

DAFTAR PUSTAKA

- Ahmed, S. K. (2024). How to choose a sampling technique and determine sample size for research: A simplified guide for researchers. *Oral Oncology Reports*, 12. <https://doi.org/10.1016/j.oor.2024.100662>
- Alcantara, J. C., Alharbi, B., Almotairi, Y., Alam, M. J., Muddathir, A. R. M., & Alshaghдали, K. (2022). Analysis of preanalytical errors in a clinical chemistry laboratory: A 2-year study. *Medicine*, 101(27). <https://doi.org/10.1097/MD.00000000000029853>
- American Society of Hematology. (2021). *Blood basics*. <https://www.hematology.org/education/patients/blood-basics>
- Andrews, N. A., Latrémoлиère, A., Basbaum, A. I., Mogil, J. S., Porreca, F., Rice, A. S. C., Woolf, C. J., et al. (2016). Ensuring transparency and minimization of methodologic bias in preclinical pain research: PPRECISE considerations. *Pain*, 157(4), 901–909. <https://doi.org/10.1097/j.pain.0000000000000458>
- Anwar, E. N., Tresnaningrum, M. E., Parwito, & Arifin, I. (2023). Perbandingan pemeriksaan alanine aminotransferase (ALT) menggunakan sampel serum dan plasma EDTA. *Jurnal Sains Kesehatan*, 30(3), 158–161.
- Arifin, A. C. S. (2018). *Analisis kebutuhan tenaga ahli teknologi laboratorium medik*. Google Cedikia, 4, 1–13.
- Azizah, M. I., Mulyani, R., Hartati, Y. W., & Maksum, I. P. (2024). Review: Mutasi pada DNA mitokondria dan pengaruhnya terhadap diabetes melitus tipe 2 dan kompleks forforilasi oksidatif. *Chimica et Natura Acta*, 12(2), 128–137. <https://doi.org/10.24198/cna.v12.n2.49970>
- American Diabetes Association. (2024). Diagnosis and classification of diabetes: Standards of care in diabetes—2024. *Diabetes Care*, 47, S20–S42. <https://doi.org/10.2337/dc24-S002>
- Dikko, M. U., Hussaini, U., Alkali, Z. A., Bandiya, M. A. M., & Abdullahi, M. (2024). The moderating effect of corporate governance in the relationship women owned enterprises: A proposed conceptual framework. *FUDMA Journal of Management Sciences*, 6(2), 167–186.
- Eğilmez, H. İ., & Haspolat, E. (2024). Temperature-dependent parameters in enzyme kinetics: Impacts on enzyme denaturation. *Fundamental Journal of Mathematics and Applications*, 7(4), 226–235. <https://doi.org/10.33401/fujma.1517334>

- Febriani, S., Anggraini, D., Lakapu, E., Hidayati, E., Kerinandhila, N. R. N. M., & Sanjaya, E. H. (2023). Effect of inhibitors on enzyme activity. *Jurnal MIPA dan Pembelajarannya*, 3(5), 223–228. <https://doi.org/10.17977/um067v3i5p223-228>
- Galicia-Garcia, U., Benito-Vicente, A., Jebari, S., Larrea-Sebal, A., Siddiqi, H., Uribe, K. B., Ostolaza, H., & Martín, C. (2020). Pathophysiology of type 2 diabetes mellitus. *International Journal of Molecular Sciences*, 21(17), 1–34. <https://doi.org/10.3390/ijms21176275>
- Garg, R. (2016). Methodology for research I. *Indian Journal of Anaesthesia*, 60(9), 640–645. <https://doi.org/10.4103/0019-5049.190619>
- Ginting, D. O., Angie, E., Natali, O., & Universitas Prima Indonesia. (2024). Gambaran fungsi hati pada pasien diabetes melitus tipe 2 di RSU Royal Prima Medan tahun 2022. *Jurnal Kesehatan Tambusai*, 5(1), 2025–2031.
- Godfrey, W. H., & Kornberg, M. D. (2020). The role of metabolic enzymes in the regulation of inflammation. *Metabolites*, 10(11), 1–22. <https://doi.org/10.3390/metabo10110426>
- Mathew, J., Sankar, P., & Varacallo, M. A. (2023). *Physiology, blood plasma*. StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK531504/>
- Kementerian Kesehatan Republik Indonesia. (2020). *Keputusan Menteri Kesehatan Republik Indonesia Nomor HK.01.07/MENKES/313/2020 tentang standar profesi ahli teknologi laboratorium medik*.
- Kementerian Kesehatan Republik Indonesia. (2020). *Standar pelayanan laboratorium klinik*. Kementerian Kesehatan RI.
- Kementerian Kesehatan Republik Indonesia. (2010). *Pedoman pemeriksaan klinik*.
- Kiseleva, O., Kurbatov, I., Ilgisonis, E., & Poverennaya, E. (2022). Defining blood plasma and serum metabolome by GC-MS. *Metabolites*, 12(1). <https://doi.org/10.3390/metabo12010015>
- Knapp, T. R. (2016). Why is the one-group pretest–posttest design still used? *Clinical Nursing Research*, 25(5), 467–472. <https://doi.org/10.1177/1054773816666280>
- Knezevic, C. E., Das, B., El-Khoury, J. M., Jannetto, P. J., Lacbawan, F., & Winter, W. E. (2022). Rising to the challenge: Shortages in laboratory medicine. *Clinical Chemistry*, 68(12), 1486–1492. <https://doi.org/10.1093/clinchem/hvac179>

- Krleza, J. L., Honovic, L., Tanaskovic, J. V., Podolar, S., Rimac, V., & Jokic, A. (2019). Post-analytical laboratory work: National recommendations from the working group for post-analytics on behalf of the Croatian Society of Medical Biochemistry and Laboratory Medicine. *Biochemia Medica*, 29(2), 228–261. <https://doi.org/10.11613/BM.2019.020502>
- Lestari, A., & Tyas, T. A. W. (2023). Profil pemeriksaan hematologi dan fungsi hati pada lansia dengan sirosis hepatitis. *Muhammadiyah Journal of Geriatric*, 4(1), 65–72. <https://doi.org/10.24853/mujg.4.1.65-72>
- Lin, Y., Spies, N. C., Zohner, K., McCoy, D., Zaydman, M. A., & Farnsworth, C. W. (2025). Pre-analytical phase errors constitute the vast majority of errors in clinical laboratory testing. *Clinical Chemistry and Laboratory Medicine*, 63(9), 1709–1715. <https://doi.org/10.1515/cclm-2025-0190>
- Listyaningrum, A. A. (2019). *Uji kesesuaian kadar kolesterol pada serum lipemik yang diolah dengan flokulan alfasiklodekstrin dan high speed sentrifugasi* (Skripsi).
- Mahé, M., Rios-Fuller, T. J., Karolin, A., & Schneider, R. J. (2023). Genetics of enzymatic dysfunctions in metabolic disorders and cancer. *Frontiers in Oncology*, 13. <https://doi.org/10.3389/fonc.2023.1230934>
- Maulana, M. R., & Kuswarini, S. (2022). Analisis risiko kadar enzim SGOT dan SGPT pada penderita diabetes mellitus tipe 2. *Jurnal Laboratorium Medis*, 4(1), 51–55.
- McIntyre, H. D., Catalano, P., Zhang, C., Desoye, G., Mathiesen, E. R., & Damm, P. (2019). Gestational diabetes mellitus. *Nature Reviews Disease Primers*, 5(1). <https://doi.org/10.1038/s41572-019-0098-8>
- Merrill, A. E., Mainali, S., & Krasowski, M. D. (2022). Data on the frequency and causes of icteric interference in clinical chemistry laboratory tests. *Data in Brief*, 40. <https://doi.org/10.1016/j.dib.2021.107771>
- Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of Cardiac Anaesthesia*, 22(1), 67–72. https://doi.org/10.4103/aca.ACA_157_18
- Najat, D. (2017). Prevalence of pre-analytical errors in clinical chemistry diagnostic labs in Sulaimani city of Iraqi Kurdistan. *PLoS ONE*, 12(1). <https://doi.org/10.1371/journal.pone.0170211>
- Ohkawara, B., Ito, M., & Ohno, K. (2021). Secreted signaling molecules at the neuromuscular junction in physiology and pathology. *International Journal of Molecular Sciences*, 22(5), 1–16. <https://doi.org/10.3390/ijms22052455>

- Parwati, P. A. (2022). Peningkatan pengetahuan petugas ahli teknologi laboratorium medis (ATLM) di Klinik Utama Bunga Emas terkait manajemen laboratorium. *Jurnal Pengabdian Barelang*, 4(2). <https://doi.org/10.33884/jpb.v4i2.5546>
- Patino, C. M., & Ferreira, J. C. (2018). Inclusion and exclusion criteria in research studies: Definitions and why they matter. *Jornal Brasileiro de Pneumologia*, 44(2), 84. <https://doi.org/10.1590/s1806-37562018000000088>
- Perkumpulan Endokrinologi Indonesia. (2021). *Pedoman pengelolaan dan pencegahan diabetes melitus tipe 2 dewasa di Indonesia 2021*.
- Rosati, G., Gherardi, G., Grigoletto, D., Marcolin, G., Cancellara, P., Mammucari, C., Scaramuzza, M., et al. (2018). Lactate dehydrogenase and glutamate pyruvate transaminase biosensing strategies for lactate detection on screen-printed sensors. *Sensing and Bio-Sensing Research*, 21, 54–64. <https://doi.org/10.1016/j.sbsr.2018.10.004>
- Ruhl, C. E., & Everhart, J. E. (2013). Diurnal variation in serum alanine aminotransferase activity in the US population. *Journal of Clinical Gastroenterology*, 47(2), 165–173. <https://doi.org/10.1097/MCG.0b013e31826df40a>
- Saiba, R., & Prastayaswati, B. (2025). Perbedaan kejadian hemolisis antara lama penyimpanan darah whole blood dan packed red cell di UDD PMI Kota Surakarta. *ARRAZI: Scientific Journal of Health*, 3, 343–354.
- Sela, M. D., Sela, B., & Sela, A. (2025). Analisa jenis frekuensi kesalahan tahap pra-analitik pada pemeriksaan hematologi rutin di rumah sakit. *Tropis: Jurnal Riset Teknologi Laboratorium Medis*, 2(2). <https://doi.org/10.37304/tropis.v2i2.19668>
- Sianipar, O. (2019). Quality improvement efforts in pre-analytical phase. *Indonesian Journal of Clinical Pathology and Medical Laboratory*, 26(1), 118–122. <https://doi.org/10.24293/ijcpml.v26i1.1522>
- Silverstein, T. P. (2019). When both K_m and V_{max} are altered, is the enzyme inhibited or activated? *Biochemistry and Molecular Biology Education*, 47(4), 446–449. <https://doi.org/10.1002/bmb.21235>
- Soh, S. X., Loh, T. P., Sethi, S. K., & Ong, L. (2022). Methods to reduce lipemic interference in clinical chemistry tests: A systematic review and recommendations. *Clinical Chemistry and Laboratory Medicine*, 60(2), 152–161. <https://doi.org/10.1515/cclm-2021-0979>

- Syed, F. Z. (2022). Type 1 diabetes mellitus. *Annals of Internal Medicine*, 175(3), ITC34–ITC48. <https://doi.org/10.7326/AITC202203150>
- Tuong, T. T. K., Tran, D. K., Phu, P. Q. T., Hong, T. N. D., Dinh, T. C., & Chu, D. T. (2020). Non-alcoholic fatty liver disease in patients with type 2 diabetes: Evaluation of hepatic fibrosis and steatosis using Fibroscan. *Diagnostics*, 10(3). <https://doi.org/10.3390/diagnostics10030159>
- Washington, I. M., & Van Hoosier, G. (2012). Clinical biochemistry and hematology. In *The laboratory rabbit, guinea pig, hamster, and other rodents*. <https://doi.org/10.1016/B978-0-12-380920-9.00003-1>
- Widiasari, K. R., Wijaya, I. M. K., & Suputra, P. A. (2021). Diabetes melitus tipe 2: Faktor risiko, diagnosis, dan tatalaksana. *Ganesha Medicine*, 1(2), 114–120. <https://doi.org/10.23887/gm.v1i2.40006>
- Yang, Q., Huang, S., Han, R., Lin, B., Liu, Q., Duan, X., Ma, Z., et al. (2022). Effects of the hemolytic index on the test results of a dry chemistry analyzer and a verification of the hemolytic interference threshold. *Annals of Palliative Medicine*, 11(4), 1381–1390. <https://doi.org/10.21037/apm-22-292>
- Zhao, M., Chen, C., Blankenfeldt, W., Pessler, F., & Büssow, K. (2025). Effect of pH and buffer on substrate binding and catalysis by cis-aconitate decarboxylase. *Scientific Reports*, 15(1). <https://doi.org/10.1038/s41598-025-89341-1>