

Daftar Pustaka

- Alves, P. G. V., Melo, S. G. O., Bessa, M. A. d. S., Brito, M. d. O., Menezes, R. d. P., Araújo, L. B. d., Penatti, M. P. A., Pedroso, R. d. S. & Röder, D. V. D. d. B. 2020. Risk factors associated with mortality among patients who had candidemia in a university hospital. *Revista da Sociedade Brasileira de Medicina Tropical*, 53.
- Ananda-Rajah, M. R., Cheng, A., Morrissey, C. O., Spelman, T., Dooley, M., Neville, A. M. & Slavin, M. 2011. Attributable hospital cost and antifungal treatment of invasive fungal diseases in high-risk hematology patients: an economic modeling approach. *Antimicrobial agents and chemotherapy*, 55, 1953-1960.
- Antinori, S., Corbellino, M. & Parravicini, C. 2018. Challenges in the diagnosis of invasive fungal infections in immunocompromised hosts. *Current Fungal Infection Reports*, 12, 12-22.
- Ashley, E. D., Drew, R., Johnson, M., Danna, R., Dabrowski, D., Walker, V., Prasad, M., Alexander, B., Papadopoulos, G. & Perfect, J. 2012. Cost of invasive fungal infections in the era of new diagnostics and expanded treatment options. *Pharmacotherapy: The Journal of Human Pharmacology and Drug Therapy*, 32, 890-901.
- Austermeier, S., Pekmezović, M., Porschitz, P., Lee, S., Kichik, N., Moyes, D. L., Ho, J., Kotowicz, N. K., Naglik, J. R. & Hube, B. 2021. Albumin neutralizes hydrophobic toxins and modulates *Candida albicans* pathogenicity. *MBio*, 12, 10.1128/mbio.00531-21.
- Barnes, P. D. & Marr, K. A. 2006. Aspergillosis: spectrum of disease, diagnosis, and treatment. *Infectious Disease Clinics*, 20, 545-561.
- Bassetti, M., Azoulay, E., Kullberg, B.-J., Ruhnke, M., Shoham, S., Vazquez, J., Giacobbe, D. R. & Calandra, T. 2021. EORTC/MSGERC definitions of invasive fungal diseases: summary of activities of the Intensive Care Unit Working Group. *Clinical Infectious Diseases*, 72, S121-S127.
- Ben-Ami, R. 2018. Treatment of invasive candidiasis: A narrative review. *Journal of Fungi*, 4, 97.
- Benedict, K., Jackson, B. R., Chiller, T. & Beer, K. D. 2019. Estimation of direct healthcare costs of fungal diseases in the United States. *Clinical Infectious Diseases*, 68, 1791-1797.
- Brotfain, E., Sebbag, G., Friger, M., Kirshtein, B., Borer, A., Koyfman, L., Frank, D., Bichovsky, Y., Peiser, J. G. & Klein, M. 2017. Invasive *Candida* infection after upper gastrointestinal tract surgery for gastric cancer. *International Journal of Surgical Oncology*, 2017.
- Burgess, T. B., Condliffe, A. M. & Elks, P. M. 2022. A fun-guide to innate immune responses to fungal infections. *Journal of Fungi*, 8, 805.
- Cadena, J., Thompson, G. R. & Patterson, T. F. 2021. Aspergillosis: epidemiology, diagnosis, and treatment. *Infectious Disease Clinics*, 35, 415-434.
- Cattaneo, L., Buonomo, A. R., Iacovazzo, C., Giaccone, A., Scotto, R., Viceconte, G., Mercinelli, S., Vargas, M., Roscetto, E. & Cacciatore, F. 2023.

- Invasive Fungal Infections in Hospitalized Patients with COVID-19: A Non-Intensive Care Single-Centre Experience during the First Pandemic Waves. *Journal of Fungi*, 9, 86.
- Denning, D. W. 2024. Global incidence and mortality of severe fungal disease. *The Lancet Infectious Diseases*, 24, e428-e438.
- Desai, J. V. & Lionakis, M. S. 2018. The role of neutrophils in host defense against invasive fungal infections. *Current clinical microbiology reports*, 5, 181-189.
- Dolin, H. H., Papadimos, T. J., Chen, X. & Pan, Z. K. 2019. Characterization of pathogenic sepsis etiologies and patient profiles: a novel approach to triage and treatment. *Microbiology insights*, 12, 1178636118825081.
- Eggimann, P., Que, Y.-A., Revelly, J.-P. & Pagani, J.-L. 2015. Preventing invasive candida infections. Where could we do better? *Journal of Hospital Infection*, 89, 302-308.
- Firacative, C. 2020. Invasive fungal disease in humans: are we aware of the real impact? *Memórias do Instituto Oswaldo Cruz*, 115.
- Gamaletsou, M., Drogari-Apiranthitou, M., Denning, D. & Sipsas, N. 2016. An estimate of the burden of serious fungal diseases in Greece. *European Journal of Clinical Microbiology & Infectious Diseases*, 35, 1115-1120.
- George, B., Menon, H., Bhurani, D., Damodar, S., Apte, S., Seth, T., Sharma, A., Shyam, R., Malhotra, P. & Easow, J. 2020. A prospective observational multi-institutional study on invasive fungal infections following chemotherapy for acute myeloid leukemia (MISFIC Study): a real world scenario from India. *Indian Journal of Hematology and Blood Transfusion*, 36, 97-103.
- Gong, Y., Li, C., Wang, C., Li, J., Ding, M., Chen, D. & Lao, M. 2020. Epidemiology and mortality-associated factors of invasive fungal disease in elderly patients: a 20-year retrospective study from Southern China. *Infection and Drug Resistance*, 711-723.
- Hahn-Ast, C., Glasmacher, A., Mückter, S., Schmitz, A., Kraemer, A., Marklein, G., Brossart, P. & von Lilienfeld-Toal, M. 2010. Overall survival and fungal infection-related mortality in patients with invasive fungal infection and neutropenia after myelosuppressive chemotherapy in a tertiary care centre from 1995 to 2006. *Journal of antimicrobial chemotherapy*, 65, 761-768.
- Harrison, D., Muskett, H., Harvey, S., Grieve, R., Shahin, J., Patel, K., Sadique, Z., Allen, E., Dybowski, R. & Jit, M. 2013. Development and validation of a risk model for identification of non-neutropenic, critically ill adult patients at high risk of invasive Candida infection: the Fungal Infection Risk Evaluation (FIRE) Study. *Health technology assessment (Winchester, England)*, 17, 1.
- Haydour, Q., Hage, C. A., Carmona, E. M., Epelbaum, O., Evans, S. E., Gabe, L. M., Knox, K. S., Kolls, J. K., Wengenack, N. L. & Prokop, L. J. 2019. Diagnosis of fungal infections. A systematic review and meta-analysis supporting American Thoracic Society Practice Guideline. *Annals of the American Thoracic Society*, 16, 1179-1188.

- Hirano, R., Sakamoto, Y., Kudo, K. & Ohnishi, M. 2015. Retrospective analysis of mortality and *Candida* isolates of 75 patients with candidemia: a single hospital experience. *Infection and drug resistance*, 8, 199.
- Kawagishi, N., Satoh, K., Enomoto, Y., Akamatsu, Y., Sekiguchi, S., Fujimori, K. & Satomi, S. 2006. Risk factors and impact of β -D glucan on invasive fungal infection for the living donor liver transplant recipients. *The Tohoku Journal of Experimental Medicine*, 209, 207-215.
- König, A., Hube, B. & Kasper, L. 2020. The dual function of the fungal toxin candidalysin during *Candida albicans*—macrophage interaction and virulence. *Toxins*, 12, 469.
- Kreitmann, L., Blot, S. & Nseir, S. 2024. Invasive fungal infections in non-neutropenic patients. *Intensive Care Medicine*, 50, 2166-2170.
- Kullberg, B. J. & Arendrup, M. C. 2015. Invasive candidiasis. *New England Journal of Medicine*, 373, 1445-1456.
- Labelle, A. J., Micek, S. T., Roubinian, N. & Kollef, M. H. 2008. Treatment-related risk factors for hospital mortality in *Candida* bloodstream infections. *Critical care medicine*, 36, 2967-2972.
- Lass-Flörl, C. 2017. Current challenges in the diagnosis of fungal infections. *Human Fungal Pathogen Identification*. Springer.
- León, C., Alvarez-Lerma, F., Ruiz-Santana, S., León, M., Nolla, J., Jordá, R., Saavedra, P. & Palomar, M. 2009a. Fungal colonization and/or infection in non-neutropenic critically ill patients: results of the EPCAN observational study. *European journal of clinical microbiology & infectious diseases*, 28, 233-242.
- León, C., Alvarez-Lerma, F., Ruiz-Santana, S., León, M., Nolla, J., Jordá, R., Saavedra, P., Palomar, M. & Group, E. S. 2009b. Fungal colonization and/or infection in non-neutropenic critically ill patients: results of the EPCAN observational study. *European journal of clinical microbiology & infectious diseases*, 28, 233-242.
- León, C., Ruiz-Santana, S., Saavedra, P., Almirante, B., Nolla-Salas, J., Álvarez-Lerma, F., Garnacho-Montero, J., León, M. Á. & Group, E. S. 2006. A bedside scoring system ("Candida score") for early antifungal treatment in nonneutropenic critically ill patients with *Candida* colonization. *Critical care medicine*, 34, 730-737.
- Leroy, G., Lambiotte, F., Thévenin, D., Lemaire, C., Parmentier, E., Devos, P. & Leroy, O. 2011. Evaluation of "Candida score" in critically ill patients: a prospective, multicenter, observational, cohort study. *Annals of intensive care*, 1, 1-7.
- Li, Z., Tang, J., Zhu, J., Xie, M., Huang, S., Li, S., Zhan, Y., Zeng, W., Xu, T. & Ye, F. 2022. The convoluted process of diagnosing pulmonary mycosis caused by *Exophiala dermatitidis*: a case report. *BMC Infectious Diseases*, 22, 433.
- Lionakis, M. S., Drummond, R. A. & Hohl, T. M. 2023. Immune responses to human fungal pathogens and therapeutic prospects. *Nature Reviews Immunology*, 23, 433-452.

- Maertens, J. A., Girmenia, C., Brüggemann, R. J., Duarte, R. F., Kibbler, C. C., Ljungman, P., Racil, Z., Ribaud, P., Slavin, M. A. & Cornely, O. A. 2018. European guidelines for primary antifungal prophylaxis in adult haematology patients: summary of the updated recommendations from the European Conference on Infections in Leukaemia. *Journal of Antimicrobial Chemotherapy*, 73, 3221-3230.
- Montagna, M. T., Caggiano, G., Lovero, G., De Giglio, O., Coretti, C., Cuna, T., Iatta, R., Giglio, M., Dalfino, L. & Bruno, F. 2013. Epidemiology of invasive fungal infections in the intensive care unit: results of a multicenter Italian survey (AURORA Project). *Infection*, 41, 645-653.
- Mori, G., Diotallevi, S., Farina, F., Lolatto, R., Galli, L., Chiurlo, M., Acerbis, A., Xue, E., Clerici, D. & Mastaglio, S. 2024. High-risk neutropenic fever and invasive fungal diseases in patients with hematological malignancies. *Microorganisms*, 12, 117.
- Nagar, T., Ramakrishna, J., Khanna, V., Reddy, T. & Turk, I. A. 2022. S2463 Immunosuppression in Chronic Total Parenteral Nutrition Patient Causing Invasive Pulmonary Candidiasis. *Official journal of the American College of Gastroenterology | ACG*, 117, e1643.
- Ortega-Loubon, C., Cano-Hernández, B., Poves-Alvarez, R., Muñoz-Moreno, M. F., Román-García, P., Balbás-Alvarez, S., de la Varga-Martínez, O., Gómez-Sánchez, E., Gómez-Pesquera, E. & Lorenzo-López, M. 2019. The overlooked immune state in Candidemia: a risk factor for mortality. *Journal of Clinical Medicine*, 8, 1512.
- Pappas, P. G., Kauffman, C. A., Andes, D. R., Clancy, C. J., Marr, K. A., Ostrosky-Zeichner, L., Reboli, A. C., Schuster, M. G., Vazquez, J. A. & Walsh, T. J. 2016. Clinical practice guideline for the management of candidiasis: 2016 update by the Infectious Diseases Society of America. *Clinical Infectious Diseases*, 62, e1-e50.
- Pappas, P. G., Lionakis, M. S., Arendrup, M. C., Ostrosky-Zeichner, L. & Kullberg, B. J. 2018. Invasive candidiasis. *Nature Reviews Disease Primers*, 4, 1-20.
- Paswan, A. K., Raju, D. C., Singh, D., Dubey, R. & Mishra, P. K. 2013. An observational study of the risk factors and incidence of invasive fungal infections in ICU patients. *Anaesth Pain Intensive Care*, 17, 136-40.
- Pathakumari, B., Liang, G. & Liu, W. 2020. Immune defence to invasive fungal infections: A comprehensive review. *Biomedicine & Pharmacotherapy*, 130, 110550.
- Patterson, T. F., Thompson III, G. R., Denning, D. W., Fishman, J. A., Hadley, S., Herbrecht, R., Kontoyiannis, D. P., Marr, K. A., Morrison, V. A. & Nguyen, M. H. 2016. Practice guidelines for the diagnosis and management of aspergillosis: 2016 update by the Infectious Diseases Society of America. *Clinical infectious diseases*, 63, e1-e60.
- Pfaller, M. A., Carvalhaes, C. G., DeVries, S., Huband, M. D. & Castanheira, M. 2022. Elderly versus nonelderly patients with invasive fungal infections: species distribution and antifungal resistance, SENTRY antifungal

- surveillance program 2017-2019. *Diagnostic microbiology and infectious disease*, 102, 115627.
- Pitarch, A., Nombela, C. & Gil, C. 2018. Diagnosis of invasive candidiasis: from gold standard methods to promising leading-edge technologies. *Current Topics in Medicinal Chemistry*, 18, 1375-1392.
- Qiao, Y., Tao, Z., Hao, F., Huang, Y., Sun, H. & Guo, P. 2023. Epidemiological characteristics, antifungal susceptibility, risk factors, and outcomes of *Candida* bloodstream infection: a ten-year surveillance in a teaching hospital in China. *Infection and Drug Resistance*, 4769-4778.
- Rayens, E. & Norris, K. A. Prevalence and healthcare burden of fungal infections in the United States, 2018. Open forum infectious diseases, 2022. Oxford University Press US, ofab593.
- Rosales, C. 2018. Neutrophil: a cell with many roles in inflammation or several cell types? *Frontiers in physiology*, 9, 324475.
- Rudramurthy, S. M., Paul, R. A., Chakrabarti, A., Mouton, J. W. & Meis, J. F. 2019. Invasive aspergillosis by *Aspergillus flavus*: epidemiology, diagnosis, antifungal resistance, and management. *Journal of Fungi*, 5, 55.
- Santos, A., Jorgenson, M. R., Osman, F., Srivastava, A., Misch, E. A., Garg, N., Aziz, F., Swanson, K. J., Mohamed, M. & Djamali, A. 2023a. Hypoalbuminemia is a risk factor for invasive fungal infections and poor outcomes in infected kidney transplant recipients. *Clinical Transplantation*, e15052.
- Santos, A., Jorgenson, M. R., Osman, F., Srivastava, A., Misch, E. A., Garg, N., Aziz, F., Swanson, K. J., Mohamed, M. & Djamali, A. 2023b. Hypoalbuminemia is a risk factor for invasive fungal infections and poor outcomes in infected kidney transplant recipients. *Clinical Transplantation*, 37, e15052.
- Shin, D. W. & Han, K. 2025. The use of Charlson comorbidity index for observational studies using administrative data in Korea. *Precision and Future Medicine*, 9, 2-14.
- Teh, B. W., Yeoh, D. K., Haeusler, G. M., Yannakou, C. K., Fleming, S., Lindsay, J., Slavin, M. A., Committee, A. A. G. S., Slavin, M. A. & Thursky, K. A. 2021. Consensus guidelines for antifungal prophylaxis in haematological malignancy and haemopoietic stem cell transplantation, 2021. *Internal Medicine Journal*, 51, 67-88.
- Townsend, L. & Martin-Loeches, I. 2022. Invasive Aspergillosis in the Intensive Care Unit. *Diagnostics*, 12, 2712.
- Tummid, S., Naik, B., Shankaralingappa, A., Balakrishna, P., Bhadada, A. A. & Kosaraju, N. 2020. *Phaeoacremonium* species detected in fine needle aspiration: a rare case report. *Diagnostic Pathology*, 15, 1-4.
- Uneno, Y., Imura, H., Makuuchi, Y., Tochtani, K. & Watanabe, N. 2022. Pre-emptive antifungal therapy versus empirical antifungal therapy for febrile neutropenia in people with cancer. *Cochrane Database of Systematic Reviews*.
- Vazquez, L. 2016. Antifungal prophylaxis in immunocompromised patients. *Mediterranean journal of hematology and infectious diseases*, 8.

- Vena, A., Bouza, E., Valerio, M., Padilla, B., Paño-Pardo, J. R., Fernández-Ruiz, M., Díaz Martín, A., Salavert, M., Mularoni, A. & Puig-Asensio, M. 2017. Candidemia in non-ICU surgical wards: comparison with medical wards. *PLoS One*, 12, e0185339.
- Wen, S.-R., Yang, Z.-H., Dong, T.-X., Li, Y.-Y., Cao, Y.-K., Kuang, Y.-Q. & Li, H.-B. 2022. Deep Fungal Infections Among General Hospital Inpatients in Southwestern China: A 5-Year Retrospective Study. *Frontiers in Public Health*, 10.
- Wiedermann, C. J. 2021. Hypoalbuminemia as surrogate and culprit of infections. *International journal of molecular sciences*, 22, 4496.
- Xess, I., Pagano, L. & Dabas, Y. 2022. Invasive Fungal Infections 2021. MDPI.
- Xiao, G., Liao, W., Zhang, Y., Luo, X., Zhang, C., Li, G., Yang, Y. & Xu, Y. 2020a. Analysis of fungal bloodstream infection in intensive care units in the Meizhou region of China: species distribution and resistance and the risk factors for patient mortality. *BMC Infectious Diseases*, 20, 1-8.
- Xiao, H., Tang, Y., Cheng, Q., Liu, J. & Li, X. 2020b. Risk prediction and prognosis of invasive fungal disease in hematological malignancies patients complicated with bloodstream infections. *Cancer Management and Research*, 2167-2175.
- Yang, S.-P., Chen, Y.-Y., Hsu, H.-S., Wang, F.-D., Chen, L.-y. & Fung, C.-P. 2013. A risk factor analysis of healthcare-associated fungal infections in an intensive care unit: a retrospective cohort study. *BMC infectious diseases*, 13, 1-10.
- Zhang, Z., Zhu, R., Luan, Z. & Ma, X. 2020. Risk of invasive candidiasis with prolonged duration of ICU stay: a systematic review and meta-analysis. *BMJ open*, 10, e036452.