



DAFTAR PUSTAKA

- Agnello, L., Giglio, R.V., Bivona, G., Scazzone, C., Gambino, C.M., Iacona, A., *et al.* (2021). The Value of a Complete Blood Count (CBC) for Sepsis Diagnosis and Prognosis. *Diagnostics* 11: 1–19.
- Allhoff, B., Neumann-Haefelin, C., & Kasper, P. (2025). Acute-on-Chronic Liver Failure—Current Management and Future Perspectives. *Biomedicines* 13(9) : 2193.
- Alqeeq, B.F., Ayyad, M., Albandak, M., Almadhoun, W.J., Kullab, M., Ghabayen, *et al.* (2025). The clinical significance of thrombocytopenia in sepsis and septic shock: a systematic review and meta-analysis. *BMC Anesthesiol.* 25: 327.
- Angus, D. C., & van der Poll, T. (2013). Severe sepsis and septic shock *N Engl J Med.* 369: 840–851.
- Artigas, A., Wernerman, J., Arroyo, V., Vincent, J.L., Levy, M. (2016). Role of albumin in diseases associated with severe systemic inflammation: Pathophysiologic and clinical evidence in sepsis and in decompensated cirrhosis. *J Crit Care.* 33: 62-70.
- Arvaniti, V., D’Amico, G., Fede, G., Manousou, P., Tsochatzis, E., Pleguezuelo, M., *et al.* (2010). Infections in patients with cirrhosis increase mortality fourfold and should be used in determining prognosis. *Gastroenterology* 139: 1246–1256.
- Bast, J., Scheer, C., Rehberg, S., *et al.* (2015). Mortality of blood-culture-positive vs. blood-culture-negative patients with severe sepsis and septic shock. *Infection.* 43(1): S58–S59.
- Beran, A., Altorok, N., Srour, O., Malhas, S.E., Khokher, W., Mhanna, M., *et al.* (2022). Balanced Crystalloids versus Normal Saline in Adults with Sepsis: A Comprehensive Systematic Review and Meta-Analysis. *J Clin Med.* 11(7) : 1971.
- Bone, R.C., Balk, R.A., Cerra, F.B. (1992). American College of Chest Physicians/Society of Critical Care Medicine Consensus Conference: definitions for sepsis and organ failure and guidelines for the use of innovative therapies in sepsis. *Crit Care Med.* 20 : 864–874.
- Bonnel, A.R., Bunchorntavakul, C., and Reddy, K.R. (2011). Immune dysfunction and infections in patients with cirrhosis. *Clin Gastroenterol Hepatol.* 9: 727–738.
- Brownlee, M. (2005). The pathobiology of diabetic complications: a unifying mechanism. *Diabetes.* 54 : 1615–1625.



- Caironi, P., Tognoni, G., Masson, S., Fumagalli, R., Pesenti, A. and Gattinoni, L., (2014). Albumin replacement in patients with severe sepsis or septic shock. *N Engl J Med.* 370 : 1412-1421.
- Cao, Y., Su, Y., Guo, C., He, L., & Ding, N. (2023). Albumin Level is Associated with Short-Term and Long-Term Outcomes in Sepsis Patients Admitted in the ICU: A Large Public Database Retrospective Research. *Clin. Epidemiol.* 15: 263–273.
- Chan, J.K., Roth, J., Oppenheim, J.J., Tracey, K.J., Vogl, T., Feldmann, M., *et al.* (2012). Alarmins: awaiting a clinical response. *J Clin Invest.* 122: 2711–2719.
- Chang, Y., Oh, J.H., Oh, D.K., Lee, S.Y., Hyun, D.G., Park, M.H. and Lim, C.M. (2024). Culture-negative sepsis may be a different entity from culture-positive sepsis: a prospective nationwide multicenter cohort study. *Crit Care*, 28(1): 385.
- Cheang, I., Li, Y., Zhu, X., Chen, Z., Ren, Q.W., Wu, M.Z., *et al.* (2024). Prognosis Prediction of Cardiovascular Event With Glucose-Albumin Ratio on Patients With Cancer and Prescribed With Anthracycline. *Cancer Med.* 13 : 70–71.
- Chiang, H.Y., Liang, C.C., Hsiao, Y.L., Le, U.M., Chang, Y.C., Chen, P.S. (2024). Sepsis-associated acute kidney disease: incidence, trajectory, and outcomes. *Kidney Med.* 7 : 100959.
- Chien, W. S., Chen, Y. H., Chang, C. Y. (2011). Suppression of autophagy in endothelial cells by LPS increases cell death through Bim-mediated apoptosis. *J Cell Biochem.* 112: 1337–1346.
- Christaki, E. and Giamarellos-Bourboulis, E.J. (2014). The complex pathogenesis of bacteremia: from antimicrobial clearance mechanisms to the genetic background of the host. *Virulence.* 5(1): 57–65.
- Clermont, G., Acker, C.G., Angus, D.C., Sirio, C.A., Pinsky, M.R., Johnson, J.P. (2002). Renal failure in the ICU: comparison of the impact of acute renal failure and end-stage renal disease on ICU outcomes. *Kidney Int.* 62(3) : 986–96.
- Do, S.N., Dao, C.X., Nguyen, T.A. (2023). Sequential Organ Failure Assessment (SOFA) Score for predicting mortality in patients with sepsis in Vietnamese intensive care units: a multicentre, cross-sectional study. *BMJ Open.* 13 : 64–70.
- Fabrizi, A., Marchesini, G., Benazzi, B., Morelli, A., Montesi, D., Bini, C. *et al.* (2020). Stress hyperglycemia and mortality in subjects with diabetes and sepsis. *Crit Care Explor.* 2(7) : e0152.



- Fernández, J., and Gustot, T. (2012). Management of bacterial infections in cirrhosis. *J Hepatol.* 56: S1–12.
- Fernández, J., Navasa, M., Gómez, J., Colmenero, J., Vila, J., Arroyo, V., (2002). Bacterial infections in cirrhosis: epidemiological changes with invasive procedures and norfloxacin prophylaxis. *Hepatology.* 35(1): 140–148.
- Ferreira, J.A., Baptista, R.M., Monteiro, S.R. (2021). Admission hyperglycemia and all-cause mortality in diabetic and non-diabetic patients with acute myocardial infarction: a tertiary center analysis. *Intern Emerg Med.* 16 : 2109–2119.
- Fleischmann-Struzek, C., Rudd, K. (2023). Challenges of assessing the burden of sepsis. *Med Klin Intensivmed Notfmed.* 118 : 68-74.
- Freund, Y., Lemachatti, N., Krastinova, E., Van Laer, M., Claessens, Y.E., Avondo, A. *et al.* (2017). Prognostic accuracy of Sepsis-3 criteria for in-hospital mortality among patients with suspected infection presenting to the emergency department. *JAMA.* 317(3) : 301–308.
- Gauer, R. L., Forbes, D., & Boyer, N. (2020). Sepsis: Diagnosis and management. *Am Fam Physician.* 101: 409–418.
- Ge, Y., Wang, Z., Ma, Y. and Zhang, C. (2025) Prognostic value of the glucose-to-albumin ratio in sepsis-related mortality: a retrospective ICU study. *Diabetes Res. Clin. Pract.* 224: 112217.
- Go, A.S., Chertow, G.M., Fan, D., McCulloch, C.E., Hsu, C.Y. (2004). Chronic kidney disease and the risks of death, cardiovascular events, and hospitalization. *N Engl J Med.* 351 (13) : 1296-1305.
- Gómez-Cantarino, S., Agulló-Ortuño, M.T., de Dios-Aguado, M., Ugarte-Gurrutxaga, M.I. and Bouzas-Mosquera, C. (2020). Prevalence of hypoproteinemia and hypoalbuminemia in pregnant women from three different socioeconomic populations. *Int. J. Environ. Res. Public Health* 17(17): 6275
- Gowda, S., Hashmi, Z., Prashar, S. and Singh, S.P. (2024). The role of procalcitonin as a biomarker in odontogenic space infection – a review of literature. *J. Res. Med. Dent. Sci.* 12: 19–24.
- He, J., Zhang, Y., Li, T., Deng, H., Wang, P., Chong, W. *et al.* (2023). Glucose-albumin ratio as new biomarker for predicting mortality after intracerebral hemorrhage. *Neurosurg Rev.* 46 : 94.



- Helmerson-Karlqvist, J., Flodin, M., Havelka, A.M., Xu, X.Y. dan Larsson, A. (2016). The Roche immunoturbidimetric albumin method on Cobas c 501 gives higher values than the Abbott and Roche BCP methods when analyzing patient plasma samples. *J Clin Lab Anal.* 30(5): 677–681.
- Hensley, M.K., Donnelly, J.P., Carlton, E.F. & Prescott, H.C. (2019). Epidemiology and outcomes of cancer-related versus non-cancer-related sepsis hospitalizations. *Crit. Care Med.*, 47: 1310–1316.
- Holmes, C.L., Anderson, M.T., Mobley, H.L.T. and Bachman, M.A. (2021). Pathogenesis of Gram-negative bacteremia. *Clin. Microbiol. Rev.* 34(2): e00234-20.
- Hotchkiss, R.S., Monneret, G., Payen, D. (2013). Sepsis-induced immunosuppression: from cellular dysfunctions to immunotherapy. *Nat Rev Immunol.* 13(12) : 862–874.
- Hou, D., Zhong, P., Ye, X. (2021). Persistent hyperglycemia is a useful glycemic pattern to predict stroke mortality: a systematic review and meta-analysis. *BMC Neurol.* 21: 487
- Hsieh, C. H., Pai, M. H., Hsueh, H. W., Yuan, S. S., Hsieh, Y. C. (2011). Complete induction of autophagy is essential for cardioprotection in sepsis. *Ann Surg* 253: 1190–1200.
- Irvan, I., Febyan, F., Supartp, S. (2018). Sepsis dan Tata Laksana Berdasar Guideline Terbaru. *JAI.* 10 : 62-73.
- Jaimes, F., León, A., González, J., Cataño, J., Maya, W., Hincapié, C. *et al.*, (2020). Positive Culture and Prognosis in Patients With Sepsis: A Prospective Cohort Study. *J Intensive Care Med.* 35(8): 755–762.
- Jeong, S., Park, Y., Cho, Y., & Kim, H.S. (2012). Diagnostic utilities of procalcitonin and C-reactive protein for the prediction of bacteremia determined by blood culture. *Clin Chim Acta.* 413 : 1731-1736.
- 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.* 24: 184
- Karakala, N., Raghunathan, K., Shaw, A.D. (2013). Intravenous fluids in sepsis: What to use and what to avoid. *Curr. Opin. Crit. Care.* 19 : 537–543.
- Kaukonen, K.M., Bailey, M., Pilcher, D., Cooper, D.J. and Bellomo, R. (2015). Systemic inflammatory response syndrome criteria in defining severe sepsis. *N. Engl. J. Med.* 372: 1629–1638.



- Kawai, T., Akira, S. (2010). The role of pattern-recognition receptors in innate immunity: update on toll-like receptors. *Nat Immunol.* 11: 373-84.
- Kethireddy, S., Bilgili, B., Sees, A., *et al.* (2018). Culture-negative septic shock compared with culture-positive septic shock: a retrospective cohort study. *Crit. Care Med.* 46(4): 506–512.
- Kim, J.H. (2022). Clinical utility of procalcitonin on antibiotic stewardship: a narrative review. *Infect. Chemother.* 54: 610–620.
- Krinsley, J.S. (2003). Association between hyperglycemia and increased hospital mortality in a heterogeneous population of critically ill patients. *Mayo Clin. Proc.* 78(12): 1471–1478.
- Kitabchi, A.E., Umpierrez, G.E., Miles, J.M. and Fisher, J.N. (2001). Management of hyperglycemic crises in patients with diabetes. *Diabetes Care.* 24(1): 131–153.
- Kumar, S., Gupta, E., Kaushik, S., Kumar Srivastava, V., Mehta, S.K. and Jyoti, A. (2018). Evaluation of oxidative stress and antioxidant status: correlation with the severity of sepsis. *Scand. J. Immunol.* 87(4): e12653.
- Landberg, E., Nevander, S., Hadi, M., Blomberg, M., Norling, A., Ekman, B. *et al.*, (2021). Evaluation of venous plasma glucose measured by point-of-care testing (Accu-Chek Inform II) and a hospital laboratory hexokinase method (Cobas c701) in oral glucose tolerance testing during pregnancy – a challenge in diagnostic accuracy. *Scand J Clin Lab Invest.* 81(8): 607–614.
- Levi, M. and van der Poll, T. (2017). Coagulation and sepsis. *Thromb. Res.* 149: 38–44.
- Li, Y., Bai, Z., Li, M., Wang, X., Pan, J., Li, X. and Wang, J. (2015). U-shaped relationship between early blood glucose and mortality in critically ill children. *BMC Pediatr.* 15: 88.
- Li, Y., Li, W. and Xu, B. (2024). Relationship between blood glucose and mortality in critically ill patients: retrospective analysis of the MIMIC-IV database. *J. Diabetes Investig.* 15: 931–938.
- Liew, F, Y, Xu, D., Brint, E.K., O’Neill, L.A., (2005). Negative regulation of toll-like receptor-mediated immune responses. *Nat Rev Immunol.* 5: 446–458.
- Liu, Z., Chen, X. and Zhang, L. (2025). A retrospective analysis of the correlation between the glucose-to-albumin ratio and 28-day mortality in sepsis patients. *BMC Infect. Dis.* 25: 715.



- Loeches, I.M., Guia, M.C., Vallecoccia, M.S., Suarez, D., Ibarz, M., Irazabal, M., *et al.* (2019). Risk Factors for Mortality in Elderly and Very Elderly Critically Ill Patients with Sepsis: a Prospective, Observational, Multicenter Cohort Study. *Ann. Intensive Care* 9 : 1–9.
- Lu, Z., Tao, G., Sun, X., Zhang, Y., Jiang, M., Liu, Y., *et al.* (2022). Association of blood glucose level and glycemic variability with mortality in sepsis patients during ICU hospitalization. *Front. Public Health* 10: 857368.
- Lupu, F., Keshari, R.S., Lambris, J.D., & Coggeshall, K.M. (2014). Crosstalk between the coagulation and complement systems in sepsis. *Thromb Res.* 133: S28–S31
- Manhes, G., Heng, A.E., Aublet-Cuvelier, B., Gazuy, N., Deteix, P., Souweine, B. (2005). Clinical features and outcome of chronic dialysis patients admitted to an intensive care unit. *Nephrol Dial Transplant.* 20 (6) : 1127–1133.
- Mathew, T.K., Zubair, M. and Tadi, P. (2023) Blood Glucose Monitoring. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing. (Accessed: 9 March 2026). Available at: <https://www.ncbi.nlm.nih.gov/books/NBK555976/>
- Marik, P.E., Bellomo, R. (2013). Stress hyperglycemia: an essential survival response!. *Crit Care Med.* 41 : 93-94.
- Martin, G. S., Mannino, D. M., Eaton, S., & Moss, M. (2003). The epidemiology of sepsis in the United States from 1979 through 2000. *N Engl J Med.* 348 : 1546-1554.
- Marzuki, M.J., Supriono, Pratomo, B. & Mustika, S. (2019). Comparison of mortality between intravenous albumin and no intravenous albumin in sepsis patients with hypoalbuminemia conditions and factors that influence the mortality of sepsis patients. *JPDI.* 4 : 196-203
- Meena D.S, Talkar M.A, Kumar D, Midha N, Bohra G.K, Tak V. (2025). Impact of blood culture positivity on clinical outcomes in sepsis: a prospective observational study. *Infez Med.* 33(3):294-302.
- Mondal, S., DasGupta, R., Lodh, M., Garai, R., Choudhury, B. and Hazra, A.K., *et al.* (2022). Stress hyperglycemia ratio, rather than admission blood glucose, predicts in-hospital mortality and adverse outcomes in moderate-to severe COVID-19 patients, irrespective of pre-existing glycemic status. *Diabetes Res. Clin. Pract.* 190: 109974.
- Mostafa, M., Hamed, L., Mokhtar, S., Arafa, M. (2025). Analysis of mortality factors in ICU patients with sepsis and septic shock: a retrospective study. *Egypt. J. Crit. Care Med.* 12 : 1.



- Murphy, K., and Weaver, C., editors. (2017). *Janeway's Immunobiology*. 9th ed. New York: *Garland Science*, pp. 127.
- Nates, J.L., Pène, F., Darmon, M., Mokart, D., Castro, P., David, S., *et al.* (2024). Septic shock in the immunocompromised cancer patient: a narrative review. *Crit. Care*, 28: 285.
- Nazer, L., Lopez-Olivo, M.A., Cuenca, J.A., Awad, W., Brown, A.R., Abusara, A., *et al.*, (2022). All-cause mortality in cancer patients treated for sepsis in intensive care units: a systematic review and meta-analysis. *Support. Care Cancer*, 30: 10099–10109.
- Oliveros, H., Tuta-Quintero, E., Piñeros, M., Guesguan, A. and Reyes, L.F. (2024). One-year survival of patients admitted for sepsis to intensive care units in Colombia. *BMC Infect Dis.* 24: 678.
- Opal, S.M. and van der Poll, T. (2014). Endothelial barrier dysfunction in septic shock. *J Intern Med.* 277(3) : 277-293.
- Park, J.E., Chung, K.S., Song, J.H., Kim, S.Y., Kim, E.Y., Jung, J.Y. (2018). The C-Reactive Protein/Albumin Ratio as a Predictor of Mortality in Critically Ill Patients. *J Clin Med.* 7 : 333-334.
- Park, S., Kim, D.-G., Suh, G.Y., Kang, J.G., Ju, Y.-S. and Lee, Y.-J., *et al.* (2012). Mild hypoglycemia is independently associated with increased risk of mortality in patients with sepsis: a 3-year retrospective observational study. *Crit. Care.* 16(5): 189.
- Patoli, D., Mignotte, F., Deckert, V., Dusuel, A., Dumont, A., Rieu, A. (2020). Inhibition of mitophagy drives macrophage activation and anti-bacterial defense during sepsis. *J Clin Invest.* 130 (11) : 5858-5874.
- Pawar, R.D., Shih, J.A., Balaji, L., Grossestreuer, A.V., Patel, P.V. and Hansen, C.K., *et al.* (2021). Variation in SOFA (Sequential Organ Failure Assessment) score performance in different infectious states. *J. Intensive Care Med.* 36: 1217–1222.
- Pepys, M.B. & Hirschfield, G.M., (2003). C-reactive protein: a critical update. *J Clin Invest.* 111 : 1805-1812.
- Piano, S., Tonon, M., Vettore, E., Stanco, M., Pilutti, C., Romano, A., *et al.* (2017). Incidence, predictors and outcomes of acute-on-chronic liver failure in outpatients with cirrhosis. *J Hepatol.* 67(6) : 1177-1184.
- Pietropaoli, AP, Glance, LG, Oakes, D, Fisher, SG. (2010). Gender differences in mortality in patients with severe sepsis or septic shock. *Gen Med.* 7(5) : 422-37.



- Purba, A.K.R, Mariana, N., Aliska, G., Wijaya, S.H., Wulandari, R.R., Hadi. U., *et al.* (2020). The burden and costs of sepsis and reimbursement of its treatment in a developing country: An observational study on focal infections in Indonesia. *Int J Infect Dis.* 96 : 211-218.
- Rababa, M., Bani Hamad, D. and Hayajneh, A.A. (2022). Sepsis assessment and management in critically ill adults: a systematic review. *PLoS One* 17: 1–19.
- Ramasamy, R., Yan, S.F., Schmidt, A.M. (2011). Receptor for AGE (RAGE): signaling mechanisms in the pathogenesis of diabetes and its complications. *Ann N Y Acad Sci.* 1243 : 88-102.
- Resende, C.B., Borges, I., Gonçalves, W.A., Carneiro, R., Rezende, B.M., Pinho, V., *et al.* (2020). Neutrophil Activity in Sepsis: A Systematic Review. *Brazilian J. Med. Biol. Res.* 53 : 1-6.
- Ricklin, D., Hajishengallis, G., Yang, K. and Lambris, J.D. (2010). Complement: a key system for immune surveillance and homeostasis. *Nat. Immunol.* 11(9): 785–797.
- Sanz-García, C., Rodríguez-García, M., Górriz-Teruel, J.L., Martín, C.B., Floege, J. and Díaz-López, B., *et al.* (2025). Differences in association between hypoalbuminaemia and mortality among younger versus older patients on haemodialysis. *Clin. Kidney J.* 18(1): 339.
- Saucedo, M.E.M, Fernández, R.E, Ricárdez, G.J.A. (2020). Hypoalbuminemia as a predictor of mortality in abdominal sepsis. *Cir Cir.* 88 : 481-484.
- Seo, M.H., Choa, M., You, J.S., Lee, H.S., Hong, J.H., Park, Y.S., *et al.* (2016). Hypoalbuminemia, Low Base Excess Values, and Tachypnea Predict 28-Day Mortality in Severe Sepsis and Septic Shock Patients in the Emergency Department. *Yonsei Med. J.* 57 : 1361–1369.
- Seymour, C.W., Liu, V.X., Iwashyna, T.J., Brunkhorst, F.M., Rea, T.D., Scherag, A. (2016). Assessment of Clinical Criteria for Sepsis: For the Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). *JAMA.* 315: 762–774.
- Shankar, H.M., Phillips, G. S., Levy, M. L., Seymour, C. W., Liu, V. X., Deutschman, C. S. *et al.* (2016). Developing a new definition and assessing new clinical criteria for septic shock. *JAMA.* 315: 775–787.
- Singer, M, Deutschman, C.S, Seymour CW, Shankar-Hari M, Annane D, Bauer M, *et al.*, The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). (2016). *JAMA.* 315 : 801-810.
- Singh, R., Barden, A., Mori, T. and Beilin, L. (2001). Advanced glycation end-products: a review. *Diabetologia* 44: 129–146.



- Soeters, P.B., Wolfe, R.R. and Shenkin, A. (2019). Hypoalbuminemia: pathogenesis and clinical significance. *JPEN J Parenter Enteral Nutr.* 43(2) : 181-193.
- Sorensen, O.E., Borregaard, N. (2016). Neutrophil extracellular traps – the dark side of neutrophils. *J Clin Invest.* 126 (5) : 1612–1620.
- Sousa, C., Brandão, M., Ribeiro, O., & Cardoso, T. (2015). Community-Acquired Severe Sepsis: A Prospective Cohort Study. *Open J. Intern. Med.* 5 : 37–49.
- Sun, J.K., Sun, F., Wang, X., Yuan, S.T., Zheng, S.Y., & Mu, X.W. (2015). Risk Factors and Prognosis of Hypoalbuminemia in Surgical Septic Patients. *PeerJ.* 3 : 1–14.
- Taccone, F.S., Artigas, A., Sprung, C.L., Moreno, R., Sakr, Y., Vincent, J.L. *et al.*, (2009). Characteristics and outcomes of cancer patients in European ICUs. *Crit Care.* 13(1) : R15.
- Takegawa, R., Kabata, D., Shimizu, K., Hisano, S., Ogura, H. and Shintani, A., *et al.* (2019). Serum albumin as a risk factor for death in patients with prolonged sepsis: an observational study. *J. Crit. Care* 51: 139–144.
- Takeuchi, O., Akira, S. (2010). Pattern recognition receptors and inflammation. *Cell.* 140: 805–820.
- Tang W, Ni X, Yao W, Wang W, Li Y, Lv Q. *et al.* (2024). Glucose-albumin ratio (GAR) as a novel biomarker for predicting postoperative pneumonia (POP) in older adults with hip fractures. *Sci Rep.* 14 : 26637.
- Tschaikowsky, K., Hedwig-Geissing, M., Braun, G.G., & Radespiel-Troeger, M. (2011). Predictive value of procalcitonin, interleukin-6, and C-reactive protein for survival in postoperative patients with severe sepsis. *J. Crit. Care* 26(1) : 54-64.
- Turcato G, Zaboli A, Lucente F, Filippi L, Maggi M, Brigiari G. (2025). Sepsis-Induced Coagulopathy and Hypoalbuminemia: Endothelial Damage as Common Pathway and Clinical Implications on Mortality and Transfusion Risk. *J Clin Med.* 24;14(13):4483.
- Ulldemolins, M., Roberts, J.A., Rello, J., Paterson, D.L. and Lipman, J. (2011). The effects of hypoalbuminaemia on optimizing antibacterial dosing in critically ill patients. *Clin. Pharmacokinet.* 50: 99–110.
- Van Cromphaut, S.J., Vanhorebeek, I., and Van den Berghe, G. (2008). Glucose Metabolism and Insulin Resistance in Sepsis. *Curr Pharm Des.* 14 : 1887-1899.



- Van den Berghe, G., Wouters, P., Weekers, F., Verwaest, C., Bruyninckx, F., Schetz, M., Vlasselaers, D., Ferdinande, P., Lauwers, P. and Bouillon, R. (2001). Intensive insulin therapy in critically ill patients. *N Engl J Med.* 345(19) : 1359–1367.
- Van den Berghe, G. (2004). How does blood glucose control with insulin. save lives in intensive care?. *J Clin Invest.* 114 : 1187-1195.
- Van den Berghe, G., Wilmer, A., Hermans, G., Meersseman, W., Wouters, P.J., Milants I, *et al.* (2006). Intensive insulin therapy in the medical ICU. *N Engl J Med.* 354 : 449-461
- Van Engelen, T.S.R., Joost, W., & van der Poll, T. (2017). Pathogenesis of Sepsis. *In:* W. J. Wiersinga, C. W. Seymour., editor, *Handbook of Sepsis.* 2nd ed., Springer International Publishing AG, part of Springer Nature, Amsterdam, pp. 31-43.
- Vanhorebeek, I., Gunst, J., Berghe, G.V.D (2018). Critical care management of stress-induced hyperglycemia. *Curr Diab Rep.* 18: 17.
- Vincent, J.L., de Mendonça, A., Cantraine, F. (1998). Working Group on "Sepsis-Related Problems" of the European Society of Intensive Care Medicine. Use of the SOFA score to assess the incidence of organ dysfunction/failure in intensive care units: results of a multicenter, prospective study. *Crit Care Med.* 26 : 1793–1800.
- Vincent, J.L., Rello, J., Marshall, J., Silva, E., Anzueto, A., Martin, C.D., *et al.* (2009). International study of the prevalence and outcomes of infection in intensive care units. *JAMA.* 302: 2323–2329.
- Vincent, J.L., Dubois, M.J., Navickis, R.J. and Wilkes, M.M. (2003). Hypoalbuminemia in acute illness: is there a rationale for intervention? A meta-analysis of cohort studies and controlled trials. *Ann Surg.* 243 : 328-340.
- Vincent, J.L., De Backer, D. & Wiedermann, C.J. (2016). Fluid management in sepsis: The potential beneficial effects of albumin. *J Crit Care.* 35: 161–167.
- Wang, W., Chen, W., Liu, Y., Li, L., Li, S. and Tan, J., *et al.* (2019). Blood glucose levels and mortality in patients with sepsis: dose-response analysis of observational studies. *J. Intensive Care Med.* 36: 182–190.
- Wang, J., Zhu, C.K., Yu, J.Q., Tan, R. and Yang, P.-L. (2021). Hypoglycemia and mortality in sepsis patients: a systematic review and meta-analysis. *Heart Lung* 50(6): 933–940.
- Wang, W., Tang, W., Yao, W., Lv Q., Ding W. (2024). Glucose-albumin ratio (GAR) as a novel biomarker of postoperative urinary tract infection in elderly hip fracture patients. *Front Med.*11:1366012.



- Wardi, G., Tainter, C.R., Ramnath, V.R., Brennan, J.J., Tolia, V., Castillo, E.M., *et al.* (2021). Age-Related Incidence and Outcomes of Sepsis in California, 2008–2015. *J. Crit. Care.* 62: 1–14.
- Wiedermann, C.J. (2021). Hypoalbuminemia as Surrogate and Culprit of Infections. *Int J Mol Sci.* 22: 4496.
- Williams, J.C., Ford, M.L., & Coopersmith, C.M. (2023). Cancer and sepsis. *Clin. Sci*, 137(11): 881–893.
- Xiang, M.J. and Chen, G.L. (2022). Impact of cancer on mortality rates in patients with sepsis: A meta-analysis and meta-regression of current studies. *World J Clin Cases*, 10(21): 7386–7396.
- Xu, Y., Jagannath, C., Liu, X.D., Sharafkhaneh, A., Kolodziejska, K.E. and Eissa, N.T. (2007). Toll-like receptor 4 is a sensor for autophagy associated with innate immunity. *Immunity* 27(1): 135–144.
- Yan, F., Chen, X., Quan, X., Wang, L., Wei, X., Zhu, J. (2024). Association between the stress hyperglycemia ratio and 28-day all-cause mortality in critically ill patients with sepsis: a retrospective cohort study and predictive model establishment based on machine learning. *Cardiovasc Diabetol.* 23(1) : 163.
- Yang, X., Zhang, R., Jin, T., Zhu, P., Yao, L., Li, L., *et al.* (2021). Stress hyperglycemia is independently associated with persistent organ failure in acute pancreatitis. *Dig Dis Sci.* 10 : 8.
- Yu, X., Gao, J. and Zhang, C. (2025). Sepsis-induced cardiac dysfunction: mitochondria and energy metabolism. *Intensive Care Med. Exp.* 13(1): 20.
- Zhu, C.L., Yao, R.Q., Li, L.X., Li, P., Xie, J. and Wang, J.F., *et al.* (2021). Mechanism of mitophagy and its role in sepsis-induced organ dysfunction: a review. *Front. Cell Dev. Biol.* 9: 664896.