

References

- Agustin, H., Massi, M.N., Djaharuddin, I., Patellongi, I., Susanto, A.D., Islam, A.A., Hatta, M., Bukhari, A., Tabri, N.A., Santoso, A. and Burhan, E., 2023. Correlation expression Toll-like receptor 4 with multidrugs resistant tuberculosis in diabetes mellitus condition. *Indian Journal of Tuberculosis*, 70(1), pp.59–64.
- Benne, N., Van Duijn, J., Kuiper, J., Jiskoot, W. and Slütter, B., 2016. Orchestrating immune responses: How size, shape and rigidity affect the immunogenicity of particulate vaccines. *Journal of Controlled Release*, 234, pp.124–134. <https://doi.org/10.1016/j.jconrel.2016.05.033>
- Biyikli, O.O., Baysak, A., Ece, G., Oz, A.T., Ozhan, M.H. and Berdeli, A., 2016. Role of Toll-Like Receptors in Tuberculosis Infection. *Jundishapur Journal of Microbiology*, 9(10), p.e20224. <https://doi.org/10.5812/jjm.20224>
- Bui, H.-H., Sidney, J., Dinh, K., Southwood, S., Newman, M.J. and Sette, A., 2006. Predicting population coverage of T-cell epitope-based diagnostics and vaccines. *BMC Bioinformatics*, 7, p.153. <https://doi.org/10.1186/1471-2105-7-153>
- Chen, X., Zaro, J.L. and Shen, W.C., 2013. Fusion protein linkers: property, design and functionality. *Advanced Drug Delivery Reviews*, 65(10), pp.1357–1369.
- Chatzou, M., Magis, C., Chang, J.M., Kemena, C., Bussotti, G., Erb, I. and Notredame, C., 2016. Multiple sequence alignment modeling: methods and applications. *Briefings in Bioinformatics*, 17(6), pp.1009–1023.
- Dos Santos, P.C.P., Messina, N.L., de Oliveira, R.D., da Silva, P.V., Puga, M.A.M., Dalcolmo, M., Dos Santos, G., de Lacerda, M.V.G., Jardim, B.A., e Val, F.F.D.A. and Curtis, N., 2024. Effect of BCG vaccination against *Mycobacterium tuberculosis* infection in adult Brazilian health-care workers: a nested clinical trial. *The Lancet Infectious Diseases*, 24(6), pp.594–601.
- Gasteiger, E., Hoogland, C., Gattiker, A., Duvaud, S., Wilkins, M.R., Appel, R.D. and Bairoch, A., 2005. Protein identification and analysis tools on the ExPASy Server. In: J.M. Walker (ed.), *The Proteomics Protocols Handbook*. Totowa, NJ: Humana Press, pp.571–607. <https://doi.org/10.1385/1-59259-890-0:571>
- Gustiananda, M., Sulisty, B.P., Agustriawan, D. and Andarini, S., 2021. Immunoinformatics analysis of SARS-CoV-2 ORF1ab polyproteins to identify promiscuous and highly conserved T-cell epitopes to formulate vaccine for Indonesia and the world population. *Vaccines*, 9, p.1459. <https://doi.org/10.3390/vaccines9121459>
- Huygen, K., 2014. The immunodominant T-cell epitopes of the mycolyl-transferases of the antigen 85 complex of *M. tuberculosis*. *Frontiers in Immunology*, 5, p.321. <https://doi.org/10.3389/fimmu.2014.00321>
- Iskandar, D., Suwantika, A.A., Pradipta, I.S., Postma, M.J. and van Boven, J.F., 2023. Clinical and economic burden of drug-susceptible tuberculosis in Indonesia: national trends 2017–19. *The Lancet Global Health*, 11(1), pp.e117–e125.
- Kendall, E.A., Azman, A.S., Cobelens, F.G. and Dowdy, D.W. (2017). MDR-TB treatment as prevention: The projected population-level impact of expanded treatment for multidrug-resistant tuberculosis. *PLOS ONE*, [online] 12(3), p.e0172748. doi:<https://doi.org/10.1371/journal.pone.0172748>.
- Liu, G., Carter, B., Bricken, T., Jain, S., Viard, M., Carrington, M. and Gifford, D.K., 2020. Computationally optimized SARS-CoV-2 MHC class I and II vaccine formulations

- predicted to target human haplotype distributions. *Cell Systems*, 11, pp.131–144.e6. <https://doi.org/10.1016/j.cels.2020.06.009>
- Machlaurin, A., Dolk, F.C.K., Setiawan, D., van der Werf, T.S. and Postma, M.J., 2020. Cost-effectiveness analysis of BCG vaccination against tuberculosis in Indonesia: a model-based study. *Vaccines*, 8(4), p.707.
- Negahdaripour, M., Nezafat, N., Eslami, M., Ghoshoon, M.B., Shoolian, E., Najafipour, S., Morowvat, M.H., Dehshahri, A., Erfani, N. and Ghasemi, Y., 2018. Structural vaccinology considerations for in silico designing of a multi-epitope vaccine. *Infection, Genetics and Evolution*, 58, pp.96–109. <https://doi.org/10.1016/j.meegid.2017.12.008>
- Park, J., Kim, H., Kwon, K.W., Choi, H.H., Kang, S.M., Hong, J.J. and Shin, S.J., 2020. Toll-like receptor 4 signaling-mediated responses are critically engaged in optimal host protection against highly virulent *Mycobacterium tuberculosis* K infection. *Virulence*, 11(1), pp.430–445. <https://doi.org/10.1080/21505594.2020.1766401>
- Plans-Rubió, P., 2022. Percentages of Vaccination Coverage Required to Establish Herd Immunity against SARS-CoV-2. *Vaccines* 10, 736. <https://doi.org/10.3390/vaccines10050736>
- Romano, M., Roupie, V., Wang, X.M., Denis, O., Jurion, F., Adnet, P.Y., Laali, R. and Huygen, K., 2006. Immunogenicity and protective efficacy of tuberculosis DNA vaccines combining mycolyl-transferase Ag85A and phosphate transport receptor PstS-3. *Immunology*, 118(3), pp.321–332. <https://doi.org/10.1111/j.1365-2567.2006.02373.x>
- Sethi, G., Varghese, R.P., Lakra, A.K., Nayak, S.S., Krishna, R. and Hwang, J.H., 2024. Immunoinformatics and structural aided approach to develop multi-epitope based subunit vaccine against *Mycobacterium tuberculosis*. *Scientific Reports*, 14, p.15923. <https://doi.org/10.1038/s41598-024-66858-5>
- Shanmuganathan, G., Orujyan, D., Narinyan, W., Poladian, N., Dhama, S., Parthasarathy, A., Ha, A., Tran, D., Velpuri, P., Nguyen, K.H. and Venketaraman, V., 2022. Role of interferons in *Mycobacterium tuberculosis* infection. *Clinics and Practice*, 12(5), pp.788–796. <https://doi.org/10.3390/clinpract12050082>
- Shende, G., Haldankar, H., Barai, R.S., Bharmal, M.H., Shetty, V. and Idicula-Thomas, S., 2017. PBIT: Pipeline builder for identification of drug targets for infectious diseases. *Bioinformatics*, 33(6), pp.929–931. <https://doi.org/10.1093/bioinformatics/btw760>
- Usmani, S.S., Kumar, R., Bhalla, S., Kumar, V. and Raghava, G.P., 2018. In silico tools and databases for designing peptide-based vaccine and drugs. *Advances in protein chemistry and structural biology*, 112, pp.221-263.
- World Health Organization (2024). Tuberculosis resurges as top infectious disease killer. [online] WHO International. Available at: <https://www.who.int/news/item/29-10-2024-tuberculosis-resurges-as-top-infectious-disease-killer>