - Desember 2012. *Jurnal Kesehatan Andalas*. 2014 Sep 1;3(3).
11. Chandra P, Anburaj SE, Vijayanarayana K, Vandana KE, Mukhopadhyay C, Acharya UD, et al. Outcome and attributable cost associated with bacterial

resistant infections in a tertiary care hospital. *J Appl Pharm Sci*. 2023;13(10):132–40.

12. Kementerian Koordinator Bidang Pembangunan Manusia dan Kebudayaan Republik Indonesia. Rencana Aksi Nasional Pengendalian Resistensi Antimikroba Tahun 2020 - 2024. 1st ed. 2022.
13. Kementerian Kesehatan Republik Indonesia. Keputusan Menteri Kesehatan Nomor HK.01.07/MENKES/2147/2023 Tentang Pedoman Nasional Pelayanan Kedokteran Tata Laksana Pneumonia Pada Dewasa. 2023.
14. Lim WS. Pneumonia—Overview. In: *Encyclopedia of Respiratory Medicine*. Elsevier; 2022. p. 185–97.
15. Byford-Ricardson L. Adult Pneumonia: Pathogenesis and clinical findings [Internet]. 2022 [cited 2025 Jun 4]. Available from: <https://calgaryguide.ucalgary.ca/adult-pneumonia-pathogenesis-and-clinical-findings/>
16. Sattar SBA, Nguyen AD, Sharma S. Bacterial Pneumonia [Internet]. 2024 [cited 2025 Jun 4]. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK513321/#:~:text=Pathologically%2C%20lobar%20pneumonia%20is%20characterized,%5B45%5D>
17. Pulingam T, Parumasivam T, Gazzali AM, Sulaiman AM, Chee JY, Lakshmanan M, et al. Antimicrobial resistance: Prevalence, economic burden, mechanisms of resistance and strategies to overcome. Vol. 170, *European Journal of Pharmaceutical Sciences*. Elsevier B.V.; 2022.
18. World Health Organization. Antimicrobial resistance [Internet]. World Health Organization. 2023 [cited 2025 Feb 16]. Available from: <https://www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance>
19. Murray CJ, Ikuta KS, Sharara F, Swetschinski L, Robles Aguilar G, Gray A, et al. Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis. *The Lancet*. 2022 Feb 12;399(10325):629–55.
20. Rokom. Resistensi Antimikroba Ancaman Kesehatan Paling Mendesak, Strategi One Health Perlu Digencarkan [Internet]. Kementerian Kesehatan Republik Indonesia. 2021 [cited 2025 Mar 4]. Available from: https://sehatnegeriku.kemkes.go.id/baca/rilis-media/20211119/2238877/resistensi-antimikroba-ancaman-kesehatan-paling-mendesak-strategi-one-health-perlu-digencarkan/?utm_source=chatgpt.com
21. Marsudi AS, Wiyono WI, Mpila DA. Inventory Control of Drug with Economic Order Quantity (EOQ) and Reorder Point (ROP) Methods in X Pharmacy, District Wenang. *Pharmacy Medical Journal*. 2021;4(2):54–61.
22. Benjamin EI, Homenta H, Waworuntu OA. Identifikasi Pola Bakteri dan Uji Sensitivitas Antibiotik di Kamar Bedah Mata Rumah Sakit Mata Provinsi Sulawesi Utara. *e-CliniC* [Internet]. 2024 Oct 2;12(3):324–9. Available from: <https://ejournal.unsrat.ac.id/v3/index.php/eclinic/article/view/53622>

23. Maclean RC, Millan AS. The evolution of antibiotic resistance. 2019 Sep 4;30(1).
24. Vanderwoude J, Azimi S, Read TD, Diggle SP. The role of hypermutation and collateral sensitivity in antimicrobial resistance diversity of *Pseudomonas aeruginosa* populations in cystic fibrosis lung infection. *mBio*. 2024 Feb 1;15(2).
25. Fernández L, Hancock REW. Adaptive and mutational resistance: Role of porins and efflux pumps in drug resistance. *Clin Microbiol Rev*. 2012 Oct;25(4):661–81.
26. Liu G, Thomsen LE, Olsen JE. Antimicrobial-induced horizontal transfer of antimicrobial resistance genes in bacteria: A mini-review. *Journal of Antimicrobial Chemotherapy*. 2022 Mar 1;77(3):556–67.
27. Endale H, Mathewos M, Abdeta D. Potential Causes of Spread of Antimicrobial Resistance and Preventive Measures in One Health Perspective-A Review. Vol. 16, *Infection and Drug Resistance*. Dove Medical Press Ltd; 2023. p. 7515–45.
28. Ahmed SK, Hussein S, Qurbani K, Ibrahim RH, Fareeq A, Mahmood KA, et al. Antimicrobial resistance: Impacts, challenges, and future prospects. *Journal of Medicine, Surgery, and Public Health*. 2024 Apr;2:100081.
29. Walana W, Vicar EK, Kuugbee ED, Sakida F, Yabasin IB, Faakuu E, et al. Antimicrobial resistance of clinical bacterial isolates according to the WHO's AWaRe and the ECDC-MDR classifications: the pattern in Ghana's Bono East Region. *Frontiers in Antibiotics*. 2023 Dec 7;2.
30. Cosentino F, Viale P, Giannella M. MDR/XDR/PDR or DTR? Which definition best fits the resistance profile of *Pseudomonas aeruginosa*? Vol. 36, *Current Opinion in Infectious Diseases*. Lippincott Williams and Wilkins; 2023. p. 564–71.
31. Tortora GJ, Funke BR, Case CL. *Microbiology: an Introduction*. 13th Edition. Bair III WB, Weber D, editors. Boston: Pearson; 2019.
32. Uddin TM, Chakraborty AJ, Khusro A, Zidan BRM, Mitra S, Emran T Bin, et al. Antibiotic resistance in microbes: History, mechanisms, therapeutic strategies and future prospects. Vol. 14, *Journal of Infection and Public Health*. Elsevier Ltd; 2021. p. 1750–66.
33. Kumawat M, Nabi B, Daswani M, Viqar I, Pal N, Sharma P, et al. Role of bacterial efflux pump proteins in antibiotic resistance across microbial species. *Microb Pathog*. 2023 Aug 1;181:106182.
34. Zhang S, Wang J, Ahn J. Advances in the Discovery of Efflux Pump Inhibitors as Novel Potentiators to Control Antimicrobial-Resistant Pathogens. Vol. 12, *Antibiotics*. Multidisciplinary Digital Publishing Institute (MDPI); 2023.

35. World Health Organization. Infections and Prevention Control [Internet]. [cited 2025 Mar 6]. Available from: https://www.who.int/health-topics/infection-prevention-and-control#tab=tab_1
36. World Health Organization. Improving infection prevention and control to prevent the spread of antimicrobial resistance [Internet]. [cited 2025 Mar 6]. Available from: <https://www.who.int/europe/activities/improving-infection-prevention-and-control-to-prevent-the-spread-of-antimicrobial-resistance>
37. Mappa MohR, Bahi RRR, Gonibala AP. Sosialisasi Penggunaan Antibiotik yang Bijak untuk Mencegah Resistensi Obat. 2023 Jun 2;
38. Estiningsih D, Puspitasari I, Nuryastuti T. Identifikasi Infeksi Multidrug-Resistant Organism (MDRO) Pada Pasien yang Dirawat Di Bangsal Neonatal Intensive Care Unit (NICU) RSUP DR. Soeradji Tirtonegoro Klaten. *Jurnal Manajemen dan Pelayanan Farmasi*. 2016 Sep;6:243–8.
39. Wu C, Lu J, Ruan L, Yao J. Tracking Epidemiological Characteristics and Risk Factors of Multi-Drug Resistant Bacteria in Intensive Care Units. *Infect Drug Resist*. 2023;16:1499–509.
40. Alsehem AF, Alharbi EA, Alammash BB, Alrais AI, Elbadawy HM, Alahmadi YM. Assessment of risk factors associated with multidrug-resistant organism infections among patients admitted in a tertiary hospital - a retrospective study. *Saudi Pharmaceutical Journal*. 2023 Jun;31(6):1084–93.
41. World Health Organizations. WHO Bacterial Priority Pathogens List, 2024. World Health Organizations; 2024. 1–72 p.
42. Wang M, Wei H, Zhao Y, Shang L, Di L, Lyu C, et al. Analysis of multidrug-resistant bacteria in 3223 patients with hospital-acquired infections (HAI) from a tertiary general hospital in China. *Bosn J Basic Med Sci*. 2019;19(1):86–93.
43. Ntambi S, Sutiningsih D, Hussein MA, Laksono B. Distribution and Prevalence of Multidrug-Resistant Organisms (MDROs) Among MDRO-Positive Individuals at Dr. Kariadi Hospital.
44. Turbawaty DK, Logito V, Tjandrawati A. Methicillin-Resistant *Staphylococcus aureus* (MRSA) Patterns and Antibiotic Susceptibility in Surgical and Non-Surgical Patients in a Tertiary Hospital in Indonesia. *Majalah Kedokteran Bandung* [Internet]. 2021 Sep;53(3):148–54. Available from: <http://journal.fk.unpad.ac.id/index.php/mkb/article/view/2396>
45. Shoaib M, Aqib AI, Muzammil I, Majeed N, Bhutta ZA, Kulyar MF e. A, et al. MRSA compendium of epidemiology, transmission, pathophysiology, treatment, and prevention within one health framework. Vol. 13, *Frontiers in Microbiology*. Frontiers Media S.A.; 2023.
46. Siddiqui AH, Koirala J. Methicillin-Resistant *Staphylococcus aureus* [Internet]. National Center for Biotechnology Informations. 2023 [cited 2025 Apr 11]. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK482221/>

47. Rastuti MR, Budayanti NNS, Dwija IBNP. Various types of extended spectrum β -lactamases: a literature review. *Journal of Clinical Microbiology and Infectious Diseases*. 2023 Dec 5;3(2):29–34.
48. Husna A, Rahman MM, Badruzzaman ATM, Sikder MH, Islam MR, Rahman MT, et al. Extended-Spectrum β -Lactamases (ESBL): Challenges and Opportunities. Vol. 11, *Biomedicines*. Multidisciplinary Digital Publishing Institute (MDPI); 2023.
49. Resi Y, Yuniarti N, Puspitasari I. Prevalensi Bakteri Extended-Spectrum Beta-Lactamase dan Evaluasi Kesesuaian Antibiotik Definitif pada Pasien Rawat Inap di RSUP Dr Soeradji Tirtonegoro Klaten. | *Majalah Farmaseutik*. 2021;17(2):157–65.
50. Istiqomah, Kian Sinanjung, Fatrinawati, Gita Mayasari. Faktor Risiko Infeksi Bakteri Penghasil Extended Spectrum Beta-Lactamase (ESBL) pada pasien ICU di RS Jogja Tahun 2023. *Informasi dan Promosi Kesehatan* [Internet]. 2024 Dec 30;3(2):118–229. Available from: <https://e-journal.saku.co.id/index.php/IPK/article/view/279>
51. Smith HZ, Hollingshead CM, Kendall B. Carbapenem-Resistant Enterobacterales [Internet]. National Center for Biotechnology Information. 2024 [cited 2025 Apr 12]. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK551704/>
52. Ma J, Song X, Li M, Yu Z, Cheng W, Yu Z, et al. Global spread of carbapenem-resistant Enterobacteriaceae: Epidemiological features, resistance mechanisms, detection and therapy. Vol. 266, *Microbiological Research*. Elsevier GmbH; 2023.
53. Center for Disease Control and Prevention. Carbapenem-resistant *Acinetobacter baumannii* (CRAB): An urgent public health threat in United States healthcare facilities [Internet]. Center for Disease Control and Prevention. 2021 [cited 2025 Apr 12]. Available from: <https://arpsp.cdc.gov/story/cra-urgent-public-health-threat>
54. Yang AF, Huang V, Samaroo-Campbell J, Augenbraun M. Multi-drug resistant *Pseudomonas aeruginosa*: a 2019–2020 single center retrospective case control study. *Infection Prevention in Practice*. 2023 Sep 1;5(3).
55. Song HW, Tian JH, Song HP, Guo SJ, Lin YH, Pan JS. Tracking multidrug resistant tuberculosis: a 30-year analysis of global, regional, and national trends. *Front Public Health*. 2024 Sep 10;12.
56. World Health Organizations. Tuberculosis: Multidrug-resistant (MDR-TB) or rifampicin-resistant TB (RR-TB) [Internet]. World Health Organizations. 2024 [cited 2025 Apr 12]. Available from: [https://www.who.int/news-room/questions-and-answers/item/tuberculosis-multidrug-resistant-tuberculosis-\(mdr-tb\)](https://www.who.int/news-room/questions-and-answers/item/tuberculosis-multidrug-resistant-tuberculosis-(mdr-tb))

57. U.S. Departement of Health and Human Services. Clinical outcome [Internet]. U.S. Departement of Health and Human Services. [cited 2025 Apr 12]. Available from: <https://toolkit.ncats.nih.gov/glossary/clinical-outcome/>
58. Hayati Z, Widyastuti E, Hayati Z, Nurjannah N, Mudatsir M, Saputra I. Hubungan Kualitas Penggunaan Antibiotik dengan Luaran Klinis Pasien Bakteremia yang Disebabkan Methicillin Resistant Staphylococcus aureus (MRSA). *Jurnal Kedokteran Syiah Kuala*. 2022 Jun 24;22(1).
59. Aryani Perwitasari D, Darmawan E, Risdiana I. Evaluasi Kesesuaian Pemberian Antibiotik Empiris terhadap Antibiotikogram dan Luaran Klinis pada Pasien Pneumonia Dewasa. 2021 Mar 9;
60. Nurhatasa A, Ichwan Hamzah M. Analisis Pengakuan Pendapatan dan Beban Serta Kaitannya Terhadap Insentif Karyawan Pada Rumah Sakit Medika Permata Hijau. 2018;
61. Fautrel B, Boonen A, De Wit M, Grimm S, Joore M, Guillemin F. Cost assessment of health interventions and diseases. Vol. 6, RMD Open. BMJ Publishing Group; 2020.
62. Weerasinghe NP, Bodinayake CK, Wijayaratne WMDGB, Devasiri I V., Dahanayake NJ, Kurukulasooriya MRP, et al. Direct and indirect costs for hospitalized patients with dengue in Southern Sri Lanka. *BMC Health Serv Res*. 2022 Dec 1;22(1).
63. Serra-Burriel M, Keys M, Campillo-Artero C, Agodi A, Barchitta M, Gikas A, et al. Impact of multi-drug resistant bacteria on economic and clinical outcomes of healthcare-associated infections in adults: Systematic review and meta-analysis. *PLoS One*. 2020 Jan 1;15(1).
64. Khairunnisa. Gambaran Efektivitas Terapi Antibiotik Empiris Pada Pasien Sepsis Rawat Inap Penyakit Dalam RSUP DR. M. DJAMIL Padang Tahun 2017. [Padang]: Universitas Andalas; 2019.
65. Prawang A, Chanjamlong N, Rungwara W, Santimaleeworagun W, Paiboonvong T, Manapattanasatein T, et al. Combination Therapy versus Monotherapy in the Treatment of *Stenotrophomonas maltophilia* Infections: A Systematic Review and Meta-Analysis. *Antibiotics*. 2022 Dec 9;11(12):1788.
66. Kementerian Kesehatan Republik Indonesia. Peraturan Menteri Kesehatan Republik Indonesia Nomor 28 Tahun 2021 Tentang Pedoman Pendoman Penggunaan Antibiotik. 2021.
67. Tamma PD, Heil EL, Ann Justo J, Mathers AJ, Satlin MJ, Bonomo RA. Infectious Diseases Society of America 2024 Guidance on the Treatment of Antimicrobial-Resistant Gram-Negative Infections [Internet]. 2023 Dec. Available from: www.idsociety.org/practice-guideline/amr-guidance/.
68. Zhao Y, Feng H ming, Qu J, Luo X, Ma W jian, Tian J hui. A systematic review of pharmacoeconomic guidelines. Vol. 21, *Journal of Medical Economics*. Taylor and Francis Ltd; 2018. p. 85–96.

69. Strilciuc S, Grad DA, Radu C, Chira D, Stan A, Ungureanu M, et al. The economic burden of stroke: a systematic review of cost of illness studies. Vol. 14, *Journal of Medicine and Life*. Carol Davila University Press; 2021. p. 606–19.
70. Agus Setiani L, Zunnita O, Wulandari C, Ikramin M. Cost-Effectiveness Analysis Kombinasi Obat Antihipertensi Pada Pasien Hipertensi Rawat Jalan di RSUP Fatmawati Jakarta Periode 2020. *Pharmamedica Journal*. 2023 Dec;8(2):200–8.
71. Hasanah NU, Dewi NMAR, Saputra YD. Cost-effectiveness analysis of amlodipine and candesartan in the inpatient setting at Mataram University Hospital in Indonesia, 2021. *Pharmacy Education*. 2024 May 1;24(3):228–33.
72. Sinaga AH, Anjani A. Cost-Effectiveness Analysis (CEA) Penggunaan Golongan Obat Neuroprotektan Citicoline Injeksi dan Piracetam Injeksi Pada Pasien Stroke DI RSU Imelda Pekerja Indonesia Medan. *Jurnal Ilmiah Farmasi Imelda*. 2022 Mar 7;5(2):35–42.
73. Yaremko HL, Locke GE, Chow R, Lock M, Dinniwell R, Yaremko BP. Cost minimization analysis of hypofractionated radiotherapy. *Current Oncology*. 2021 Feb 1;28(1):716–25.
74. Kumar DT, Balasubramanian K. Evaluation of Cost Utility Analysis In The Management Of Osteoarthritis Knee in A Tertiary Care Hospital. A Prospective Observational Pharmacoeconomic Study. *Journal of Population Therapeutics & Clinical Pharmacology*. 2024;31(4):1974–9.
75. Singh G, Loho T, Yulianti M, Aditjaningsih D, Zakiah LF, Masse SF, et al. Factors associated with antibiotic resistance and survival analysis of severe pneumonia patients infected with *Klebsiella pneumoniae*, *Acinetobacter baumannii*, and *Pseudomonas aeruginosa* : A retrospective cohort study in Jakarta, Indonesia. *SAGE Open Med*. 2024 Jan 27;12.
76. Arikandini DAPAR, Ni Nyoman Sri Budayanti, Ni Nengah Dwi Fatmawati, I Putu Bayu Mayura. Prevalence and antibiotic sensitivity patterns of extended-spectrum beta-lactamase-producing *Klebsiella pneumoniae* in pneumonia patients at Ngoerah Hospital from 2020 to 2022. *Journal of Clinical Microbiology and Infectious Diseases*. 2025 Mar 18;5(1):12–6.
77. Latar NJ, Wikaningrum R, Armelia L. Prevalensi dan Pola Kepekaan Bakteri Gram Negatif Multidrug Resistant dari Kultur Sputum Penyebab Infeksi Saluran Pernapasan Bawah Non-Tuberkulosis Tahun 2022-2023. *Junior Medical Journal*. 2025;3(3).
78. Akhmad AF, Ulfa M, Azuma M. Antibiotic Susceptibility Patterns among Indonesian Adults Hospitalized with Pneumonia. *Jurnal Respirasi*. 2024 Jan 30;10(1):6–13.

79. Díaz A, Beleña Á, Zueco J. The Role of Age and Gender in Perceived Vulnerability to Infectious Diseases. *Int J Environ Res Public Health*. 2020 Jan 11;17(2):485.
80. Fadrian F, Chen K, Kumalawati J, Rumende CM, Shatri H, Nelwan EJ. The Validation of Drug Resistance in Pneumonia (DRIP) Score in Predicting Infections due to Drug-Resistant Pathogens in Community-acquired Pneumonia at Cipto Mangunkusumo Hospital, Jakarta, Indonesia. *Acta Med Indones - Indones J Intern Med*. 2021 Oct;53:416–22.
81. Hyun H, Song JY, Yoon JG, Seong H, Noh JY, Cheong HJ, et al. Risk factor-based analysis of community-acquired pneumonia, healthcare-associated pneumonia and hospital-acquired pneumonia: Microbiological distribution, antibiotic resistance, and clinical outcomes. *PLoS One*. 2022 Jun 29;17(6):e0270261.
82. Soedarsono S, Widyaningsih PD, Mertaniasih NM. The Risk Factors of Multidrug-Resistant Organisms in Hospitalized Patients with Community-Acquired Pneumonia in Dr. Soetomo Hospital Surabaya, Indonesia. *Acta Med Indones-Indones J Intern Med*. 2021 Apr;53:169–76.
83. Poovieng J, Sakboonyarat B, Nasomsong W. Bacterial etiology and mortality rate in community-acquired pneumonia, healthcare-associated pneumonia and hospital-acquired pneumonia in Thai university hospital. *Sci Rep*. 2022 May 30;12(1):9004.
84. Wu B, Peng M, Tong Y, Wang X, Ding Y, Cheng X. Distribution of bacteria and risk factors in patients with multidrug-resistant pneumonia in a single center rehabilitation ward. *Medicine*. 2023 Sep 8;102(36):e35023.
85. Purba AK, Ascobat P, Muchtar A, Wulandari L, Rosyid AN, Purwono PB, et al. Multidrug-Resistant Infections Among Hospitalized Adults With Community-Acquired Pneumonia In An Indonesian Tertiary Referral Hospital. *Infect Drug Resist*. 2019 Nov;Volume 12:3663–75.
86. ANISHA F, Dodi Vionanda, Nonong amalita, Zilrahmi. Application of Random Forest for The Classification Diabetes Mellitus Disease in RSUP Dr. M. Jamil Padang. *UNP Journal of Statistics and Data Science*. 2023 Mar 8;1(2):45–52.
87. Dourliou V, Kakaletsis N, Stamou D, Champla A, Tsakiri K, Agapakis D, et al. Diabetes Mellitus and Multidrug-Resistant Gram-Negative Bacterial Infections in Critically Ill COVID-19 Patients: A Retrospective Observational Study. *Diagnostics*. 2025 May 8;15(10):1190.
88. Assefa M. Multi-drug resistant gram-negative bacterial pneumonia: etiology, risk factors, and drug resistance patterns. *Pneumonia*. 2022 May 5;14(1):4.
89. Breijyeh Z, Jubeh B, Karaman R. Resistance of Gram-Negative Bacteria to Current Antibacterial Agents and Approaches to Resolve It. *Molecules*. 2020 Mar 16;25(6):1340.

90. Lüthi-Corridori G, Boesing M, Roth A, Giezendanner S, Leuppi-Taegtmeyer AB, Schuetz P, et al. Predictors of Length of Stay, Rehospitalization and Mortality in Community-Acquired Pneumonia Patients: A Retrospective Cohort Study. *J Clin Med*. 2023 Aug 28;12(17):5601.
91. Sinanjung K, Aman AT, Nirwati H. Extended spectrum beta lactamase (ESBL)-producing *Klebsiella pneumoniae* clinical isolates and its susceptibility pattern to antibiotics at Dr. Soeradji Tirtonegoro General Hospital Klaten, Central Java. *Journal of the Medical Sciences (Berkala Ilmu Kedokteran)*. 2020 Jan 2;52(01).
92. Lestari DC, Karuniawati A, Saharman YR, Sedono Y. Patients Infected by Extended-Spectrum Beta-Lactamase Producing *Klebsiella pneumoniae*: Risk Factors and Outcomes. 2020 Apr 1;8:46–51.
93. Khadijah S, Handayani I, Sennang N. Prevalence and Characteristic Multidrug Resistant Organism in Intensive Care Unit of Dr. Wahidin Sudirohusodo Hospital Makassar. *Indonesian Journal of Clinical Pathology and Medical Laboratory*. 2019 Jul;323–7.
94. Kaier K, Heister T, Götting T, Wolkewitz M, Mutters NT. Measuring the in-hospital costs of *Pseudomonas aeruginosa* pneumonia: methodology and results from a German teaching hospital. *BMC Infect Dis*. 2019 Dec 3;19(1):1028.
95. Poudel AN, Zhu S, Cooper N, Little P, Tarrant C, Hickman M, et al. The economic burden of antibiotic resistance: A systematic review and meta-analysis. *PLoS One*. 2023 May 8;18(5):e0285170.
96. Naoum P, Athanasakis K, Kyriopoulos I, Liapikou A, Toumbis M, Kyriopoulos J. Community acquired pneumonia: a cost-of-illness analysis in Greece. *Rural Remote Health*. 2020 Jun 15;
97. Yang H, Fan Y, Li C, Zhang M, Liu W. A retrospective study on risk factors and disease burden for hospital-acquired pneumonia caused by multi-drug-resistant bacteria in patients with intracranial cerebral hemorrhage. *Neurological Sciences*. 2022 Apr 8;43(4):2461–7.
98. Minar Paskah Lianti Manik, Rizka Humardewayanti Asdie, Ika Puspitasari. Evaluation of empirical antibiotic usage and cost analysis of patients with nosocomial pneumonia in ICU of RSUP Dr. Sardjito, Yogyakarta. *Indonesian Journal of Pharmacology and Therapy*. 2020 Dec 17;1(2).
99. Hastuti S, Islam Z, Amaliah Z, Ruskar D. Perbandingan Analisis Biaya Penggunaan Antibiotik Seftriakson Tunggal Dengan Kombinasi Antibiotik Lain Pada Pasien Pneumonia Komunitas. *PENDIPA Journal of Science Education*. 2022 Mar 20;6(2):394–403.
100. van Werkhoven CH, Postma DF, Mangen MJJ, Oosterheert JJ, Bonten MJM. Cost-effectiveness of antibiotic treatment strategies for community-acquired pneumonia: results from a cluster randomized cross-over trial. *BMC Infect Dis*. 2017 Dec 10;17(1):52.

101. Tichy E, Torres A, Bassetti M, Kongnakorn T, Di Virgilio R, Irani P, et al. Cost-effectiveness Comparison of Ceftazidime/Avibactam Versus Meropenem in the Empirical Treatment of Hospital-acquired Pneumonia, Including Ventilator-associated Pneumonia, in Italy. Clin Ther. 2020 May;42(5):802–17.

