

DAFTAR PUSTAKA

- Aken, B. L., Ayling, S., Barrell, D., Clarke, L., Curwen, V., Fairley, S., Fernandez Banet, J., Billis, K., García Girón, C., Hourlier, T., Howe, K., Kähäri, A., Kokocinski, F., Martin, F. J., Murphy, D. N., Nag, R., Ruffier, M., Schuster, M., Tang, Y. A., ... Searle, S. M. J. (2016). The Ensembl gene annotation system. *Database : The Journal of Biological Databases and Curation*, 2016. <https://doi.org/10.1093/database/baw093>
- Altall, R. M., Qusti, S. Y., Filimban, N., Alhozali, A. M., Alotaibi, N. A., Dallol, A., Chaudhary, A. G., & Bakhshab, S. (2019). SLC22A1 and ATM genes polymorphisms are associated with the risk of type 2 diabetes mellitus in western Saudi Arabia: A case-control study. *Application of Clinical Genetics*, 12, 213–219. <https://doi.org/10.2147/TACG.S229952>
- American Diabetes Association. (2022). *Standards of Care in Diabetes-2023*. <https://diabetesjournals.org/care>
- Auwerx, C., Sadler, M. C., Reymond, A., & Kutalik, Z. (2022). From pharmacogenetics to pharmaco-omics: Milestones and future directions. In *Human Genetics and Genomics Advances* (Vol. 3, Issue 2). Cell Press. <https://doi.org/10.1016/j.xhgg.2022.100100>
- Barbarino, J. M., Whirl-Carrillo, M., Altman, R. B., & Klein, T. E. (2018). PharmGKB: A worldwide resource for pharmacogenomic information. In *Wiley Interdisciplinary Reviews: Systems Biology and Medicine* (Vol. 10, Issue 4). Wiley-Blackwell. <https://doi.org/10.1002/wsbm.1417>
- Betteng, R., Pangemanan, D., Mayulu, N., Fakultas, K. S., Universitas, K., Ratulangi, S., Fakultas, B. F., & Fakultas, B. G. (2014). Analisis Faktor Resiko Penyebab Terjadinya Diabetes Melitus Tipe 2 Pada Wanita Usia Produktif Dipuskesmas Wawonasa. In *Jurnal e-Biomedik (eBM)* (Vol. 2, Issue 2).
- Chen, R., Corona, E., Sikora, M., Dudley, J. T., Morgan, A. A., Moreno-Estrada, A., Nilsen, G. B., Ruau, D., Lincoln, S. E., Bustamante, C. D., & Butte, A. J. (2012). Type 2 diabetes risk alleles demonstrate extreme directional differentiation among human populations, compared to other diseases. *PLoS Genetics*, 8(4). <https://doi.org/10.1371/journal.pgen.1002621>
- Cheng, L., Zhang, D., Zhou, L., Zhao, J., & Chen, B. (2015). Association between SLC30A8 rs13266634 polymorphism and type 2 diabetes risk: A meta-analysis. *Medical Science Monitor*, 21, 2178–2189. <https://doi.org/10.12659/MSM.894052>
- Daly, A. K. (2017). Pharmacogenetics: A general review on progress to date. In *British Medical Bulletin* (Vol. 124, Issue 1, pp. 65–79). Oxford University Press. <https://doi.org/10.1093/bmb/lbx035>
- Dawed, A. Y., Donnelly, L., Tavendale, R., Carr, F., Leese, G., Palmer, C. N. A., Pearson, E. R., & Zhou, K. (2016). CYP2C8 and SLCO1B1 variants and therapeutic

- response to thiazolidinediones in patients with Type 2 diabetes. *Diabetes Care*, 39(11), 1902–1908. <https://doi.org/10.2337/dc15-2464>
- Dawed, A. Y., Zhou, K., van Leeuwen, N., Mahajan, A., Robertson, N., Koivula, R., Elders, P. J. M., Rauh, S. P., Jones, A. G., Holl, R. W., Stingl, J. C., Franks, P. W., McCarthy, M. I., t Hart, L. M., & Pearson, E. R. (2019). Variation in the plasma membrane monoamine transporter (PMAT) (encoded by SLC29A4) and organic cation transporter 1 (OCT1) (encoded by SLC22A1) and gastrointestinal intolerance to metformin in type 2 diabetes: An IMI direct study. *Diabetes Care*, 42(6), 1027–1033. <https://doi.org/10.2337/dc18-2182>
- Di, S., Han, L., An, X., Kong, R., Gao, Z., Yang, Y., Wang, X., Zhang, P., Ding, Q., Wu, H., Wang, H., Zhao, L., & Tong, X. (2021). In silico network pharmacology and in vivo analysis of berberine-related mechanisms against type 2 diabetes mellitus and its complications. *Journal of Ethnopharmacology*, 276. <https://doi.org/10.1016/j.jep.2021.114180>
- Gerek, N. Z., Liu, L., Gerold, K., Biparva, P., Thomas, E. D., & Kumar, S. (2015). Evolutionary diagnosis of non-synonymous variants involved in differential drug response. *BMC Medical Genomics*, 8. <https://doi.org/10.1186/1755-8794-8-S1-S6>
- Gong, Z. C., Huang, Q., Dai, X. P., Lei, G. H., Lu, H. Bin, Yin, J. Y., Xu, X. J., Qu, J., Pei, Q., Dong, M., Zhou, B. T., Shen, J., Zhou, G., Zhou, H. H., & Liu, Z. Q. (2012). NeuroD1 A45T and PAX4 R121W polymorphisms are associated with plasma glucose level of repaglinide monotherapy in Chinese patients with type 2 diabetes. *British Journal of Clinical Pharmacology*, 74(3), 501–509. <https://doi.org/10.1111/j.1365-2125.2012.04202.x>
- Herman, Sunardi, & Stiyo Famuji, T. (2023). Proses Implementasi Bioinformatika Pada Digitalisasi Data Genetika Manusia. *Jurnal SIMETRIS*, 14(1).
- Howe, K. L., Achuthan, P., Allen, J., Allen, J., Alvarez-Jarreta, J., Ridwan Amode, M., Armean, I. M., Azov, A. G., Bennett, R., Bhai, J., Billis, K., Boddu, S., Charkhchi, M., Cummins, C., da Rin Fioretto, L., Davidson, C., Dodiya, K., El Houdaigui, B., Fatima, R., ... Flliceck, P. (2021). Ensembl 2021. *Nucleic Acids Research*, 49(D1), D884–D891. <https://doi.org/10.1093/nar/gkaa942>
- Huang Q, Yin JY, Dai XP, Wu J, Chen X, Deng CS, Yu M, Gong ZC, Zhou HH, Liu ZQ. (2010). Association analysis of SLC30A8 rs13266634 and rs16889462 polymorphisms with type 2 diabetes mellitus and repaglinide response in Chinese patients. *Eur J Clin Pharmacol*. 66: 1207-1215 DOI: 10.1007/s00228-010-0882-6
- Husain, A. A., Rombot, D. V, & Porajow, Z. C. J. G. (2022). Prevalensi diabetes melitus tipe 2 pada masa pandemi COVID-19 di praktik dokter keluarga Kota Manado.
- Idris, H., Hasyim, H., & Utama, F. (2017). Analysis of Diabetes Mellitus Determinants in Indonesia: A Study from the Indonesian Basic Health Research 2013. In *Acta Med Indones-Indones J Intern Med* • (Vol. 49).
- International Diabetes Federation (IDF). (2021). IDF Diabetes Atlas 10th edition. www.diabetesatlas.org

- Irham, L. M., Dania, H., Rita Maliza, Imaniar Noor Faridah, & Dyah Aryani Perwitasari. (2022). Farmakogenetik-Farmakogenomik: Menuju Precision Medicine.
- Jang, E. J., Lee, D. H., Im, S. S., Yee, J., & Gwak, H. S. (2023). Correlation between PPARG Pro12Ala Polymorphism and Therapeutic Responses to Thiazolidinediones in Patients with Type 2 Diabetes: A Meta-Analysis. In *Pharmaceutics* (Vol. 15, Issue 6). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/pharmaceutics15061778>
- Javorský, M., Gotthardová, I., Klimčáková, L., Kvapil, M., Židzik, J., Schroner, Z., Doubravová, P., Gala, I., Dravecká, I. and Tkáč, I. (2016), A missense variant in GLP1R gene is associated with the glycaemic response to treatment with gliptins. *Diabetes Obes Metab*, 18: 941-944.
- Jensterle M, Pirs B, Goricar K, Dolzan V, Janez A. (2015). Genetic variability in GLP-1 receptor is associated with inter-individual differences in weight lowering potential of liraglutide in obese women with PCOS:A pilot study. *Eur J Clin Pharmacol*. 71(7):817–24. <https://doi.org/10.1007/s00228-015-1868-1>
- Katara, P. (2013). Role of bioinformatics and pharmacogenomics in drug discovery and development process. *Network Modeling and Analysis in Health Informatics and Bioinformatics*, 2(4), 225–230. <https://doi.org/10.1007/s13721-013-0039-5>
- Kemenkes. (2020). Keputusan Menteri Kesehatan Republik Indonesia Nomor HK.01.07/MENKES/603/2020 Tentang Pedoman Nasional Pelayanan Kedokteran Tata Laksana Diabetes Melitus Tipe 2 Dewasa. Menteri Kesehatan Republik Indonesia.
- Klen, J., & Dolžan, V. (2022). Glucagon-like Peptide-1 Receptor Agonists in the Management of Type 2 Diabetes Mellitus and Obesity: The Impact of Pharmacological Properties and Genetic Factors. In *International Journal of Molecular Sciences* (Vol. 23, Issue 7). MDPI. <https://doi.org/10.3390/ijms23073451>
- Le, J., Chen, Y., Yang, W., Chen, L., & Ye, J. (2024). Metabolic basis of solute carrier transporters in treatment of type 2 diabetes mellitus. In *Acta Pharmaceutica Sinica B* (Vol. 14, Issue 2, pp. 437–454). Chinese Academy of Medical Sciences. <https://doi.org/10.1016/j.apsb.2023.09.004>
- Lee, S., Lee, K. H., Song, M., & Lee, D. (2011). Building the process-drug-side effect network to discover the relationship between biological Processes and side effects. *BMC Bioinformatics*, 12(S2). <https://doi.org/10.1186/1471-2105-12-s2-s2>
- Lopez, D. (2018). Pharmacogenetics: An Important Part of Drug Development with A Focus on Its Application. *International Journal of Biomedical Investigation*, 1(2), 1–16. <https://doi.org/10.31531/2581-4745.1000111>
- Lorenzo, P. I., Juárez-Vicente, F., Cobo-Vuilleumier, N., García-Domínguez, M., & Gauthier, B. R. (2017). The diabetes-linked transcription factor PAX4: From gene to functional consequences. In *Genes* (Vol. 8, Issue 3). MDPI AG. <https://doi.org/10.3390/genes8030101>
- Mambyia, M., Shang, M., Wang, Y., Li, Q., Liu, S., Yang, L., Zhang, Q., Zhang, K., Liu, M., Nie, F., Zeng, F., & Liu, W. (2019). The Play of Genes and Non-genetic Factors on Type 2 Diabetes. In *Frontiers in Public Health* (Vol. 7). Frontiers Media S.A. <https://doi.org/10.3389/fpubh.2019.00349>

- Newman, V., Moore, B., Sparrow, H., & Perry, E. (2018). The ensembl genome browser: Strategies for accessing eukaryotic genome data. In *Methods in Molecular Biology* (Vol. 1757, pp. 115–139). Humana Press Inc. https://doi.org/10.1007/978-1-4939-7737-6_6
- Overkleef, R., Tommel, J., Evers, A. W. M., Den Dunnen, J. T., Roos, M., Hoefmans, M. J., Schrader, W. E., Swen, J. J., Numans, M. E., & Houwink, E. J. F. (2020). Using personal genomic data within primary care: A bioinformatics approach to pharmacogenomics. *Genes*, 11(12), 1–11. <https://doi.org/10.3390/genes11121443>
- Pei, Q., Huang, Q., Yang, G. P., Zhao, Y. C., Yin, J. Y., Song, M., Zheng, Y., Mo, Z. H., Zhou, H. H., & Liu, Z. Q. (2013). PPAR- γ 2 and PTPRD gene polymorphisms influence type 2 diabetes patients' response to pioglitazone in China. *Acta Pharmacologica Sinica*, 34(2), 255–261. <https://doi.org/10.1038/aps.2012.144>
- Peng, A., Gong, C., Xu, Y., Liang, X., Chen, X., Hong, W., & Yan, J. (2023). Association between organic cation transporter genetic polymorphisms and metformin response and intolerance in T2DM individuals: a systematic review and meta-analysis. *Frontiers in Public Health*, 11. <https://doi.org/10.3389/fpubh.2023.1183879>
- Perkeni. (2021). Pedoman Pengelolaan Dan Pencegahan Diabetes Melitus Tipe 2 Dewasa Di Indonesia-2021 Perkeni I Penerbit Pb. Perkeni.
- Putri, A. dan W. S. (2019). Aplikasi Single Nucleotide Polymorphism (Snp) Dalam Studi Farmakogenomik Untuk Pengembangan Obat. <https://www.researchgate.net/publication/330158923>
- Sarhangi, N., Sharifi, F., Hashemian, L., Hassani Doabsari, M., Heshmatzad, K., Rahbaran, M., Jamaldini, S. H., Aghaei Meybodi, H. R., & Hasanzad, M. (2020). PPARG (Pro12Ala) genetic variant and risk of T2DM: a systematic review and meta-analysis. *Scientific Reports*, 10(1). <https://doi.org/10.1038/s41598-020-69363-7>
- Schärfe, C. P. I., Tremmel, R., Schwab, M., Kohlbacher, O., & Marks, D. S. (2017). Genetic variation in human drug-related genes. *Genome Medicine*, 9(1). <https://doi.org/10.1186/s13073-017-0502-5>
- Shikata, E., Yamamoto, R., Takane, H., Shigemasa, C., Ikeda, T., Otsubo, K., & Ieiri, I. (2007). Human organic cation transporter (OCT1 and OCT2) gene polymorphisms and therapeutic effects of metformin. *Journal of Human Genetics*, 52(2), 117–122. <https://doi.org/10.1007/s10038-006-0087-0>
- Singh, S., Ricardo-Silgado, M. L., Bielinski, S. J., & Acosta, A. (2021). Pharmacogenomics of Medication-Induced Weight Gain and Antiobesity Medications. In *Obesity* (Vol. 29, Issue 2, pp. 265–273). Blackwell Publishing Inc. <https://doi.org/10.1002/oby.23068>
- Singh, S., Usman, K., & Banerjee, M. (2016). Pharmacogenetic studies update in type 2 diabetes mellitus. *World Journal of Diabetes*, 7(15), 302. <https://doi.org/10.4239/wjd.v7.i15.302>

- Thorn, C. F., Klein, T. E., & Altman, R. B. (2013). PharmGKB: The pharmacogenomics knowledge base. *Methods in Molecular Biology*, 1015, 311–320. https://doi.org/10.1007/978-1-62703-435-7_20
- Urgeová A, Javorský M, Klimčáková L. (2020). Genetic variants associated with glycemic response to treatment with dipeptidylpeptidase 4 inhibitors. *Pharmacogenomics*. 21(5):317–323. doi: 10.2217/pgs-2019-0147
- Ward, L. D., & Kellis, M. (2016). HaploReg v4: Systematic mining of putative causal variants, cell types, regulators and target genes for human complex traits and disease. *Nucleic Acids Research*, 44(D1), D877–D881. <https://doi.org/10.1093/nar/gkv1340>
- Whirl-Carrillo, M., Huddart, R., Gong, L., Sangkuhl, K., Thorn, C. F., Whaley, R., & Klein, T. E. (2021). An Evidence-Based Framework for Evaluating Pharmacogenomics Knowledge for Personalized Medicine. *Clinical Pharmacology and Therapeutics*, 110(3), 563–572. <https://doi.org/10.1002/cpt.2350>
- Widiasari, K. R., Made, I., Wijaya, K., & Suputra, P. A. (2021). Diabetes Melitus Tipe 2: Faktor Risiko, Diagnosis, Dan Tatalaksana. *Ganesha Medicina Journal*, 1.
- Zeng Shi-Ying Huang Tao Sun, Z., & Huang, S. (2020). Pharmacogenomic Studies of Current Antidiabetic Agents and Potential New Drug Targets for Precision Medicine of Diabetes DIGITAL FEATURES. *Diabetes Therapy*, 11. <https://doi.org/10.6084/m9>