

## DAFTAR PUSTAKA

- Al-kuraishy, H. M. *et al.* (2021) 'COVID-19 and Risk of Acute Ischemic Stroke and Acute Lung Injury in Patients With Type II Diabetes Mellitus: The Anti-inflammatory Role of Metformin', *Frontiers in Medicine*, 8(February), pp. 1–10. doi: 10.3389/fmed.2021.644295.
- American Diabetes Association (2017) 'Standards of Medical Care in Diabetes: Pharmacologic Approaches to Glycemic Treatment', *Diabetes Care*, 40(Supplement 1), pp. S64–S74.
- Bornstein, S. R. *et al.* (2020) 'Practical recommendations for the management of diabetes in patients with COVID-19', (January).
- Boye, K. S. *et al.* (2021) 'Risk Factors Associated with COVID-19 Hospitalization and Mortality: A Large Claims-Based Analysis Among People with Type 2 Diabetes Mellitus in the United States', *Diabetes Therapy*, 12(8), pp. 2223–2239. doi: 10.1007/s13300-021-01110-1.
- Bramante, C. T., Ingraham, N. E., *et al.* (2021) 'Metformin and risk of mortality in patients hospitalised with COVID-19: a retrospective cohort analysis', *The Lancet Healthy Longevity*, 2(1), pp. e34–e41. doi: 10.1016/S2666-7568(20)30033-7.
- Bramante, C. T., Buse, J., *et al.* (2021) 'Outpatient metformin use is associated with reduced severity of COVID-19 disease in adults with overweight or obesity', *Journal of Medical Virology*, 93(7), pp. 4273–4279. doi: 10.1002/jmv.26873.
- Burhan, E. *et al.* (2020) *PEDOMAN TATALAKSANA COVID-19 Edisi 3 TIM EDITOR Perhimpunan Dokter Paru Indonesia (PDPI) Perhimpunan Dokter Spesialis Kardiovaskular Indonesia (PERKI) Perhimpunan Dokter Spesialis Penyakit Dalam Indonesia (PAPDI) Perhimpunan Dokter Anestesiologi dan Terap.*
- Chen, Z. *et al.* (2021) 'Association of metformin with mortality or ARDS in patients with COVID-19 and type 2 diabetes: A retrospective cohort study', *Diabetes Research and Clinical Practice*, 173, p. 108619. doi: 10.1016/j.diabres.2020.108619.
- Cheng, X. *et al.* (2020) 'Metformin Is Associated with Higher Incidence of Acidosis, but Not Mortality, in Individuals with COVID-19 and Pre-existing Type 2 Diabetes Graphical', *Ann Oncol*, (January), pp. 19–21.
- Crouse, A. B. *et al.* (2021) 'Metformin Use Is Associated With Reduced Mortality in a Diverse Population With COVID-19 and Diabetes', *Frontiers in Endocrinology*, 11(January), pp. 1–8. doi: 10.3389/fendo.2020.600439.

- Dhama, K. *et al.* (2020) *Coronavirus Disease 2019–COVID-19*. Available at: <http://cmr.asm.org/>.
- Fan, Y. *et al.* (2019) ‘Bat Coronaviruses in China’. doi: 10.3390/v11030210.
- French, E. K., Donihi, A. C. and Korytkowski, M. T. (2019) ‘Diabetic ketoacidosis and hyperosmolar hyperglycemic syndrome: Review of acute decompensated diabetes in adult patients’, *The BMJ*, 365. doi: 10.1136/bmj.11114.
- Gao, Y. *et al.* (2020) ‘Risk of Metformin in Patients With Type 2 Diabetes With COVID-19: A Preliminary Retrospective Report’, *Clinical and Translational Science*, 13(6), pp. 1055–1059. doi: 10.1111/cts.12897.
- Ghany, R. *et al.* (2021) ‘Metformin is associated with lower hospitalizations, mortality and severe coronavirus infection among elderly medicare minority patients in 8 states in USA’, *Diabetes and Metabolic Syndrome: Clinical Research and Reviews*, 15(2), pp. 513–518. doi: 10.1016/j.dsx.2021.02.022.
- Gralinski, L. E. and Menachery, V. D. (2020) ‘Return of the Coronavirus: 2019-nCoV’. doi: 10.3390/v12020135.
- Hsu, W. H. *et al.* (2018) ‘Effect of metformin on kidney function in patients with type 2 diabetes mellitus and moderate chronic kidney disease’, *Oncotarget*, 9(4), pp. 5416–5423. doi: 10.18632/oncotarget.23387.
- Hussain, A., Bhowmik, B. and Cristina, N. (2020) ‘COVID-19 and diabetes: Knowledge in progress’, *Diabetes Research and Clinical Practice*, (January).
- Ibrahim, S. *et al.* (2021) ‘Metformin and Covid-19: Focused Review of Mechanisms and Current Literature Suggesting Benefit’, 12(July), pp. 1–11. doi: 10.3389/fendo.2021.587801.
- De Jager, J., Kooy, A. and Lehert, P. (2020) ‘Long term treatment with metformin in patients with type 2 diabetes and risk of vitamin B-12 deficiency: randomised placebo controlled trial’. doi: 10.1136/bmj.c2181.
- Khunti, K. *et al.* (2020) ‘Prescription of glucose-lowering therapies and risk of COVID-19 mortality in people with type 2 diabetes: a nationwide observational study in England’, (January), pp. 19–21.
- Koichi, Y. \*, Fujiogi, M. and Koutsogiannaki, S. (2019) ‘COVID-19 pathophysiology: A review’. doi: 10.1016/j.clim.2020.108427.
- Li, J. *et al.* (2020) ‘Metformin use in diabetes prior to hospitalization: Effects on mortality in COVID-19’, *Endocrine Practice*, 26(10), pp. 1166–1172. doi: 10.4158/EP-2020-0466.

- Liu, K. *et al.* (2020) ‘Clinical characteristics of novel coronavirus cases in tertiary hospitals in Hubei Province’, *Chinese medical journal*, 133(9), pp. 1025–1031. doi: 10.1097/CM9.0000000000000744.
- Liu, Y. C., Kuo, R. L. and Shih, S. R. (2020) ‘COVID-19: The first documented coronavirus pandemic in history’, *Biomedical Journal*, 43(4), pp. 328–333. doi: 10.1016/j.bj.2020.04.007.
- Luo, P. *et al.* (2020) ‘Metformin treatment was associated with decreased mortality in COVID-19 patients with diabetes in a retrospective analysis’, *American Journal of Tropical Medicine and Hygiene*, 103(1), pp. 69–72. doi: 10.4269/ajtmh.20-0375.
- Lv, Z. and Guo, Y. (2020) ‘Metformin and Its Benefits for Various Diseases’, *Frontiers in Endocrinology*, 11(April), pp. 1–10. doi: 10.3389/fendo.2020.00191.
- Machhi, J. *et al.* (2020) ‘The Natural History, Pathobiology, and Clinical Manifestations of SARS-CoV-2 Infections’, *Journal of Neuroimmune Pharmacology*, 15(3), pp. 359–386. doi: 10.1007/s11481-020-09944-5.
- Malhotra, A. *et al.* (2020) ‘ACE2, Metformin, and COVID-19’, *iScience*, 23(9), p. 101425. doi: 10.1016/j.isci.2020.101425.
- Mariano, F. and Biancone, L. (2021) ‘Metformin, chronic nephropathy and lactic acidosis: a multi-faceted issue for the nephrologist’, *Journal of Nephrology*, 34(4), pp. 1127–1135. doi: 10.1007/s40620-020-00941-8.
- Moher, D. *et al.* (2015) ‘Preferred reporting items for systematic review and meta-analysis protocols ( PRISMA-P ) 2015 statement’, pp. 1–9.
- Muniyappa, R. and Gubbi, S. (2020) ‘COVID-19 pandemic, coronaviruses, and diabetes mellitus’, *Am J Physiol Endocrinol Metab*, 318, pp. 736–741. doi: 10.1152/ajpendo.00124.
- Oh, T. K. and Song, I. A. (2021) ‘Metformin use and risk of COVID-19 among patients with type II diabetes mellitus: an NHIS-COVID-19 database cohort study’, *Acta Diabetologica*, (II). doi: 10.1007/s00592-020-01666-7.
- Pal, R. and Bhadada, S. K. (2020) ‘COVID-19 and diabetes mellitus: An unholy interaction of two pandemics’, (January).
- Pérez-Belmonte, L. M. *et al.* (2020) ‘Mortality and other adverse outcomes in patients with type 2 diabetes mellitus admitted for COVID-19 in association with glucose-lowering drugs: a nationwide cohort study’, *SSRN Electronic Journal*, pp. 1–10. doi: 10.2139/ssrn.3666251.
- Perhimpunan Dokter Paru Indonesia (2020) ‘Jurnal Respirologi Indonesia’, 40(2).
- PERKENI (2019) ‘Pedoman Pengelolaan dan Pencegahan Diabetes Melitus Tipe

2 Dewasa di Indonesia 2019', *Perkeni*, 19(4). doi: 10.7748/NM.2020.E1928.

- PERKENI (2020) 'Pernyataan Resmi dan Rekomendasi Penanganan Diabetes Mellitus di era Pandemi COVID-19', *The Indonesian Society of Endocrinology*, pp. 1–5.
- Perreault, L. *et al.* (2012) 'Effect of regression from prediabetes to normal glucose regulation on long-term reduction in diabetes risk: Results from the Diabetes Prevention Program Outcomes Study', *The Lancet*, 379(9833), pp. 2243–2251. doi: 10.1016/S0140-6736(12)60525-X.
- Sapra, A. and Bhandari, P. (2021) 'Diabetes Mellitus', *StatPearls*. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK551501/> (Accessed: 25 July 2021).
- Scheen, A. J. (2020) 'Metformin and COVID-19: From cellular mechanisms to reduced mortality', (January).
- Schwartz, S. S. *et al.* (2016) 'The time is right for a new classification system for diabetes: Rationale and implications of the  $\beta$ -cell-centric classification schema', *Diabetes Care*, 39(2), pp. 179–186. doi: 10.2337/dc15-1585.
- Sharma, S., Ray, A. and Sadasivam, B. (2020) 'Metformin in COVID-19: A possible role beyond diabetes', *Diabetes Research and Clinical Practice*, 164, p. 462020. doi: 10.1016/j.diabres.2020.108183.
- Singh, A. K. and Singh, R. (2020) 'Is metformin ahead in the race as a repurposed host-directed therapy for patients with diabetes and COVID-19?', (January).
- Tamura, R. E. *et al.* (2021) 'Outcome and death risk of diabetes patients with Covid-19 receiving pre-hospital and in-hospital metformin therapies', *Diabetology and Metabolic Syndrome*, 13(1), pp. 1–13. doi: 10.1186/s13098-021-00695-8.
- Unger, R. H. and Orci, L. (2010) 'Paracrinology of islets and the paracrinopathy of diabetes', *Proceedings of the National Academy of Sciences of the United States of America*, 107(37), pp. 16009–16012. doi: 10.1073/pnas.1006639107.
- Wang, J. *et al.* (2020) 'Association of metformin with susceptibility to COVID-19 in people with Type 2 diabetes Jingya', *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, 0813(April), pp. 1–11.
- Wang, Y. W. *et al.* (2017) 'Metformin: A review of its potential indications', *Drug Design, Development and Therapy*, 11, pp. 2421–2429. doi: 10.2147/DDDT.S141675.

- WHO (2016) 'Global Report on Diabetes', *Isbn*, 978, pp. 6–86. Available at: [http://www.who.int/about/licensing/copyright\\_form/index.html](http://www.who.int/about/licensing/copyright_form/index.html)<https://apps.who.int/iris/handle/10665/204871><http://www.who.int/about/licensing/>.
- World Health Organization (2021) 'COVID-19 Weekly Epidemiological Update', (April).
- Young, J. *et al.* (2020) 'Is there an association between metformin use and clinical outcomes in diabetes patients with COVID-19?', (January).
- Zhang, Y. *et al.* (2020) 'Metformin Is Associated with Higher Incidence of Acidosis, but Not Mortality, in Individuals with COVID-19 and Pre-existing Type 2 Diabetes', (January).
- Zhou, F. (2020) 'Clinical Course And Risk Factors For Mortality Of Adult In Patients With COVID-19 In Wuhan, China: A Retrospective Cohort Study', *Journal of Medicine Study & Research*, 3(1), pp. 01–02. doi: 10.24966/msr-5657/100015.