

DAFTAR PUSTAKA

- Abbasi E, Mirzaei F, Tavalani H, Khodadadi I 2021, 'Diabetes and COVID-19: Mechanism of pneumonia, treatment strategy and vaccine' *Metabol Open*. Sep;11:100122. doi: 10.1016/j.metop.2021.100122.
- Alahmad, B, Al-Shammari AA, Bennakhi A, Al-Mulla F, Ali H 2020 'Fasting Blood Glucose and COVID-19 Severity: Nonlinearity Matters. *Diabetes Care*', 43(12):3113–6. doi: 10.2337/dc20-1941
- Alimohamadi Y, Sepandi M, Taghdir M, Hosamirudsari H. Determine the most common clinical symptoms in COVID-19 patients: a systematic review and meta-analysis. *J Prev Med Hyg.* 2020 Oct 6;61(3):E304-E312. doi: 10.15167/2421-4248/jpmh2020.61.3.1530. PMID: 33150219; PMCID: PMC7595075.
- Angeli, F, Reboldi, G, Poltronieri, C, Lazzari, L, Sordi, M, Garofoli, M, Bartolini, C, Verdecchia, P 2015, 'Hyperglycemia in acute coronary syndromes: from mechanisms to prognostic implications, *Therapeutic Advances in Cardiovascular Disease*' 1753944715594528, doi:10.1177/1753944715594528
- Armstrong RA, Kane AD, Kursumovic E, Oglesby FC, Cook TM. Mortality in patients admitted to intensive care with COVID-19: an updated systematic review and meta-analysis of observational studies. *Anaesthesia*. 2021 Apr;76(4):537-548. doi: 10.1111/anae.15425. Epub 2021 Feb 1. PMID: 33525063; PMCID: PMC8013495.
- Berghöfer B, Frommer T, Haley G, Fink L, Bein G, Hackstein H. TLR7 ligands induce higher IFN- α production in females. *J Immunol.* 2006;177:2088–2096. doi: 10.4049/jimmunol.177.4.2088.
- Bode B, Garrett V, Messler J, McFarland R, Crowe J, Booth R, et al. 2020, 'Glycemic Characteristics and Clinical Outcomes of COVID-19 Patients Hospitalized in the United States' *J Diabetes Sci Technol* 14(4):813–21. doi: 10.1177/1932296820924469.
- Bonanad C, García-Blas S, Tarazona-Santabalbina F, Sanchis J, Bertomeu-González V, Fácila L, Ariza A, Núñez J, Cordero A. The Effect of Age on Mortality in Patients With COVID-19: A Meta-Analysis With 611,583 Subjects. *J Am Med Dir Assoc.* 2020 Jul;21(7):915-918. doi: 10.1016/j.jamda.2020.05.045. Epub 2020 May 25. PMID: 32674819; PMCID: PMC7247470.
- Bordallo, B., Bellas, M., Cortez, A.F, Vieira, M., Pinheiro, M 2020, 'Severe COVID-19: what have we learned with the immunopathogenesis?' *Adv Rheumatol* **60**, 50 (2020). DOI:10.1186/s42358-020-00151-7.
- Bo Yu, Chenze Li, Yang Sun, Dao Wen Wang 2021, 'Insulin Treatment Is Associated with Increased Mortality in Patients with COVID-19 and Type 2 Diabetes Cell Metabolism' Volume 33, Issue 1,2021, Pages 65-77.e2, ISSN 1550-4131, DOI:10.1016/j.cmet.2020.11.014.

- Burhan, E., Susanto, DA., Isbaniah, F., Aman Nasution, S., Ginanjar, E., Pitoyo, CW., *et al.* 2022, *Pedoman Tatalaksana COVID-19 Edisi 4*. Jakarta.
- Carrasco-Sanchez FJ, Lopez-Carmona MD, Martinez-Marcos FJ, Pérez-Belmonte LM, Hidalgo-Jiménez A, Buonaiuto V, *et al.* 2021, 'Admission hyperglycaemia as a predictor of mortality in patients hospitalized with COVID-19 regardless of diabetes status: data from the Spanish SEMI-COVID-19 registry' *Ann Med.* 2021;53(1):103e116.
- Cascella M, Rajnik M, Cuomo A, Dulebohn SC, Di Napoli R. Features 2021, 'Evaluation and Treatment Virus corona (COVID-19)' *StatPearls*. 2021.
- Casiglia, Edoardo; Tikhonoff, Valérie 2017, ; 'Long-Standing Problem of β -Blocker-Elicited Hypoglycemia in Diabetes Mellitus' *Hypertension*, 70(1), 42–43. doi:10.1161/hypertensionaha.117.09378.
- Chander, S.; Deepak, V.; Kumari, R.; Leys, L.; Wang, H.Y.; Mehta, P.; Sadarat, F. Glycemic Control in Critically Ill COVID-19 Patients: Systematic Review and Meta-Analysis. *J. Clin. Med.* **2023**, 12, 2555. <https://doi.org/10.3390/jcm12072555>
- Chaudhuri A, Umpierrez GE. Oxidative stress and inflammation in hyperglycemic crises and resolution with insulin: implications for the acute and chronic complications of hyperglycemia. *J Diabetes Complications*. 2012 Jul-Aug;26(4):257-8. doi: 10.1016/j.jdiacomp.2012.04.016. Epub 2012 May 31. PMID: 22658407; PMCID: PMC3718464.
- Chen L, Sun W, Liu Y, Zhang L, Lv Y, Wang Q, *et al* 2021, 'Association of Early-Phase In-Hospital Glycemic Fluctuation With Mortality in Adult Patients With Coronavirus Disease 2019' *Diabetes Care* (2021) 44(4):865–73. doi: 10.2337/dc20-0780.
- Corona G, Pizzocaro A, Vena W, Rastrelli G, Semeraro F, Isidori AM, *et al* 2021, 'Diabetes is Most Important Cause for Mortality in COVID-19 Hospitalized Patients: Systematic Review and Meta-Analysis. *Rev Endocr Metab Disord*' doi: 10.1007/s11154-021-09630-8.
- COVID-ICU Group on behalf of the REVA Network and the COVID-ICU Investigators, 'Clinical characteristics and day-90 outcomes of 4244 critically ill adults with COVID-19: a prospective cohort study' *Intensive Care Med*, 2021 Jan;47(1):60-73.
- Desouza CV, Bolli GB, Fonseca V. Hypoglycemia, diabetes, and cardiovascular events. *Diabetes Care*. 2010 Jun;33(6):1389-94. doi: 10.2337/dc09-2082. PMID: 20508232; PMCID: PMC2875462.
- Dongelmans, D,A., Termorshuizen, F., Brinkman, S. *et al* 2022, 'Characteristics and outcome of COVID-19 patients admitted to the ICU: a nationwide cohort study on the comparison between the first and the consecutive upsurges of the second wave of the COVID-19 pandemic in the Netherland' *Ann. Intensive Care* **12**, 5 (2022), <https://doi.org/10.1186/s13613-021-00978-3>

- Fang X, Li S, Yu H, Wang P, Zhang Y, Chen Z, et al 2020 'Epidemiological, Comorbidity Factors With Severity and Prognosis of COVID-19: A Systematic Review and Meta-Analysis' doi: 10.18632/aging.103579
- Finelli L, Gupta V, Petigara T, Yu K, Bauer KA, Puzniak LA 2020, 'Mortality Among US Patients Hospitalized With SARS-CoV-2 Infection in 2020' *JAMA Netw Open*. 2021 Apr 01;4(4):e216556. [PMC free article: PMC8033442] [PubMed: 33830226]
- Gebhard C, Regitz-Zagrosek V, Neuhauser HK, Morgan R, Klein SL 2020, 'Impact of sex and gender on COVID-19 outcomes in Europe' *Biol Sex Differ*, 2020 May 25;11(1):29. [PMC free article: PMC7247289] [PubMed: 32450906]
- Guo ZD, Wang ZY, Zhang SF, Li X, Li L, Li C, et al 2020, 'Aerosol and Surface Distribution of Severe Acute Respiratory Syndrome Coronavirus 2 in Hospital Wards, Wuhan, China' *Emerg Infect Dis*. 2020 Jul;26(7):1583-1591. [PMC free article: PMC7323510] [PubMed: 32275497]
- Ho FK, Petermann-Rocha F, Gray SR, Jani BD, Katikireddi SV, Niedzwiedz CL, Foster H, Hastie CE, Mackay DF, Gill JMR, O'Donnell C, Welsh P, Mair F, Sattar N, Celis-Morales CA, Pell JP. Is older age associated with COVID-19 mortality in the absence of other risk factors? General population cohort study of 470,034 participants. *PLoS One*. 2020 Nov 5;15(11):e0241824. doi: 10.1371/journal.pone.0241824. PMID: 33152008; PMCID: PMC7644030.
- Hou, D., Zhong, P., Ye, X. *et al* 2021, 'Persistent hyperglycemia is a useful glycemic pattern to predict stroke mortality: a systematic review and meta-analysis' *BMC Neurol* **21**, 487 (2021), <https://doi.org/10.1186/s12883-021-02512-1>
- Hui Y, Li Y, Tong X, Wang Z, Mao X, Huang L, et al 2020, 'The risk factors for mortality of diabetic patients with severe COVID-19: A retrospective study of 167 severe COVID-19 cases in Wuhan' *PLoS One*, doi: 10.1371/journal.pone.0243602.
- Jorda A, Kussmann M, Kolenchery N, Siller-Matula JM, Zeitlinger M, Jilma B, Gelbenegger G. Convalescent Plasma Treatment in Patients with Covid-19: A Systematic Review and Meta-Analysis. *Front Immunol*. 2022 Feb 7;13:817829. doi: 10.3389/fimmu.2022.817829. PMID: 35197981; PMCID: PMC8859444.
- Kartsonaki, Christiana, 2016, 'Survival analysis. Diagnostic Histopathology' **22(7)**, 263–270. doi:10.1016/j.mpdhp.2016.06.005.
- Klonoff DC, Messler JC, Umpierrez GE, Peng L, Booth R, Crowe J, Garrett V, McFarland R, Pasquel FJ, 2020, 'Association Between Achieving Inpatient Glycemic Control and Clinical Outcomes in Hospitalized Patients With COVID-19: A Multicenter, Retrospective Hospital-Based Analysis' *Diabetes Care*, 2021 Feb;44(2):578-585. doi: 10.2337/dc20-1857
- Lauer SA, Grantz KH, Bi Q, Jones FK, Zheng Q, Meredith HR, et al., 2020, 'The Incubation Period of Coronavirus Disease 2019 (COVID-19) From Publicly

Reported Confirmed Cases: Estimation and Application' *Ann Intern Med.* 2020 May 05;172(9):577-582.

- Lavrentieva, A., Kaimakamis, E., Voutsas, V. *et al.* An observational study on factors associated with ICU mortality in Covid-19 patients and critical review of the literature. *Sci Rep* **13**, 7804 (2023). <https://doi.org/10.1038/s41598-023-34613-x>
- Leisman DE, Ronner L, Pinotti R, Taylor MD, Sinha P, Calfee CS, Hirayama AV, Mastroiani F, Turtle CJ, Harhay MO, Legrand M, Deutschman CS. Cytokine elevation in severe and critical COVID-19: a rapid systematic review, meta-analysis, and comparison with other inflammatory syndromes. *Lancet Respir Med.* 2020 Dec;8(12):1233-1244. doi: 10.1016/S2213-2600(20)30404-5. Epub 2020 Oct 16. PMID: 33075298; PMCID: PMC7567529.
- Leite SA, Locatelli SB, Niece SP, Oliveira AR, Tockus D, Tosin T, 2010, 'Impact of hyperglycemia on morbidity and mortality, length of hospitalization and rates of re-hospitalization in a general hospital setting in Brazil' *Diabetol Metab Syndr.* 2010 Jul 21;2:49. doi: 10.1186/1758-5996-2-49.
- Leng Y, Chen M, Dai M, Wu Y, Lei SQ, Yan K, et al., 2021, 'Minimized Glycemic Fluctuation Decreases the Risk of Severe Illness and Death in Patients With COVID-19' *J Med Virol* 93(7):4060–2. doi: 10.1002/jmv.26584.
- Libby P, Lüscher T, 2020, 'COVID-19 is, in the end, an endothelial disease. *Eur Heart J* 2020 Sep 1;41(32):3038-3044. doi: 10.1093/eurheartj/ehaa623.
- Li J, Huang DQ, Zou B, Yang H, Hui WZ, Rui F, et al., 2021, 'Epidemiology of COVID-19: A systematic review and meta-analysis of clinical characteristics, risk factors, and outcomes' *J Med Virol.* 2021 Mar;93(3):1449-1458
- Lim, S., Bae, J.H., Kwon, HS. et al 2021, 'COVID-19 and diabetes mellitus: from pathophysiology to clinical management' *Nat Rev Endocrinol* 17, 11–30 <https://doi.org/10.1038/s41574-020-00435-4>
- Li Y, Han X, Alwalid O, Cui Y, Cao Y, Liu J, et al., 2020, 'Baseline Characteristics and Risk Factors for Short-Term Outcomes in 132 COVID-19 Patients With Diabetes in Wuhan China: A Retrospective Study' *Diabetes Res Clin Pract*, 166:108299. doi: 10.1016/j.diabres.2020.108299.
- Lihua Zhu, Zhi-Gang She, Xu Cheng, 2020, 'Association of Blood Glucose Control and Outcomes in Patients with COVID-19 and Pre-existing Type 2 Diabetes, *Cell Metabolism*' volume 31, Issue 6, Pages 1068-1077.e, <https://doi.org/10.1016/j.cmet.2020.04.021>
- Ling P, Luo S, Zheng X, Cai G, Weng J, 2020, 'Elevated Fasting Blood Glucose Within the First Week of Hospitalization was Associated With Progression to Severe Illness of COVID-19 in Patients With Preexisting Diabetes: A Multicenter Observational Study' *J Diabetes* 13(1):89–93, doi: 10.1111/1753-0407.13121

- Liu SP, Zhang Q, Wang W, Zhang M, Liu C, Xiao X, et al., 2020, 'Hyperglycemia is a Strong Predictor of Poor Prognosis in COVID-19' *Diabetes Res Clin Pract*, 167:108338. doi: 10.1016/j.diabres.2020.108338
- Luevano-Contreras, Claudia; Chapman-Novakofski, Karen, 2010, 'Dietary Advanced Glycation End Products and Aging. Nutrients' 2(12), 1247–1265. doi:10.3390/nu2121247
- Mahendra M, Nuchin A, Kumar R, Shreedhar S, Mahesh PA. Predictors of mortality in patients with severe COVID-19 pneumonia - a retrospective study. *Adv Respir Med*. 2021;89(2):135-144. doi: 10.5603/ARM.a2021.0036. PMID: 33966261
- Mahmoodpoor A, Hamishehkar H, Beigmohammadi M, Sanaie S, Shadvar K, Soleimanpour H, Rahimi A, Safari S, 2016, 'Predisposing Factors for Hypoglycemia and Its Relation With Mortality in Critically Ill Patients Undergoing Insulin Therapy in an Intensive Care Unit' *Anesth Pain Med*, Jan 31;6(1):e33849. doi: 10.5812/aapm.33849.
- Martínez-Piña, D. A. , Alvarado-Fernández, G. A. , González-Guevara, E. , Castillo-Pérez, C. , Romero-Luna, G. , Torres-Ríos, J. A, 2022, 'Hypoglycemia and Brain: The Effect of Energy Loss on Neurons' *In: Raghav, A. , editor. Basics of Hypoglycemia*, <https://www.intechopen.com/online-first/81593> doi:10.5772/intechopen.104210
- Mazori AY, Bass IR, Chan L, Mathews KS, Altman DR, Saha A, Soh H, Wen HH, Bose S, Leven E, Wang JG, Mosoyan G, Pattharanitima P, Greco G, Gallagher EJ. Hyperglycemia is Associated With Increased Mortality in Critically Ill Patients With COVID-19. *Endocr Pract*. 2021 Feb;27(2):95-100. doi: 10.1016/j.eprac.2020.12.015. Epub 2021 Jan 9. PMID: 33551315; PMCID: PMC7796656.
- Mehta PB, Kohn MA, Koliwad SK, Rushakoff RJ, 2021, 'Lack of Association Between Either Outpatient or Inpatient Glycemic Control and COVID-19 Illness Severity or Mortality in Patients With Diabetes' *BMJ Open Diabetes Res Care* 9(1):e002203. doi: 10.1136/bmjdr-2021-002203
- Mirza H, Noori MAM, Akbar H, Fichadiya H, Kaur IP, Sachdeva S, Grewal J, Khakwani MZ, Levitt H, Chang W, Wasty N, Patton C, Shah A, Angi P, Mughal MS. Hypertension as an Independent Risk Factor for In-Patient Mortality in Hospitalized COVID-19 Patients: A Multicenter Study. *Cureus*. 2022 Jul 11;14(7):e26741. doi: 10.7759/cureus.26741. PMID: 35836713; PMCID: PMC9275529.
- NICE-SUGAR Study Investigators; Finfer S, Chittock DR, Su SY, Blair D, Foster D, Dhingra V, Bellomo R, Cook D, Dodek P, Henderson WR, Hébert PC, Heritier S, Heyland DK, McArthur C, McDonald E, Mitchell I, Myburgh JA, Norton R, Potter J, Robinson BG, Ronco JJ. Intensive versus conventional glucose control in critically ill patients. *N Engl J Med*. 2009 Mar 26;360(13):1283-97. doi: 10.1056/NEJMoa0810625. Epub 2009 Mar 24. PMID: 19318384.

- Pan M, Vasbinder A, Anderson E, Catalan T, Shadid HR, Berlin H, Padalia K, O'Hayer P, Meloche C, Azam TU, Khaleel I, Michaud E, Blakely P, Bitar A, Huang Y, Zhao L, Pop-Busui R, Loosen SH, Chalkias A, Tacke F, Giamarellos-Bourboulis EJ, Reiser J, Eugen-Olsen J, Hayek SS; ISIC Group. Angiotensin-Converting Enzyme Inhibitors, Angiotensin II Receptor Blockers, and Outcomes in Patients Hospitalized for COVID-19. *J Am Heart Assoc*. 2021 Dec 21;10(24):e023535. doi: 10.1161/JAHA.121.023535. Epub 2021 Dec 10. PMID: 34889102; PMCID: PMC9075226.
- Papachristou S, Stamatiou I, Stoian AP, Papanas N, 2021, 'New-Onset Diabetes in COVID- 19: Time to Frame Its Fearful Symmetry' *Diabetes Ther*. 12:461–4.
- Park SC, Won SY, Kim NH, Choi H, Youk TM, Lee HJ, et al., 2021, 'Risk Factors for Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infections: A Nationwide Population-Based Study' *Ann Transl Med* 9(3):211. doi: 10.21037/atm-20-5958
- Pedoman Pengelolaan dan Pencegahan Diabetes Melitus Tipe 2 di Indonesia - PERKENI. 2021. Perkumpulan Endokrinologi Indonesia.
- Pisitkun P, Deane JA, Difilippantonio MJ, Tarasenko T, Satterthwaite AB, Bolland S. Autoreactive B cell responses to RNA-related antigens due to TLR7 gene duplication. *Science*. 2006;312:1669–1672. doi: 10.1126/science.1124978.
- Ramírez-Soto MC, Ortega-Cáceres G, Arroyo-Hernández H. Sex differences in COVID-19 fatality rate and risk of death: An analysis in 73 countries, 2020-2021. *Infez Med*. 2021 Sep 10;29(3):402-407. doi: 10.53854/liim-2903-11. PMID: 35146345; PMCID: PMC8805484.
- RECOVERY Collaborative Group, Horby P, Lim WS, Emberson JR, Mafham M, Bell JL et al., 2020, 'Dexamethasone in hospitalized patients with covid-19—preliminary report' *N Engl J Med*. 2020;384: 693–704.
- Reno, Candace M.; Skinner, Allie; Bayles, Justin; Chen, Y. Stefanie; Daphna-Iken, Dorit; Fisher, Simon J, 2018, Severe hypoglycemia-induced sudden death is mediated by both cardiac arrhythmias and seizures' *American Journal of Physiology-Endocrinology and Metabolism*, 315(2), E240–E249. doi:10.1152/ajpendo.00442.2017
- Roedl K, Jarczak D, Thasler L, Bachmann M, Schulte F, Bein B, Weber CF, Schäfer U, Veit C, Hauber HP, Kopp S, Sydow K, de Weerth A, Bota M, Schreiber R, Detsch O, Rogmann JP, Frings D, Sensen B, Burdelski C, Boenisch O, Nierhaus A, de Heer G, Kluge S. Mechanical ventilation and mortality among 223 critically ill patients with coronavirus disease 2019: A multicentric study in Germany. *Aust Crit Care*. 2021 Mar;34(2):167-175. doi: 10.1016/j.aucc.2020.10.009. Epub 2020 Oct 27. PMID: 33250401; PMCID: PMC7590821.
- Sarah E Capes; Dereck Hunt; Klas Malmberg; Hertz C Gerstein 2000, 'Stress hyperglycaemia and increased risk of death after myocardial infarction in patients

- with and without diabetes: a systematic overview' 355(9206),0–778. doi:10.1016/s0140 6736(99)08415-9
- Sardu C, D'Onofrio N, Balestrieri ML, Barbieri M, Rizzo MR, Messina V, et al 2020, 'Outcomes in Patients With Hyperglycemia Affected by COVID-19: Can We Do More on Glycemic Control?' *Diabetes Care*, Jul;43(7):1408-1415, doi: 10.2337/dc20-0723. Epub 2020 May 19
- Shah K, Tiwaskar M, Chawla P, Kale M, Deshmane R, Sowani A, 2020, 'Hypoglycemia at the time of Covid-19 pandemic' *Diabetes Metab Syndr* doi: 10.1016/j.dsx.2020.07.003
- Shen Y, Fan X, Zhang L, Wang Y, Li C, Lu J, et al., 2021, 'Thresholds of Glycemia and the Outcomes of COVID-19 Complicated With Diabetes: A Retrospective Exploratory Study Using Continuous Glucose Monitoring' *Diabetes Care*, 44(4):976–82. doi: 10.2337/dc20-1448
- Singh R, Rathore SS, Khan H, Karale S, Chawla Y, Iqbal K, Bhurwal A, Tekin A, Jain N, Mehra I, Anand S, Reddy S, Sharma N, Sidhu GS, Panagopoulos A, Pattan V, Kashyap R, Bansal V. Association of Obesity With COVID-19 Severity and Mortality: An Updated Systemic Review, Meta-Analysis, and Meta-Regression. *Front Endocrinol (Lausanne)*. 2022 Jun 3;13:780872. doi: 10.3389/fendo.2022.780872. PMID: 35721716; PMCID: PMC9205425.
- Stokes EK, Zambrano LD, Anderson KN, Marder EP, Raz KM, El Burai Felix S, et al., 2020, 'Coronavirus Disease 2019 Case Surveillance' *MMWR Morb Mortal Wkly Rep*, Jun 19;69(24):759-765.
- Susilo, Adityo., Rumende, C.Martin., Pitoyo, Ceva W., Santoso, Widayat Djoko., Yulianti, Mira., Herikurniawan., et al., 2020, 'Coronavirus Disease 2019 : Tinjauan Literatur Terkini' Fakultas Kedokteran Universitas Indonesia : Jakarta.
- Tharmarajah E, Buazon A, Patel V, Hannah JR, Adas M, Allen VB, Bechman K, Clarke BD, Nagra D, Norton S, Russell MD, Rutherford AI, Yates M, Galloway JB. IL-6 inhibition in the treatment of COVID-19: A meta-analysis and meta-regression. *J Infect*. 2021 May;82(5):178-185. doi: 10.1016/j.jinf.2021.03.008. Epub 2021 Mar 18. PMID: 33745918; PMCID: PMC7970418.
- Turina, Matthias; Fry, Donald E.; Polk, Hiram C 2005, 'Acute hyperglycemia and the innate immune system: Clinical, cellular, and molecular aspects' *Critical Care Medicine*, 33(7), 1624–1633. doi:10.1097/01.ccm.0000170106.61978.d8
- Van den Berghe, Greet; Wouters, Pieter J.; Bouillon, Roger; Weekers, Frank; Verwaest, Charles; Schetz, Miet; Vlasselaers, Dirk; Ferdinande, Patrick; Lauwers, Peter 2003, 'Outcome benefit of intensive insulin therapy in the critically ill: Insulin dose versus glycemic control' *Critical Care Medicine*, 31(2), 359–366. doi:10.1097/01.ccm.0000045568.12881.10

- Vargas-Rodriguez, J.R.; Valdés Aguayo, J.J.; Garza-Veloz, I.; Martinez-Rendon, J.; del Refugio Rocha Pizaña, M.; Cabral-Pacheco, G.A.; Juárez-Alcalá, V.; Martinez-Fierro, M.L, 2022, Sustained Hyperglycemia and Its Relationship with the Outcome of Hospitalized Patients with Severe COVID-19: Potential Role of *ACE2* Upregulation' *J.Pers.Med.* 12,805 <https://doi.org/10.3390/jpm1205085>
- Vekaria B, Overton C, Wiśniowski A, Ahmad S, Aparicio-Castro A, Curran-Sebastian J, Eddleston J, Hanley NA, House T, Kim J, Olsen W, Pampaka M, Pellis L, Ruiz DP, Schofield J, Shryane N, Elliot MJ. Hospital length of stay for COVID-19 patients: Data-driven methods for forward planning. *BMC Infect Dis.* 2021 Jul 22;21(1):700. doi: 10.1186/s12879-021-06371-6. PMID: 34294037; PMCID: PMC8295642.
- Viana, Marina Verçoza; Moraes, Rafael Barberena; Fabbrin, Amanda Rodrigues; Santos, Manoella Freitas; Gerchman, Fernando, 2014, 'Assessment and treatment of hyperglycemia in critically ill patients', *Revista Brasileira de Terapia Intensiva*, 26(1), 71–76, doi:10.5935/0103-507X.20140011
- Wang J, Jiang M, Chen X, Montaner LJ, 2020, 'Cytokine storm and leukocyte changes in mild versus severe SARS-CoV-2 infection: Review of 3939 COVID-19 patients in China and emerging pathogenesis and therapy concepts', *J Leukoc Biol* , Jul;108(1):17-41
- Wang S, Ma P, Zhang S, Song S, Wang Z, Ma Y, et al 2020, 'Fasting blood glucose at admission is an independent predictor for 28-day mortality in patients with COVID-19 without previous diagnosis of diabetes: a multi-centre retrospective study' *Diabetologia*, 2020;63:2102–11
- Wang, Wen; Chen, Wenwen; Liu, Yanmei; Li, Ling; Li, Sheyu; Tan, Jing; Sun, Xin, 2019, 'Blood Glucose Levels and Mortality in Patients With Sepsis: Dose–Response Analysis of Observational Studies', *Journal of Intensive Care Medicine*, 088506661988932 doi:10.1177/0885066619889322
- Wang Y, Lu X, Li Y, Chen H, Chen T, Su N, Huang F, Zhou J, Zhang B, Yan F, Wang J. Clinical Course and Outcomes of 344 Intensive Care Patients with COVID-19. *Am J Respir Crit Care Med.* 2020 Jun 1;201(11):1430-1434. doi: 10.1164/rccm.202003-0736LE. PMID: 32267160; PMCID: PMC7258632.
- Whitcomb, Brian W.; Pradhan, Elizabeth Kimbrough; Pittas, Anastassios G.; Roghmann, Mary-Claire; Perencevich, Eli N, 2005, 'Impact of admission hyperglycemia on hospital mortality in various intensive care unit populations' *Critical Care Medicine*, 33(12), 2772-2777. doi:10.1097/01.ccm.0000189741.44071.25
- Wu Z, McGoogan JM 2020, 'Characteristics of and Important Lessons From the Coronavirus Disease 2019 (COVID-19) Outbreak in China: Summary of a Report of 72 314 Cases From the Chinese Center for Disease Control and Prevention' *JAMA*, Apr 7;323(13):1239-1242, doi: 10.1001/jama.2020.2648. PMID: 32091533.

- Wu ZH, Tang Y, Cheng Q 2021, 'Diabetes Increases the Mortality of Patients With COVID-19: A Meta-Analysis', *Acta Diabetol* 58(2):139–44, doi: 10.1007/s00592-020-01546-0
- Xie J, Covassin N, Fan Z, Singh P, Gao W, Li G, Kara T, Somers VK. Association Between Hypoxemia and Mortality in Patients With COVID-19. *Mayo Clin Proc*. 2020 Jun;95(6):1138-1147. doi: 10.1016/j.mayocp.2020.04.006. Epub 2020 Apr 11. PMID: 32376101; PMCID: PMC7151468.
- Yamada T, Shojima N, Noma H, Yamauchi T, Kadowaki T. Glycemic control, mortality, and hypoglycemia in critically ill patients: a systematic review and network meta-analysis of randomized controlled trials. *Intensive Care Med*. 2017 Jan;43(1):1-15. doi: 10.1007/s00134-016-4523-0. Epub 2016 Sep 16. PMID: 27637719.
- Yang AP, Liu JP, Tao WQ, Li HM, 2020, 'The diagnostic and predictive role of NLR, d-NLR and PLR in COVID-19 patients', *Int Immunopharmacol*, Jul;84:106504.
- Yuan S, Li H, Chen C, Wang F, Wang DW, 2021, 'Association of Glycosylated Haemoglobin HbA1c Levels With Outcome in Patients With COVID-19: A Retrospective Study', *J Cell Mol Med*, 25(7):3484–97. doi: 10.1111/jcmm.1643
- Ye P, Pang R, Li L, Li HR, Liu SL, Zhao L. Both Underweight and Obesity Are Associated With an Increased Risk of Coronavirus Disease 2019 (COVID-19) Severity. *Front Nutr*. 2021 Oct 8;8:649422. doi: 10.3389/fnut.2021.649422. PMID: 34692741; PMCID: PMC8531071.
- Yu, T 2006, 'Increased production of reactive oxygen species in hyperglycemic conditions requires dynamic change of mitochondrial morphology', *103(8)*, 2653–2658. doi:10.1073/pnas.0511154103
- Zhang B, Liu S, Zhang L, Dong Y, Zhang S 2020, 'Admission fasting blood glucose predicts 30-day poor outcome in patients hospitalized for COVID-19 pneumonia', *Diabetes Obes. Metab.*;22:1955–7
- Zhang L, Hou J, Ma FZ, Li J, Xue S, Xu ZG, 2021, 'The common risk factors for progression and mortality in COVID-19 patients: a meta-analysis' *Arch Virol*, Aug;166(8):2071-2087, doi: 10.1007/s00705-021-05012-2
- Zhang W, Li C, Xu Y, He B, Hu M, Cao G, et al 2021, 'Hyperglycemia and Correlated High Levels of Inflammation Have a Positive Relationship With the Severity of Coronavirus Disease 2019', *Mediators Inflamm* 2021:8812304. doi: 10.1155/2021/8812304
- Zhang, X., Zhang, J., Li, J. *et al* 2021, 'Relationship between 24-h venous blood glucose variation and mortality among patients with acute respiratory failure', *Sci Rep* **11**, 7747, <https://doi.org/10.1038/s41598-021-87409-2>
- Zhou, F., Yu, T., Du, R., Fan, G., Liu, Y., Liu, Z., ... Cao, B. (2020). *Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study*. *The Lancet*, 395(10229), 1054–1062. doi:10.1016/s0140-6736(20)30566-3

- Zhu B, Jin S, Wu L, et al 2020, 'J-shaped association between fasting blood glucose levels and COVID-19 severity in patients without diabetes', *Diabetes Res Clin Pract*, 168:108381.
- Zhu J, Zhong Z, Ji P, Li H, Li B, Pang J, et al 2020, 'Clinicopathological characteristics of 8697 patients with COVID-19 in China: a meta-analysis', *Fam Med Community Health*, Apr;8(2).
- Zhu L, She ZG, Cheng X, Qin JJ, Zhang XJ, Cai J, et al 2020, 'Association of blood glucose control and outcomes in patients with COVID-19 and preexisting type 2 diabetes', *Cell Metab*, 31(6):1068e1077.e3.