

## DAFTAR PUSTAKA

- Von Eschen, Kenneth, Royce Morrison, Madeleine Braun, Opokua Ofori-Anyinam, Els De Kock, Priya Pavithran, Marguerite Koutsoukos, et al. 2009. 'The Candidate Tuberculosis Vaccine Mtb72F/AS02A: Tolerability and Immunogenicity in Humans.' *Human vaccines* 5(7): 475–82. doi:10.4161/hv.8570.
- Filliol, Ingrid, Alifiya S. Motiwala, Magali Cavatore, Weihong Qi, Manzour Hernando Hazbón, Miriam Bobadilla del Valle, Janet Fyfe, et al. 2006. 'Global Phylogeny of *Mycobacterium Tuberculosis* Based on Single Nucleotide Polymorphism (SNP) Analysis: Insights into Tuberculosis Evolution, Phylogenetic Accuracy of Other DNA Fingerprinting Systems, and Recommendations for a Minimal Standard SNP Set'. *Journal of Bacteriology* 188(2): 759–72. doi:10.1128/JB.188.2.759-772.2006.
- Fleischmann, R. D., D. Alland, J. A. Eisen, L. Carpenter, O. White, J. Peterson, R. DeBoy, et al. 2002. 'Whole-Genome Comparison of *Mycobacterium Tuberculosis* Clinical and Laboratory Strains'. *Journal of Bacteriology* 184(19): 5479–90. doi:10.1128/JB.184.19.5479-5490.2002.
- García-Bengoa, María, Emil Joseph Vergara, Andy C. Tran, Lorenzo Bossi, Andrea M. Cooper, John E. Pearl, Tufária Mussá, et al. 2023. 'Immunogenicity of PE18, PE31, and PPE26 Proteins from *Mycobacterium Tuberculosis* in Humans and Mice'. *Frontiers in Immunology* 14. doi:10.3389/fimmu.2023.1307429.
- Gómez-González, Paula Josefina, Anna D. Grabowska, Leopold D. Tientcheu, Anthony G. Tsolaki, Martin L. Hibberd, Susana Campino, Jody E. Phelan, and Taane G. Clark. 2023. 'Functional Genetic Variation in Pe/Ppe Genes Contributes to Diversity in *Mycobacterium Tuberculosis* Lineages and Potential Interactions with the Human Host'. *Frontiers in Microbiology* 14. doi:10.3389/fmicb.2023.1244319.
- Hebert, Andrea M., Sarah Talarico, Dong Yang, Riza Durmaz, Carl F. Marrs, Lixin Zhang, Betsy Foxman, and Zhenhua Yang. 2007. 'DNA Polymorphisms in the PepA and PPE18 Genes among Clinical Strains of *Mycobacterium Tuberculosis*: Implications for Vaccine Efficacy'. *Infection and Immunity* 75(12): 5798–5805. doi:10.1128/IAI.00335-07.
- Homolka, Susanne, Stefan Niemann, David G. Russell, and Kyle H. Rohde. 2010. 'Functional Genetic Diversity among *Mycobacterium Tuberculosis* Complex Clinical Isolates: Delineation of Conserved Core and Lineage-Specific during Intracellular Survival'. *PLoS Pathogens* 6(7): 0.1371/journal.ppat.1000988.
- van der Vliet, Anja Ubben, and Stefan Niemann. 2016. 'High Sequence Conservation of the PpE18 Gene of Clinical *Mycobacterium Tuberculosis* Strains and Its Potential Impact on the Effectivity of Vaccine Candidate Mtb72F'. *PLOS ONE* 11(3): e0152200. doi:10.1371/journal.pone.0152200.



- Kapopoulou A, Lew JM, and Cole ST. 2011. 'The MycoBrowser Portal: A Comprehensive and Manually Annotated Resource for Mycobacterial Genomes'. *Tuberculosis (Edinb)*: 8–13.  
<https://mycobrowser.epfl.ch/genes/Rv1196> (October 24, 2024).
- Kemenkes. 2023. *Laporan Program Penanggulangan Tuberkulosis Tahun 2022*.
- Leroux-Roels, Isabel, Sheron Forgas, Fien De Boever, Frédéric Clement, Marie-Ange Demoitie, Pascal Mettens, Philippe Moris, et al. 2013. 'Improved CD4+ T Cell Responses to Mycobacterium Tuberculosis in PPD-Negative Adults by M72/AS01 as Compared to the M72/AS02 and Mtb72F/AS02 Tuberculosis Candidate Vaccine Formulations: A Randomized Trial'. *Vaccine* 31(17): 2196–2206. doi:10.1016/j.vaccine.2012.05.035.
- Lisdawati, Vivi, Nelly Puspendari, Lutfah Rif'ati, Triyani Soekarno, Melatiwati M, Syamsidar K, Lies Ratnasari, Nur Izzatun, and Ida Parwati. 2015. 'Molecular Epidemiology Study of Mycobacterium Tuberculosis and Its Susceptibility to Anti-Tuberculosis Drugs in Indonesia'. *BMC Infectious Diseases* 15(1): 366. doi:10.1186/s12879-015-1101-y.
- Marie-Ange, Demoitie, Donner Marie-Noelle Renelle, and Ouaked Nadia. 2018. 'NOVEL METHODS FOR INDUCING AN IMMUNE RESPONSE'.  
<https://lens.org/065-681-594-521-326>.
- McEvoy, Christopher R. E., Ruben Cloete, Borna Müller, Anita C. Schürch, Paul D. van Helden, Sebastien Gagneux, Robin M. Warren, and Nicolaas C. Gey van Pittius. 2012. 'Comparative Analysis of Mycobacterium Tuberculosis P<sub>pe</sub> and P<sub>pe</sub> Genes Reveals High Sequence Variation and an Apparent Absence of Selective Constraints'. *PLoS ONE* 7(4): e30593. doi:10.1371/journal.pone.0030593.
- Mertaniasih, Ni Made, Didik Handijatno, Agnes Dwi Sis Perwitasari, Desak Nyoman Surya Suameitria Dewi, Much Zaenal Fanani, and Ika Qurrotul Afifah. 2016. 'Sequence Analysis of the Gene Region Encoding ESAT-6, Ag85B, and Ag85C Proteins from Clinical Isolates of Mycobacterium Tuberculosis'. *Procedia Chemistry* 18: 225–30. doi:10.1016/j.proche.2016.01.035.
- Nair, Shiny, Poongothai A. Ramaswamy, Sudip Ghosh, Dhananjay C. Joshi, Niteen Pathak, Imran Siddiqui, Pawan Sharma, et al. 2009. 'The PPE18 of *Mycobacterium Tuberculosis* Interacts with TLR2 and Activates IL-10 Induction in Macrophage'. *The Journal of Immunology* 183(10): 6269–81. doi:10.4049/jimmunol.0901367.
- Qian, Jianing, Run Chen, Honghai Wang, and Xuelian Zhang. 2020. 'Role of the PE/PPE Family in Host–Pathogen Interactions and Prospects for Antivaccine and Diagnostic Tool Design'. *Frontiers in Cellular and Immunology* 10. doi:10.3389/fcimb.2020.594288.
- Kulathinal. 2013. 'Polymorphism'. In *Brenner's Encyclopedia of Microbiology*, 398–99. doi:10.1016/B978-0-12-374984-0.01189-X.
- Sanjana. 2018. 'Polymorphisms'. In *Genetic Diversity and Disease*, 1–12. IntechOpen. doi:10.5772/intechopen.76728.



- Tait, Dereck R., Mark Hatherill, Olivier Van Der Meeren, Ann M. Ginsberg, Elana Van Brakel, Bruno Salaun, Thomas J. Scriba, et al. 2019a. 'Final Analysis of a Trial of M72/AS01 E Vaccine to Prevent Tuberculosis'. *New England Journal of Medicine* 381(25): 2429–39. doi:10.1056/NEJMoa1909953.
- Tait, Dereck R., Mark Hatherill, Olivier Van Der Meeren, Ann M. Ginsberg, Elana Van Brakel, Bruno Salaun, Thomas J. Scriba, et al. 2019b. 'Final Analysis of a Trial of M72/AS01 E Vaccine to Prevent Tuberculosis'. *New England Journal of Medicine* 381(25): 2429–39. doi:10.1056/NEJMoa1909953.
- Trunz, B Bourdin, PEM Fine, and C Dye. 2006. 'Effect of BCG Vaccination on Childhood Tuberculous Meningitis and Miliary Tuberculosis Worldwide: A Meta-Analysis and Assessment of Cost-Effectiveness'. *The Lancet* 367(9517): 1173–80. doi:10.1016/S0140-6736(06)68507-3.
- Woodworth, Joshua S., Helena Strand Clemmensen, Hannah Battey, Karin Dijkman, Thomas Lindenstrøm, Raquel Salvador Laureano, Randy Taplitz, et al. 2021. 'A Mycobacterium Tuberculosis-Specific Subunit Vaccine That Provides Synergistic Immunity upon Co-Administration with Bacillus Calmette-Guérin'. *Nature Communications* 12(1): 6658. doi:10.1038/s41467-021-26934-0.
- World Health Organization. 2024. *Global Tuberculosis Report 2024*. CC BY-NC-SA 3.0 IGO (November 5, 2024).

