DAFTAR PUSTAKA

Abdalla, A., Mohamed, M.A., & Radwan, S.M., 2019. Outcome Predictors of Multi-drug Resistant Gram Negative Bacteremia in Children with Hematological Malignancies. *Cancer Biology* 9: 66–77.

Aizawa, Y., Shoji, T., Ito, K., Kasai, M., Sakurai, H., Toyofuku, E., et al., 2019. Multidrug-resistant Gram-negative Bacterial Bloodstream Infections in Children's Hospitals in Japan, 2010–2017. *Pediatric Infectious Disease Journal* 38: 653–659. doi:10.1097/inf.0000000000002273

Alali, M., David, M.Z., Department of Medicine, Division of Infectious Diseases, University of Pennsylvania, Philadelphia, PA, USA, Ham, S.A., Center for Health and the Social Sciences, The University of Chicago , IL, USA, La, D.-I., et al., 2020. Febrile Neutropenia in Children: Etiologies, Outcomes, and Risk Factors with Prolonged Fever. *OBM Transplantation* 4: 1–15. doi:10.21926/obm.transplant.2001102

Almand, B., Clark, J.I., Nikitina, E., Van Beynen, J., English, N.R., Knight, S.C., et al., 2001. Increased Production of Immature Myeloid Cells in Cancer Patients: A Mechanism of Immunosuppression in Cancer. *The Journal of Immunology* 166: 678–689. doi:10.4049/jimmunol.166.1.678

Anoop, P., & Patil, C.N., 2021. Management of Febrile Neutropenia in Children: Current Approach and Challenges. *Pediatric Infectious Disease* 2: 135–139. doi:10.5005/jp-journals-10081-1257

Ashman, L.K., Drew, P.A., Toogood, I.R., & Juttner, C.A., 1987. Immunological competence of patients in remission from acute leukaemia: apparently normal T cell function but defective pokeweed mitogen-driven immunoglobulin synthesis. *Immunol Cell Biol* 65: 201–210. doi:10.1038/icb.1987.22

Astria, Y., Satari, H.I., Gunardi, H., & Sjakti, H.A., 2021. Microbiological profiles and prognostic factors of infection mortality in febrile neutropenic children with malignancy. *PI* 61: 283–90. doi:10.14238/pi61.5.2021.283-90

Averbuch, D., Avaky, C., Harit, M., Stepensky, P., Fried, I., Ben-Ami, T., et al., 2017. Non-fermentative Gram-negative rods bacteremia in children with cancer: a 14-year single-center experience. *Infection* 45: 327–334. doi:10.1007/s15010-017-0988-1

Bassetti, M., & Garau, J., 2021. Current and future perspectives in the treatment of multidrug-resistant Gram-negative infections. *Journal of Antimicrobial Chemotherapy* 76: iv23–iv37. doi:10.1093/jac/dkab352

Boeriu, E., Borda, A., Vulcanescu, D.D., Sarbu, V., Arghirescu, S.T., Ciorica, O., et al., 2022. Diagnosis and Management of Febrile Neutropenia in Pediatric Oncology Patients—A Systematic Review. *Diagnostics* 12: 1800. doi:10.3390/diagnostics12081800

Breijyeh, Z., Jubeh, B., & Karaman, R., 2020. Resistance of Gram-Negative Bacteria to Current Antibacterial Agents and Approaches to Resolve It. *Molecules* 25: 1340. doi:10.3390/molecules25061340

Carena, A.A., Laborde, A., Roccia-Rossi, I., Palacios, C.J., Jordán, R., Valledor, A., et al., 2020. Proposal of a clinical score to stratify the risk of multidrug-resistant gram-negative rods bacteremia in cancer patients. *The Brazilian Journal of Infectious Diseases* 24: 34–43. doi:10.1016/j.bjid.2019.11.001

Castagnola, E., Bagnasco, F., Mesini, A., Agyeman, P.K.A., Ammann, R.A., Carlesse, F., et al., 2021. Antibiotic Resistant Bloodstream Infections in Pediatric Patients Receiving Chemotherapy or Hematopoietic Stem Cell Transplant: Factors Associated with Development of Resistance, Intensive Care Admission and Mortality. *Antibiotics* 10: 266. doi:10.3390/antibiotics10030266

Cennamo, F., Masetti, R., Largo, P., Argentiero, A., Pession, A., & Esposito, S., 2021. Update on Febrile Neutropenia in Pediatric Oncological Patients Undergoing Chemotherapy. *Children* 8: 1086. doi:10.3390/children8121086

Centers for Disease Control and Prevention, 2013. ANTIBIOTIC RESISTANCE THREATS in the United States, 2013.

Clearesta, K.E., I Wayan Gustawan, Ketut Ariawati, Ni Nengah Dwi Fatmawati, Made Gde Dwi Lingga Utama, Anak Agung Ngurah Ketut Putra Widnyana, et al., 2022. Microbial blood culture patterns and antibiotic susceptibility in pediatric febrile neutropenia at Sanglah General Hospital Bali. *Bali Med J.* 11: 962–969. doi:10.15562/bmj.v11i2.3436

Davis, K., & Wilson, S., 2020. Febrile neutropenia in paediatric oncology. *Paediatrics and Child Health* 30: 93–97. doi:10.1016/j.paed.2019.12.002

De Oliveira Costa, P., Atta, E.H., & Da Silva, A.R.A., 2015. Infection with multidrug-resistant gram-negative bacteria in a pediatric oncology intensive care unit: risk factors and outcomes. *Jornal de Pediatria* 91: 435–441. doi:10.1016/j.jped.2014.11.009

De Oliveira Costa, P., Atta, E.H., & Da Silva, A.R.A., 2014. Predictors of 7- and 30-day mortality in pediatric intensive care unit patients with cancer and hematologic malignancy infected with Gram-negative bacteria. *The Brazilian Journal of Infectious Diseases* 18: 591–599. doi:10.1016/j.bjid.2014.05.012

Dufrayer, M.C., Monteiro, Y.M.C., Carlesse, F.A.D.M.C., Motta, F., Daudt, L.E., & Michalowski, M.B., 2023. Antibiotic prophylaxis in acute childhood leukemia: What is known so far? *Hematology, Transfusion and Cell Therapy* 45: 473–482. doi:10.1016/j.htct.2022.09.1279

Exner, M., Bhattacharya, S., Christiansen, B., Gebel, J., Goroncy-Bermes, P., Hartemann, P., et al., 2017. Antibiotic resistance: What is so special about multidrug-resistant Gram-negative bacteria? *GMS Hygiene and Infection Control; 12:Doc05*. doi:10.3205/DGKH000290

Gandhi, M., & Shetty, R., 2019. Multidrug-resistant Gram-negative Bacterial Infections in Critically Ill. *Pediatric Infectious Disease* 1: 62–67. doi:10.5005/jp-journals-10081-1214

Haeusler, G.M., Mechinaud, F., Daley, A.J., Starr, M., Shann, F., Connell, T.G., et al., 2013. Antibiotic-resistant Gram-negative Bacteremia in Pediatric

Oncology Patients—Risk Factors and Outcomes. *Pediatric Infectious Disease Journal* 32: 723–726. doi:10.1097/INF.0b013e31828aebc8

Hafez, H.A., Soliaman, R.M., Bilal, D., Hashem, M., & Shalaby, L.M., 2019. Early Deaths in Pediatric Acute Leukemia: A Major Challenge in Developing Countries. *Journal of Pediatric Hematology/Oncology* 41: 261–266. doi:10.1097/MPH.0000000000001408

Hamid, S., Widjajanto, P.H., & Laksono, I.S., 2016. Evaluasi Sensitivitas Antibiotik dengan Demam Neutropenia. *SP* 15: 220. doi:10.14238/sp15.4.2013.220-4

Hansen, B.-A., Wendelbo, Ø., Bruserud, Ø., Hemsing, A.L., Mosevoll, K.A., & Reikvam, H., 2019. Febrile Neutropenia in Acute Leukemia. Epidemiology, Etiology, Pathophysiology and Treatment. *Mediterr J Hematol Infect Dis* 12: e2020009. doi:10.4084/mjhid.2020.009

Herrera, F., Laborde, A., Rossi, I.R., Guerrini, G., Jordan, R., Valledor, A., et al., 2018. Prognostic factors for 7-day and 30-day mortality during gram-negative bacteremia episodes in cancer and hematopoietic stem cell transplant patients. *International Journal of Infectious Diseases* 73: 3. doi:10.1016/j.ijid.2018.04.3437

Ivády, B., Kenesei, É., Tóth-Heyn, P., Kertész, G., Tárkányi, K., Kassa, C., et al., 2016. Factors influencing antimicrobial resistance and outcome of Gram-negative bloodstream infections in children. *Infection* 44: 309–321. doi:10.1007/s15010-015-0857-8

James, V., Prakash, A., Mehta, K., & Durugappa, T., 2021. Re-thinking treatment strategies for febrile neutropenia in paediatric oncology population: the perspective from a developing country. *Infect Agents Cancer* 16: 44. doi:10.1186/s13027-021-00387-y

Joudeh, N., Sawafta, E., Abu Taha, A., Hamed Allah, M., Amer, R., Odeh, R.Y., et al., 2023. Epidemiology and source of infection in cancer patients with febrile neutropenia: an experience from a developing country. *BMC Infect Dis* 23: 106. doi:10.1186/s12879-023-08058-6

Jungrungrueng, T., Anugulruengkitt, S., Lauhasurayotin, S., Chiengthong, K., Poparn, H., Sosothikul, D., et al., 2021. The Pattern of Microorganisms and Drug Susceptibility in Pediatric Oncologic Patients with Febrile Neutropenia. *Journal of Pathogens* 2021: 1–9. doi:10.1155/2021/6692827

Karthaus, M., & Cornely, O.A., 2003. Ceftriaxone in Febrile Neutropenia. *Journal of Chemotherapy* 15: 211–219. doi:10.1179/joc.2003.15.3.211

Kelompok Staf Medis Anak RS Sardjito, 2020. Dr. Sardjito Hospital Clinical Guideline: Neutropenic fever in pediatric patients receiving chemotherapy 2020.

Khafaja, S., Salameh, Y., Boutros, C.F., Awad, C., Faour, K., Tfaily, N., et al., 2025. Increased rate of multidrug-resistant gram-negative bacterial infections in hospitalized immunocompromised pediatric patients. *Front. Cell. Infect. Microbiol.* 14: 1382500. doi:10.3389/fcimb.2024.1382500

Lai, H.-P., Chen, Y.-C., Chang, L.-Y., Lu, C.-Y., Lee, C.-Y., Lin, K.-H., et al., 2005. Invasive fungal infection in children with persistent febrile neutropenia. *J Formos Med Assoc* 104: 174–179.

Lee, J.H., Kim, S.-K., Kim, S.K., Han, S.B., Lee, J.W., Lee, D.-G., et al., 2016. Increase in Antibiotic-Resistant Gram-Negative Bacterial Infections in Febrile Neutropenic Children. *Infect Chemother* 48: 181. doi:10.3947/ic.2016.48.3.181

Lehrnbecher, T., Averbuch, D., Castagnola, E., Cesaro, S., Ammann, R.A., Garcia-Vidal, C., et al., 2021. 8th European Conference on Infections in Leukaemia: 2020 guidelines for the use of antibiotics in paediatric patients with cancer or post-haematopoietic cell transplantation. *The Lancet Oncology* 22: e270–e280. doi:10.1016/S1470-2045(20)30725-7

Lehrnbecher, T., Robinson, P., Fisher, B., Alexander, S., Ammann, R.A., Beauchemin, M., et al., 2017. Guideline for the Management of Fever and Neutropenia in Children With Cancer and Hematopoietic Stem-Cell Transplantation Recipients: 2017 Update. *J Clin Oncol* 35: 2082–2094. doi:10.1200/JCO.2016.71.7017

Lehrnbecher, T., Robinson, P.D., Ammann, R.A., Fisher, B., Patel, P., Phillips, R., et al., 2023. Guideline for the Management of Fever and Neutropenia in Pediatric Patients With Cancer and Hematopoietic Cell Transplantation Recipients: 2023 Update. *JCO* 41: 1774–1785. doi:10.1200/JCO.22.02224

Levene, I., Castagnola, E., & Haeusler, G.M., 2018. Antibiotic-resistant Gram-negative Blood Stream Infections in Children With Cancer: A Review of Epidemiology, Risk Factors, and Outcome. *Pediatric Infectious Disease Journal* 37: 495–498. doi:10.1097/INF.0000000000001938

Madiyono, B., Sastroasmoro, S., Budiman, I., & Purwanto, S.H., 2011. Dasar-Dasar Metodologi Penelitian Klinis : Perkiraan Besar Sampel. Sagung Seto, Jakarta, Indonesia.

Magiorakos, A.-P., Srinivasan, A., Carey, R.B., Carmeli, Y., Falagas, M.E., Giske, C.G., et al., 2012. Multidrug-resistant, extensively drug-resistant and pandrug-resistant bacteria: an international expert proposal for interim standard definitions for acquired resistance. *Clinical Microbiology and Infection* 18: 268–281. doi:10.1111/j.1469-0691.2011.03570.x

Mhaskar, R., Clark, O.A.C., Lyman, G., Engel Ayer Botrel, T., Morganti Paladini, L., & Djulbegovic, B., 2014. Colony-stimulating factors for chemotherapy-induced febrile neutropenia. *Cochrane Database of Systematic Reviews* 2022. doi:10.1002/14651858.CD003039.pub2

Mihalcea, A.-R., Garnier, N., Faure-Conter, C., Rama, N., Renard, C., Benezech, S., et al., 2023. Alarming Upward Trend in Multidrug-Resistant Bacteria in a Large Cohort of Immunocompromised Children: A Four-Year Comparative Study. *Cancers* 15: 938. doi:10.3390/cancers15030938

Miller, S.I., 2016. Antibiotic Resistance and Regulation of the Gram-Negative Bacterial Outer Membrane Barrier by Host Innate Immune Molecules. *mBio* 7: e01541-16. doi:10.1128/mBio.01541-16

Mohamed, N., Ghazal, A., Ahmed, A.A.H., & Zaki, A., 2023. Prevalence and determinants of antimicrobial resistance of pathogens isolated from cancer patients in an intensive care unit in Alexandria, Egypt. *J. Egypt. Public. Health. Assoc.* 98: 9. doi:10.1186/s42506-023-00134-8

Monegro, A.F., Muppidi, V., & Regunath, H., 2025. Hospital-Acquired Infections, in: StatPearls. StatPearls Publishing, Treasure Island (FL).

Morris, S., & Cerceo, E., 2020. Trends, Epidemiology, and Management of Multi-Drug Resistant Gram-Negative Bacterial Infections in the Hospitalized Setting. *Antibiotics* 9: 196. doi:10.3390/antibiotics9040196

Nirmal, G., Jithin, T.K., Gopakumar, K.G., Parthiban, R., & Nair, C., 2023. Prevalence and Outcomes of Carbapenem-resistant Bloodstream Infection in Children With Cancer. *Journal of Pediatric Hematology/Oncology* 45: e678. doi:10.1097/MPH.0000000000002679

Nursyirwan, S.R., & Windiastuti, E., 2017. Kejadian Demam Neutropenia pada Anak dengan Keganasan. *Sari Pediatri* 19.

Oberoi, S., Das, A., Trehan, A., Ray, P., & Bansal, D., 2017. Can complications in febrile neutropenia be predicted? Report from a developing country. *Support Care Cancer* 25: 3523–3528. doi:10.1007/s00520-017-3776-7

Phillips, R.S., Sung, L., Amman, R.A., Riley, R.D., Castagnola, E., Haeusler, G.M., et al., 2016. Predicting microbiologically defined infection in febrile neutropenic episodes in children: global individual participant data multivariable meta-analysis. *Br J Cancer* 114: 623–630. doi:10.1038/bjc.2016.28

Punnapuzha, S., Edemobi, P.K., & Elmoheen, A., 2023. Febrile Neutropenia, in: StatPearls. StatPearls Publishing, Treasure Island (FL).

Rasmy, A., Amal, A., Fotih, S., & Selwi, W., 2016. Febrile Neutropenia in Cancer Patient: Epidemiology, Microbiology, Pathophysiology and Management. *JCPCR* 5. doi:10.15406/jcpcr.2016.05.00165

Schwartzberg, L.S., 2006. Neutropenia: Etiology and Pathogenesis. *Clinical Cornerstone* 8: S5–S11. doi:10.1016/S1098-3597(06)80053-0

Sjahruddin, D.D., Husada, D., & Ugrasena, I.D.G., 2022. Microbiological profile and antibiotic susceptibility pattern in children with malignancy and febrile neutropenia. *IJHS* 7866–7880. doi:10.53730/ijhs.v6nS1.6792

Slocker-Barrio, M., López-Herce-Cid, J., Bustinza-Arriortúa, A., Fresán-Ruiz, E., Jordán-García, I., De Carlos-Vicente, J.C., et al., 2023. Increase in Incidence Rates and Risk Factors for Multidrug Resistant Bacteria in Septic Children: A Nationwide Spanish Cohort Study (2013–2019). *Antibiotics* 12: 1626. doi:10.3390/antibiotics12111626

Sonis, S.T., 2004. The pathobiology of mucositis. *Nature Reviews Cancer* 4: 277–284. doi:10.1038/nrc1318

Stephens, R.S., 2019. Neutropenic Fever in the Intensive Care Unit, in: Nates, J.L., & Price, K.J. (Eds.), Oncologic Critical Care. Springer International Publishing, Cham, pp. 1–15. doi:10.1007/978-3-319-74698-2_118-1

Sulviani, R., Idjradinata, P., & Raspati, H., 2007. The risk factors for febrile neutropenia during chemotherapy in children with malignancy. *PI* 47: 83. doi:10.14238/pi47.2.2007.83-7

Suryaningrat, F.R., Primadi, A., & Chairulfatah, A., 2019. Perbandingan Efektifitas Antara Monoterapi Empiris Seftazidime dan Sefepim Pada Anak Leukemia Limfoblastik Akut dengan Demam Neutropenia. *SP* 21: 81. doi:10.14238/sp21.2.2019.81-8

Terwilliger, T., & Abdul-Hay, M., 2017. Acute lymphoblastic leukemia: a comprehensive review and 2017 update. *Blood Cancer J.* 7: e577–e577. doi:10.1038/bcj.2017.53

Ting, S.-W., Lee, C.-H., & Liu, J.-W., 2018. Risk factors and outcomes for the acquisition of carbapenem-resistant Gram-negative bacillus bacteremia: A retrospective propensity-matched case control study. *Journal of Microbiology, Immunology and Infection* 51: 621–628. doi:10.1016/j.jmii.2016.08.022

Tripathi, R., Jain, P., Tarai, B., & Arora, R., 2023. Factors associated with mortality from gram-negative bacterial infections in children with cancer. *Pediatric Hematology Oncology Journal* 8: 41–44. doi:10.1016/j.phoj.2023.01.005

van der Velden, W.J.F.M., Herbers, A.H.E., Netea, M.G., & Blijlevens, N.M.A., 2014. Mucosal barrier injury, fever and infection in neutropenic patients with cancer: introducing the paradigm febrile mucositis. *British Journal of Haematology* 167: 441–452. doi:10.1111/bjh.13113

World Health Organization, 2024. WHO Bacterial Priority Pathogens List 2024: Bacterial Pathogens of Public Health Importance, to Guide Research, Development, and Strategies to Prevent and Control Antimicrobial Resistance, 1st ed. ed. World Health Organization, Geneva.

World Health Organization, 2017. WHO publishes list of bacteria for which new antibiotics are urgently needed [WWW Document]. URL https://www.who.int/news/item/27-02-2017-who-publishes-list-of-bacteria-for-which-new-antibiotics-are-urgently-needed (accessed 11.19.23).

World Health Organization, Regional Office for South-East Asia, 2023. Buku Antibiotik WHO AWaRe (Access, Watch, Reserve), Lampiran laman, Infografik. New Delhi.

Wulandari, L.P.L., Khan, M., Liverani, M., Ferdiana, A., Mashuri, Y.A., Probandari, A., et al., 2021. Prevalence and determinants of inappropriate antibiotic dispensing at private drug retail outlets in urban and rural areas of Indonesia: a mixed methods study. *BMJ Glob Health* 6: e004993. doi:10.1136/bmjgh-2021-004993

Zhang, Y., Zheng, Y., Dong, F., Ma, H., Zhu, L., Shi, D., et al., 2020. Epidemiology of Febrile Neutropenia Episodes with Gram-Negative Bacteria Infection in Patients Who Have Undergone Chemotherapy for Hematologic Malignancies: A Retrospective Study of 10 Years' Data from a Single Center. *IDR* Volume 13: 903–910. doi:10.2147/IDR.S241263