

## DAFTAR PUSTAKA

Abbas AK, Lichtman AH. (2012) 'Cellular and molecular immunology'. Philadelphia: Elsevier

Abubakar, I. *et al.* (2018) 'Prognostic value of interferon- $\gamma$  release assays and tuberculin skin test in predicting the development of active tuberculosis (UK PREDICT TB): a prospective cohort study', *The Lancet Infectious Diseases*, 18(10), pp. 1077–1087. doi:10.1016/S1473-3099(18)30355-4.

Afum-Adjei Awuah, A. *et al.* (2014) 'Dynamics of T-cell IFN- $\gamma$  and miR-29a expression during active pulmonary tuberculosis', *International Immunology*, 26(10), pp. 579–582. doi:10.1093/intimm/dxu068.

Agarwal, R.G., Sharma, P. and Nyati, K.K. (2019) 'microRNAs in mycobacterial infection: Modulation of host immune response and apoptotic pathways', *Immune Network*, 19(5), pp. 1–22. doi:10.4110/in.2019.19.e30.

Ahmad, S. (2011) 'Pathogenesis, immunology, and diagnosis of latent mycobacterium tuberculosis infection', *Clinical and Developmental Immunology*, 2011. doi:10.1155/2011/814943.

Amin, Z. and Bahar, A. (2014) 'Tuberkulosis Paru', in *Ilmu Penyakit Dalam*. Jakarta: Pusat Pendidikan Departemen Ilmu Penyakit Dalam. Fakultas Kedokteran Universitas Indonesia, pp. 998–1003.

Ankrah, A.O. *et al.* (2016) 'PET/CT imaging of Mycobacterium tuberculosis infection', *Clinical and Translational Imaging*, 4(2), pp. 131–144. doi:10.1007/s40336-016-0164-0.

Banfield, S. *et al.* (2012) 'Factors associated with the performance of a blood-based interferon- $\gamma$  release assay in diagnosing tuberculosis', *PLoS ONE*, 7(6). doi:10.1371/journal.pone.0038556.

Baratawidjaya, Karnen Garna, Rengganis Iris., 2012. *Imunologi Dasar Edisi ke 10*. Badan Penerbit Fakultas Kedokteran Universitas Indonesia; Jakarta. hal 469-475.

Barcellini, L. *et al.* (2016) 'First evaluation of QuantiFERON-TB gold plus performance in contact screening', *European Respiratory Journal*, 48(5), pp. 1411–1419. doi:10.1183/13993003.00510-2016.

Barry, S.E. *et al.* (2018) 'Identification of a plasma microRNA profile in untreated pulmonary tuberculosis patients that is modulated by anti-mycobacterial therapy', *Journal of Infection*, 77(4), pp. 341–348.

doi:10.1016/j.jinf.2018.03.006.

Behrouzi, A. *et al.* (2019) 'The role of host mirnas on mycobacterium tuberculosis', *ExRNA*, 1(October-November-December), pp. 1–10. doi:10.1186/s41544-019-0040-y. 154

Bezman, N.A. *et al.* (2010) 'Distinct Requirements of MicroRNAs in NK Cell Activation, Survival, and Function', *The Journal of Immunology*, 185(7), pp. 3835–3846. doi:10.4049/jimmunol.1000980.

Blakemore, R. *et al.* (2010) 'Evaluation of the analytical performance of the Xpert MTB/RIF assay', *Journal of Clinical Microbiology*, 48(7), pp. 2495–2501. doi:10.1128/JCM.00128-10.

Brookes, R.H. *et al.* (2003) 'CD8+ T cell-mediated suppression of intracellular Mycobacterium tuberculosis growth in activated human macrophages', *European Journal of Immunology*, 33(12), pp. 3293–3302. doi:10.1002/eji.200324109.

Calin, G.A. and Croce, C.M. (2006) 'MicroRNA-cancer connection: The beginning of a new tale', *Cancer Research*, 66(15), pp. 7390–7394. doi:10.1158/0008-5472.CAN-06-0800.

Capristano, S. and Guio, H. (2020) 'ORIGINAL ARTICLE DIFFERENTIAL EXPRESSION OF CIRCULATING MICRO-RNAs IN PATIENTS', 37(1), pp. 51–56.

Chee, C.B.E. *et al.* (2018) 'Latent tuberculosis infection: Opportunities and challenges', *Respirology*, 23(10), pp. 893–900. doi:10.1111/resp.13346.

Van Crevel, R. *et al.* (2009) 'Infection with mycobacterium tuberculosis Beijing genotype strains is associated with polymorphisms in SLC11A1/NRAMP1 in Indonesian patients with tuberculosis', *Journal of Infectious Diseases*, 200(11), pp. 1671–1674. doi:10.1086/648477.

Crevel, R.R., Ottenhoff, T.H.M. and van der Meer, J.W.M. (2002) 'Innate Immunity to Mycobacterium tuberculosis', *CLINICAL MICROBIOLOGY REVIEWS*, 15(2), pp. 294–309. doi:10.1128/CMR.15.2.294.

Cru, E. and Clayton, J. (1998) 'Identification of Mycobacterium DNA in an Egyptian Pott ' s disease of 5 400 years old', pp. 941–951.

Daniel, T.M. (2006) 'The history of tuberculosis', pp. 1862–1870. doi:10.1016/j.rmed.2006.08.006.

Dheda, K. *et al.* (2010) 'The immunology of tuberculosis: From bench to bedside', *Respirology*, 15(3), pp. 433–450. doi:10.1111/j.1440-1843.2010.01739.x.

Dinas Kesehatan Sulawesi Selatan (2020) *Profil Dinas Kesehatan Provinsi Sulawesi Selatan*. Makassar: Dinas Kesehatan Provinsi Sulawesi Selatan.

Donoghue, H.D. (2014) 'Palaeomicrobiology of Tuberculosis Palaeomicrobiology of Tuberculosis', (January 2008). doi:10.1007/978-3-540-75855-6.

Eisenach, K.D. *et al.* (1993) 'United States Patent (19)', (19).

Flynn, J.O.A.L. and Chan, J. (2001) 'MINIREVIEW Tuberculosis : Latency and Reactivation', 69(7), pp. 4195–4201. doi:10.1128/IAI.69.7.4195.

Fu, Y. *et al.* (2011) 'Circulating microRNAs in patients with active pulmonary tuberculosis', *Journal of Clinical Microbiology*, 49(12), pp. 4246–4251. doi:10.1128/JCM.05459-11.

Harapan, H. *et al.* (2012) 'MicroRNAs: Genomics, Biogenesis, Mechanism, and Function', *Cell*, 7(1), pp. 281–297. doi:10.22219/sm.v7i1.1086.

Hermayanti, D. (2012) 'Respons Imun Dan Pemeriksaan Serologi Pada Tuberkulosis', *Saintika Medika*. doi:10.22219/sm.v7i1.1086.

Hill, P.C. and Ota, M.O.C. (2010) 'Tuberculosis case-contact research in endemic tropical settings: design, conduct, and relevance to other infectious diseases', *The Lancet Infectious Diseases*, 10(10), pp. 723–732. doi:10.1016/S1473-3099(10)70164-X.

Kaihena, M. (2013) 'Propolis Sebagai Immunostimultor Terhadap Infeksi *Micobacterium tuberculosis*', *Prosiding FMIPA Universitas Pattimura 2013*, pp. 71–72.

Kambuno, N.T. *et al.* (2019) 'Uji Tuberkulosis Laten Pada Kontak Serumah Pasien BTA Positif Dengan Metode Mantoux Test', *Jurnal Info Kesehatan*, 17(1), pp. 50–63. doi:10.31965/infokes.vol17.iss1.239.

Kathirvel, M., Saranya, S. and Mahadevan, S. (2020) 'Expression levels of candidate circulating microRNAs in pediatric tuberculosis', *Pathogens and Global Health*, 114(5), pp. 262–270. doi:10.1080/20477724.2020.1761140.

Kementerian Kesehatan Republik Indonesia (2020) *Petunjuk Teknis Penanganan Infeksi Laten Tuberkulosis (ILTb)*. Jakarta.

Kenyorini, Suradi and Surjanto, E. (2006) 'Uji Tuberkulin', *Tuberkulosis Indonesia*, 3(2), pp. 1–5.

Kiazyk, S. and Ball, T.B. (2017) 'Latent tuberculosis infection : An overview', *Can Commun Dis Rep*, 43(3), pp. 62–66.

Kim, J.Y. *et al.* (2018) 'Combined IFN- $\gamma$  and TNF- $\alpha$  release assay for differentiating active tuberculosis from latent tuberculosis infection', *Journal of Infection*, 77(4), pp. 314–320. doi:10.1016/j.jinf.2018.04.011.

Kleinstuber, K. *et al.* (2013) 'Decreased Expression of miR-21, miR-26a, miR-29a, and miR-142-3p in CD4+ T Cells and Peripheral Blood from Tuberculosis Patients', *PLoS ONE*, 8(4), pp. 1–10. doi:10.1371/journal.pone.0061609.

Kresno, S.B. (2010) *Imunologi: Diagnosis dan Prosedur Laboratorium*. Jakarta: Badan Penerbit Fakultas Kedokteran Universitas Indonesia.

Lalvani, A., Berrocal-Almanza, L.C. and Halliday, A. (2019) 'Predicting progression to active tuberculosis: A rate-limiting step on the path to elimination', *PLoS Medicine*, 16(5), pp. 10–12. doi:10.1371/journal.pmed.1002814.

Lalvani, A. and Pareek, M. (2010) 'Interferon gamma release assays: principles and practice', *Enfermedades Infecciosas Y Microbiologia Clinica*, 28(4), pp. 245–252. doi:10.1016/j.eimc.2009.05.012.

Latorre, I. *et al.* (2015) 'A novel whole-blood miRNA signature for a rapid diagnosis of pulmonary tuberculosis', *European Respiratory Journal*, 45(4), pp. 1173–1176. doi:10.1183/09031936.00221514.

Lestari, L.D. (2021) 'Perbedaan Kadar 25-Hydroxyvitamin D Serum Dan Tumor Necrosis Factor Alpha Antara Pasien'.

Lighter, J. *et al.* (2009) 'Latent tuberculosis diagnosis in children by using the quantiFERON-TB gold in-tube test', *Pediatrics*, 123(1), pp. 30–37. doi:10.1542/peds.2007-3618.

Linas, B.P. *et al.* (2011) 'Priorities for screening and treatment of latent tuberculosis infection in the United States', *American Journal of Respiratory and Critical Care Medicine*, 184(5), pp. 590–601. doi:10.1164/rccm.201101-0181OC.

Lu, Y. *et al.* (2019) 'Bioinformatics analysis of microRNA expression between patients with and without latent tuberculosis infections', *Experimental and Therapeutic Medicine*, pp. 3977–3988.

doi:10.3892/etm.2019.7424.

Ma, F. *et al.* (2011) 'The microRNA miR-29 controls innate and adaptive immune responses to intracellular bacterial infection by targeting interferon- $\gamma$ ', *Nature Immunology*, 12(9), pp. 861–869. doi:10.1038/ni.2073.

Mack, U. *et al.* (2009) 'LTBI: Latent tuberculosis infection or lasting immune responses to *M. tuberculosis*? A TBNET consensus statement', *European Respiratory Journal*, 33(5), pp. 956–973. doi:10.1183/09031936.00120908.

Maidin. (2005) 'Harapan dan tantangan aplikasi reaksi rantai polimerase (PCR) multiplex dalam pemberantasan TB paru di Indonesia'. *Suplemen* 26: 19-28

Malla, B. *et al.* (2012) 'First Insights into the Phylogenetic Diversity of *Mycobacterium tuberculosis* in Nepal', 7(12), pp. 1–8. doi:10.1371/journal.pone.0052297.

Martin, U. and Hasibuan, P. (2010) 'Prevalens TB Laten Pada Petugas Kesehatan Di RSUP H. Adam Malik Medan', *Jurnal Respirasi Indonesia*, 30(2), pp. 113–18.

Massi, M.N. (2012) *Pendekatan Molekuler Mikrobiologi dalam Mendeteksi Kuman Tuberkulosis*. Pertama. Dua Satu Press.

Mathema, B. *et al.* (2006) 'Molecular epidemiology of tuberculosis: Current insights', *Clinical Microbiology Reviews*, 19(4), pp. 658–685. doi:10.1128/CMR.00061-05.

Meng, Q.L. *et al.* (2014) 'Identification of latent tuberculosis infection-related microRNAs in human U937 macrophages expressing *Mycobacterium tuberculosis* Hsp16.3', *BMC Microbiology*, 14(1), pp. 1–9. doi:10.1186/1471-2180-14-37.

Menzies, D., Pai, M. and Zwerling, A. (2008) 'Systematic review: T-cell-based assays for the diagnosis of latent tuberculosis infection: an update', *Annals of Internal Medicine*, 149(3), pp. 177–184. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/18593687>.

Mootoo, A. *et al.* (2009) 'TNF- $\alpha$  in tuberculosis: A cytokine with a split personality', *Inflammation and Allergy - Drug Targets*, 8(1), pp. 53–62. doi:10.2174/187152809787582543.

Munoz, L., Stagg, H.R. and Abubakar, I. (2015) 'Diagnosis and Management of Latent Tuberculosis Infection', *Cold Spring Harb Perspect Med*, 26(2), pp. 57–71. doi:10.1016/S0366-0850(32)80021-9.

Ndzi, E.N. *et al.* (2019) 'MicroRNA hsa-miR-29a-3p is a plasma biomarker for the differential diagnosis and monitoring of tuberculosis', *Tuberculosis*, 114(December 2018), pp. 69–76. doi:10.1016/j.tube.2018.12.001.

Nikolova, M. *et al.* (2012) 'Antigen-specific CD4- and CD8-positive signatures in different phases of Mycobacterium tuberculosis infection Antigen-specific CD4- and CD8-positive signatures in different phases of Mycobacterium tuberculosis infection ☆', (March 2018), pp. 4–9. doi:10.1016/j.diagmicrobio.2012.11.023.

Novianti, N., Simarmata, O.S. and Lolong, D.B. (2020) 'Pemanfaatan Tes Cepat Molekuler (Tcm) Genexpert Sebagai Alat Diagnostik Tb Paru Di Rsud Wangaya Kota Denpasar', *Jurnal Ekologi Kesehatan*, 18(3), pp. 135–148. doi:10.22435/jek.v3i18.2399.

Nurjana, M.A. (2015) 'Faktor Risiko Terjadinya Tuberculosis Paru Usia Produktif (15-49 Tahun) di Indonesia', *Media Penelitian dan Pengembangan Kesehatan*, 25(3), pp. 163–170.

O'Brien, J. *et al.* (2018) 'Overview of microRNA biogenesis, mechanisms of actions, and circulation', *Frontiers in Endocrinology*, 9(AUG), pp. 1–12. doi:10.3389/fendo.2018.00402.

Palomino (2007) *Tuberculosis, The Basics of Clinical Bacteriology. From Basic Science to Patient Care Tuberculosis Textbook.com.*

Palomino, J.C. (2005) 'Nonconventional and new methods in the diagnosis of tuberculosis: Feasibility and applicability in the field', *European Respiratory Journal*, 26(2), pp. 339–350. doi:10.1183/09031936.05.00050305.

Pan, D., Pan, M. and Xu, Y.M. (2017) 'Mir-29a expressions in peripheral blood mononuclear cell and cerebrospinal fluid: Diagnostic value in patients with pediatric tuberculous meningitis', *Brain Research Bulletin*, 130, pp. 231–235. doi:10.1016/j.brainresbull.2017.01.013.

Panjaitan, F. M. (2014) 'Faktor Risiko Kejadian Tuberkulosis Laten Pada Anak Kontak Serumah Dengan Penderita Tuberkulosis Dewasa', Fakultas Kedokteran Universitas Sumatera Utara. Medan.

Perhimpunan Dokter Paru Indonesia (2021) *Tuberkulosis Pedoman Diagnosis dan Penatalaksanaan di Indonesia, Perhimpunan Dokter Paru Indonesia.*

Perron, M.P. and Provost, P. (2009) 'Protein components of the microRNA

pathway and human diseases.', *Methods in molecular biology (Clifton, N.J.)*, 487, pp. 369–385. doi:10.1007/978-1-60327-547-7\_18.

Prihantika, S. *et al.* (2019) 'Sekresi IFN- $\gamma$  dan IL-10 Setelah Stimulasi Antigen Fusi ESAT-6-CFP-10 ( EC610 ) pada Penderita TB Aktif dan TB Laten Kasus TB di Provinsi Sumatera Selatan metode pemeriksaan Interferon Gamma Release Assay ( IGRA ) untuk mendiagnosis', *Biomedical Journal of Indonesia*, 5(3), pp. 106–115.

Programs, T.C., Brudney, K. and Dobkin, J.A.Y. (1991) 'Resurgent Tuberculosis in New York City', pp. 745–749.

Putra, I.A.E. *et al.* (2016) 'Modul Penelitian Uji Diagnostik Dan Skrining', *Program Studi Kesehatan Masyarakat Fakultas Kedokteran Universitas Udayana*, p. 36. Available at: [https://simdos.unud.ac.id/uploads/file\\_pendidikan\\_1\\_dir/d204d4a5ad0870a0965416e671a38791.pdf](https://simdos.unud.ac.id/uploads/file_pendidikan_1_dir/d204d4a5ad0870a0965416e671a38791.pdf).

Qi, Y. *et al.* (2012) 'Altered serum microRNAs as biomarkers for the early diagnosis of pulmonary tuberculosis infection', *BMC Infectious Diseases*, 12(1), p. 1. doi:10.1186/1471-2334-12-384.

Qiagen (2016) *QuantiFERON<sup>®</sup> - TB Gold Plus (QFT<sup>®</sup> -Plus) ELISA Package Insert 2*.

Qiagen (2019) 'QuantiFERON<sup>®</sup> -TB Gold Plus (QFT<sup>®</sup> -Plus) Package Insert', Rev 5(622130), pp. 1–72.

Rao, M. *et al.* (2019) 'Latent TB Infection (LTBI) – Mycobacterium tuberculosis pathogenesis and the dynamics of the granuloma battleground', *International Journal of Infectious Diseases*, 80, pp. S58–S61. doi:10.1016/j.ijid.2019.02.035.

van Rensburg, I.C. *et al.* (2018) 'Decreased neutrophil-associated miRNA and increased B-cell associated miRNA expression during tuberculosis', *Gene*, 655, pp. 35–41. doi:10.1016/j.gene.2018.02.052.

Rothschild, B.M. *et al.* (2001) 'Mycobacterium tuberculosis Complex DNA from an Extinct Bison Dated 17 , 000 Years before the Present', (September). doi:10.1086/321886.

Sabir, N. *et al.* (2018) 'miRNAs in tuberculosis: New avenues for diagnosis and host-directed therapy', *Frontiers in Microbiology*, 9(MAR), pp. 1–14. doi:10.3389/fmicb.2018.00602.

Setiawan, H. and Nugraha, J. (2016) 'Analisis Kadar IFN- $\gamma$  dan IL-10 pada

PBMC Penderita Tuberkulosis Aktif, Laten dan Orang Sehat, Setelah di Stimulasi dengan Antigen ESAT-6', *Jurnal Biosains Pascasarjana*, 18(1), p. 50. doi:10.20473/jbp.v18i1.2016.50-63.

Sharbati, J. *et al.* (2011) 'Integrated microrna-mrna-analysis of human monocyte derived macrophages upon mycobacterium avium subsp. hominissuis infection', *PLoS ONE*, 6(5). doi:10.1371/journal.pone.0020258.

Sidhi, D.P. (2010) 'Riwayat Kontak Tuberkulosis Sebagai Faktor Risiko Hasil Uji Tuberkulin Positif', *Universitas Diponegoro* [Preprint]. Available at: [http://eprints.undip.ac.id/28997/1/Dwi\\_Purnomo\\_Sidhi\\_Tesis.pdf](http://eprints.undip.ac.id/28997/1/Dwi_Purnomo_Sidhi_Tesis.pdf).

Singh, Y. *et al.* (2013) 'Mycobacterium tuberculosis controls MicroRNA-99b (miR-99b) expression in infected murine dendritic cells to modulate host immunity', *Journal of Biological Chemistry*, 288(7), pp. 5056–5061. doi:10.1074/jbc.C112.439778.

Sinigaglia, A. *et al.* (2020) 'Tuberculosis-Associated MicroRNAs: From Pathogenesis to Disease Biomarkers', *Cells*, 9(10), pp. 1–23. doi:10.3390/cells9102160.

Spinelli, S. V. *et al.* (2017) 'miR-30c is specifically repressed in patients with active pulmonary tuberculosis', *Tuberculosis*, 105, pp. 73–79. doi:10.1016/j.tube.2017.04.004.

Subagyo, Ahmad. (2013) 'TB Laten Diagnosis', <http://www.klikparu.com/2013/06/tb-laten-diagnosis.html>. Diakses pada hari Rabu, 06 Februari 2019

Takdir, A.K. *et al.* (2018) 'Hubungan Kadar Interferon-Gamma Serum dengan Derajat Kepositifan Sputum Basil Tahan Asam pada Tuberkulosis Paru Kasus Baru', *Jurnal Penyakit Dalam Indonesia*, 5(2), p. 72. doi:10.7454/jpdi.v5i2.173.

Todar, K. (2005) 'Online Textbook of Bacteriology', *Science Magazine*, 429-450.

Trajman, A., Steffen, R.E. and Menzies, D. (2013) 'Interferon-gamma release assays versus tuberculin skin testing for the diagnosis of latent tuberculosis infection: An overview of the evidence', *Pulmonary Medicine*, p. 601737. doi:10.1155/2013/601737.

Turner, J. and Dockrell, H.M. (1996) 'Stimulation of human peripheral blood mononuclear cells with live mycobacterium bovis BCG activates cytolytic CD8+ T cells in vitro', *Immunology*, 339. doi:10.1046/j.1365-2567.1996.512590.x.



Wahyuniati, N. (2018) 'Peran Interferon Gamma Pada Infeksi Mycobacterium Tuberculosis', *Jurnal Kedokteran Syiah Kuala*, 18(2), pp. 115–120. doi:10.24815/jks.v18i2.18005.

Wang, C. *et al.* (2011) 'Comparative mirna expression profiles in individuals with latent and active tuberculosis', *PLoS ONE*, 6(10). doi:10.1371/journal.pone.0025832.

Wang, J.X. *et al.* (2015) 'Diagnostic values of microRNA-31 in peripheral blood mononuclear cells for pediatric pulmonary tuberculosis in Chinese patients', *Genetics and Molecular Research*, 14(4), pp. 17235–17243. doi:10.4238/2015.December.16.23.

Whitworth, H.S. *et al.* (2013) 'IGRAs - The gateway to T cell based TB diagnosis', *Methods* [Preprint]. doi:10.1016/j.ymeth.2012.12.012.

WHO (2009) *Global Tuberculosis Control*.

WHO (2019) *TB Global Report 2019*.

World Health Organization (2017) *Global tuberculosis report 2017*. Geneva:

*World Health Organization; 2017*. Available at: <http://apps.who.int/iris>.

World Health Organization (2022) 'WHO consolidated guidelines on tuberculosis.', *WHO Press*, p. 98.

Wu, L.S. *et al.* (2014) 'Systematic Expression Profiling Analysis Identifies Specific MicroRNA-Gene Interactions that May Differentiate between Active and Latent Tuberculosis Infection', *Hindawi Publishing Corporation BioMed Research International*, 2014.

Wu, L.S.H. *et al.* (2014) 'Systematic Expression Profiling Analysis Identifies Specific MicroRNA-Gene Interactions that May Differentiate between Active and Latent Tuberculosis Infection', *BioMed Research International*, 2014. doi:10.1155/2014/895179.

Wuchty, S. *et al.* (2012) 'Involvement of microRNA families in cancer', *Nucleic Acids Research*, 40(17), pp. 8219–8226. doi:10.1093/nar/gks627.

Xu, Y. *et al.* (2013) 'Tuberculosis-related miRNAs have potential as disease biomarkers', *Journal of Tuberculosis Research*, 01(02), pp. 17–27. doi:10.4236/jtr.2013.12005.

Zellweger, J.P. *et al.* (2020) 'The diagnosis of latent tuberculosis infection (Ltb): Currently available tests, future developments, and perspectives to

eliminate tuberculosis (tb)', *Medicina del Lavoro*, 111(3), pp. 170–183. doi:10.23749/mdl.v111i3.9983.

Zhou, M. *et al.* (2016) 'Circulating microRNAs as biomarkers for the early diagnosis of childhood tuberculosis infection', *Molecular Medicine Reports*, 13(6), pp. 4620–4626. doi:10.3892/mmr.2016.5097.

