

DAFTAR PUSTAKA

1. World Health Organisation. Global Tuberculosis Report 2018. Geneva: World Health Organization; 2018.
2. Dinihari TN, Siagian V. Pedoman Nasional Pengendalian Tuberculosis. Jakarta: Kementerian Kesehatan RI 2014.
3. Lienhardt C, Mnneh K, Bouchier V, Lahai G, Milligan PJM, McAdam KPJW. Factors determining the outcome of treatment of adult smear-positive tuberculosis cases in The Gambia. *INT J TUBERC LUNG DIS* 1998; 2(9):712-718.
4. Singla R, Osman MM, Khan N, Al-Sharif N, Al-Sayegh MO, Shaikh MA. Factor predicting persistent sputum smear positivity among pulmonary tuberculosis patients 2 months after treatment. *INT J TUBERC LUNG DIS* 2003; 7(1):58-64.
5. Amaral EP, Lasunkaia EB, Regina M. Innate immunity: how to sensing of mycobacteria and tissue damage modulates macrophage death. *Microbe and infection* 2015; XX: 1-10.
6. Bafica A, Scanga CA, Serhan C, Machado F, White S, Sher A, Aliberti J. Host control of *Mycobacterium Tuberculosis* regulated by 5 - lipoxygenase-dependent *Lipoxin* production. *J Clin Invest* 2005;115:1601-6.
7. Vilaplana C, Marzo E, Tapia G, Diaz J, Garcia V, Cardona PJ. Ibuprofen Therapy Resulted in Significantly Decreased Tissue Bacillary Loads and Increased Survival in a New Murine Experimental Model of Active Tuberculosis. *JID* 2015; 208: 199-202.
8. Soolingen DV, Hoogenboezem T, Hass PEWD, Hermans PWM, Koedam MA, Teppema KS, Breannan PJ, et al. A Novel Pathogenic Taxon of the *Mycobacterium Tuberculosis* Complex Canetti: Characterization of an Exceptional Isolate from Africa. *INT. J. SYST. BACTERIOL.* 1997; 47(4): 1236-1245.
9. Sharma N, Nautiyal SC, Kaur P, Singh D, Kauskhik R, Singh P, et al. Advent in technologies for molecular diagnosis of tuberculosis. *Adv. Appl. Sci. Res.* 2013;4(#):146-149.
10. Parle A, Singh G. Treatment and advances in tuberculosis research. *International Journal of Pharmaceutical Science and Research* 2017; 2(4): 14-21.

11. Gordon SV and Parish T. Microbe Profile: *Mycobacterium tuberculosis*: Humanity's deadly foe. *Microbiology* 2018; 164:437-439.
12. Dannenberg AM, Tomaszefski JF. Pathogenesis of pulmonary tuberculosis in pulmonary disease and disorders. 2nd ed. New York: Fishman AP (Ed), McGraw-Hill 1988. Vol 3.
13. Weiss G, Scahible UE. Macrophage defense mechanisms against intracellular bacteria. *Immunol Rev* 2015; 264:182.
14. De Jonge MI, Pehau-Amaudet G, Fretz MM. ESAT-6 from *Mycobacterium Tuberculosis* dissociates from its putative chaperone CFP-10 under acidic conditions and exhibits membrane-lysing activity. *J Bacteriol* 2015; 129:1287.
15. Riley LW, Reyn CFV, Baron EL. Immunology of tuberculosis. UpToDate 2017: Ver. 13.0. Topic 8026.
16. Gardam MA, Keystone EC, Menzies R, Manners S, Skamene E, Long, R, Vinh DC. Anti-tumour necrosis factor agents and tuberculosis risk: mechanisms of action and clinical management. *Lancet Infect Dis* 2003; 3:148-55.
17. Hussell T, Bell TJ. Alveolar macrophages: plasticity in a tissue-specific context. *Nat Rev Immunol* 2014;14: 81-93.
18. Danial NN, Korsmeyer SJ. Cell death: critical control points. *Cell* 2004;116:205-19.
19. Chung EY, Kim SJ, Ma XJ. Regulation of cytokine production during phagocytosis of apoptotic cells. *Cell Res* 2006;16:154-61.
20. Riendeau CJ, Kornfeld H. THP-1 Cell Apoptosis in Response to Mycobacterial Infection. *Infection and immunity* 2003;71: 254-259.
21. Li P, Nijhawan D, Budihardjo I, Srinivasula SM, Ahmad M, Alnemri ES, Wang X. Cytochrome c and dATP-Dependent Formation of Apaf-1/Caspase-9 Complex Initiates an Apoptotic Protease Cascade. *Cell* 1997; 91: 479-489.
22. Golstein P, Kroemer G. Cell death by necrosis: towards a molecular definition. *Trends Biochem Sci* 2007; 32:37-43.
23. Chan FK, Shisler J, Bixby JG, Felices M, Zheng L, Appel M, et al. A role for tumor necrosis factor receptor-2 and receptor-interacting protein in programmed necrosis and antiviral responses. *J Biol Chem* 2003; 278:51613-21.

24. Berghe TV, Vanlangenakker N, Parthoens E, Ceckers W, Devos M, Festjens N, et al. Necroptosis, necrosis and secondary necrosis converge on similarcellular disintegration features. *Cell Death Differ* 2010; 17:922-30.
25. Vandenabeele P, Galluzzi L, Berghe TV, Kroemer, G. Molecular mechanisms of necroptosis: an ordered cellular explosion. *Cell Death Differ* 2010;11: 700-714.
26. Srinivasan L, Ahlbrand S, Briken V. Interaction of *Mycobacterium Tuberculosis*with Host Cell Death Pathways. *Cold Spring Harb Perspect Med* 2014;4:a022459.
27. Dietzold J, Gopalakrishnan A, Salgame, P. Duality of lipid mediators in host response against *Mycobacterium tuberculosis*: good cop, bad cop. *F1000Prime* 2015;7; 29.
28. Romano M, Cianci E, Simiele F, Recchiuti A. "*Lipoxins* and aspirin-triggered *Lipoxins* in resolution of inflammation". *European Journal of Pharmacology* 2015: 760; 49–63.
29. Critchley JA., Young F., Orton L., Garner P., 2013. Corticosteroids for prevention of mortality in people with tuberculosis: a systematic review and meta-analysis. *Lancet Infect Dis*; 13:223-37
30. Serhan CN, Hamberg M, Samuelsson B. Trihydroxytetraenes: a novel series of compounds formed from arachidonic acid in human leukocytes. *Biochemical and Biophysical Research Communications* 1984: 118 (3); 943–9.
31. Qu Q, Xuan W, Fan GH. Roles of resolvins in the resolution of acute inflammation. *Cell Biology International* 2015;39 (1): 3–22
32. Serhan CN. *Lipoxins* and aspirin-triggered 15-epi-*Lipoxins* are the firstlipid mediators of endogenous anti-inflammation and resolution. *Prostaglandins Leukot Essent Fatty Acids* 2005;73:163e77.
33. Bonnans C, Gras D, Chavis C, Mainprice B, Vachier I, Godard P, et al. Synthetis and anti-inflammatory effect of *Lipoxins* in human airway epithelial cells. *Biomedicine & Pharmacotherapy* 2007;61; 261-267.
34. Goicoechea M, Nino MDS, Ortiz A, Vinuesa SGD, Quiroga B, Bernis C, et al. Low dose aspirin increase 15-epi-*Lipoxin* A4 levels in diabetic chronic kidney disease patients. *Prostaglandins, Leukotrienes and Essential Fatty Acids* 2017;125;8–13.
35. Kaviarasan Ka, Jithu M, Mulla MA, Sharma T, Sivasankar S, Das UN, Angayarkanni N. Low blood and vitreal BDNF, LXA4 and altered Th1/Th2

- cytokine balance are potential risk factors for diabetic retinopathy. *Metabolism*. 2017;64: 958-966.
36. Wang Z, Cheng Q, Tang K, Sun Y, Zhang K, Zhang Yi. Lipid mediator *Lipoxin A4* inhibits tumor growth by targetting IL-10-producing regulatory B (Breg) cells. *Cancer Letters* 2015;364:118–124.
 37. Das UN. Lipoxins as biomarkers of lupus and other inflammatory conditions. *Das Lipids in Health and Disease* 2011; 10:76.
 38. Menteri Kesehatan Republik Indonesia. Peraturan Menteri Kesehatan Republik Indonesia Nomor 67 Tahun 2016 tentang Penanggulangan Tuberkulosis. Jakarta: 2016.p.63-66.
 39. European Centre for Disease Prevention and Control. Handbook on TB laboratory diagnostic methods for the European Union, Stockholm: ECDC; 2016.p.32.
 40. International Union Against Tuberculosis and Lung Disease. Sputum Examination For Tuberculosis by Direct Microscopy in Low Income Countries. 5th edition. France:2000.p.
 41. Siddiqi K, Lambert ML, Walley J. Clinical diagnosis of smear-negative pulmonary tuberculosis in low-income countries: the current evidence. *The Lancet Infectious Diseases* 2003;3:288.
 42. Bouti K, Aharmim M, Marc K, Soualhi M, Zahraoui R, Benamor J, et al. Factors Influencing Sputum Conversion among Smear-Positive Pulmonary Tuberculosis Patients in Morocco. *ISRN Pulmonology* 2013;p.1-5.
 43. Singla R, Osman MM, Khan N, Al-Sharif N, Al-Sayegh MO, Syaikh MA. Factor predicting persistent sputum smear positivity among pulmonary tuberculosis patients 2 months after treatment. *Inj J Tuberc Lung Dis* 2003;7(1):58-64.
 44. Ratnawati, Wijaya D, Nazaruddin AM, Nurwidya F, Burhan E. Relationship between Hemoglobin A1C Levels and Sputum Conversion Time in Indonesian Patients with New Cases of Pulmonary Tuberculosis. *J Nat Sc Biol Med* 2018;9:217-21.
 45. Corona MEJ, Garcia LG, DeRiemer K, Reyes LF, Del-Valle MB, Arellano BC, et al. Gender differentials of pulmonary tuberculosis transmission and reactivation in an endemic area. *6Thorax*. 2006;61:348–353.
 46. Van Zyl Smit RN, Pai M, Yew WW, Leung CC, Zumla A, Bateman ED, et al. Global lung health: the colliding epidemics of tuberculosis, tobacco

- smoking, HIV and COPD. *Eur Respir J.* 2010;35(1):27-33. <https://doi.org/10.1183/09031936.00072909>.
47. North RJ, Jung YJ. Immunity to tuberculosis. *Ann Rev Immunol.* 2004;22:599-623. <https://doi.org/10.1146/annurev.immunol.22.012703.104635>.
 48. Cosio MG, Saetta M, Agusti A. Immunologic aspects of chronic obstructive pulmonary disease. *N Engl J Med.* 2009;360(23):2445- 54. <https://doi.org/10.1056/NEJMra0804752>.
 49. Snider DE Jr. Tuberculosis and body build. *JAMA.*1987;258:3299.
 50. Casha AR, Scarci M. The link between tuberculosis and body mass index. *J Thorac Dis.* 2017;9(3):E301-E303. doi: 10.21037/jtd.2017.03.47.
 51. Comstock GW, Palmer CE. Long-term results of BCG vaccination in the southern United States. *Am Rev Respir Dis.*1966;93:171-83.
 52. Workneh MH, Bjune GA, Yimer SA. Prevalence and associated factors of tuberculosis and diabetes mellitus comorbidity: A systematic review. *PLoS One.* 2017;12(4):e0175925. <https://doi.org/10.1371/journal.pone.0175925>.
 53. Dooley KE, Chaisson RE. Tuberculosis and diabetes mellitus: convergence of two epidemics. *Lancet Infect Dis.* 2009;9(12):737- 46. [https://doi.org/10.1016/S1473-3099\(09\)70282-8](https://doi.org/10.1016/S1473-3099(09)70282-8).
 54. Restrepo BI. Diabetes and tuberculosis. *Microbiol Spectr.* 2016;4(6):1-19.
 55. Ragonnet R, Trauer JM, Denholm JT, Marais BJ, McBryde ES. High rates of multidrug-resistant and rifampicin-resistant tuberculosis among re-treatment cases: where do they come from?. *BMC Infectious Diseases.*2017.17:36.
 56. Awji EG, Chand H, Bruse S, Smith KR, Colby JK, Mebratu Y, Levy BD, Tesfaigzi. Wood Smoke Enhances Cigarette Smoke–Induced Inflammation by Inducing the Aryl Hydrocarbon Receptor Repressor in Airway Epithelial Cells. *Am J Respir Cell Mol Biol.*2015.52; 377–386.
 57. Pavankumar N, Moideen K, Nancy A, Viswanathan V, Shruthi BS, Shanmugam S, et al. Plasma Eicosanoid Levels in Tuberculosis and Tuberculosis-Diabetes Co-morbidity are Associated with Lung Pathology and Bacterial Burden. *Front. Cell. Infect. Microbiol.*2019. 9;335.
 58. Gundala, NKV. Anti-inflammatory and anti diabetic action of Arachidonic acid and its metabolite Lipoxin A4. *Best popular science story*;52-54.

59. Yu D, Xu Z, Yin X, Zheng F, Lin X, Pan Q, et al. Inverse Relationship between Serum Lipoxin A4 Level and the Risk of Metabolic Syndrome in a Middle-Aged Chinese Population. *PLoS ONE*.2015.10 (11): e0142848. doi:10.1371/journal.pone.0142848.
60. Divangahi, M., Desjardins, D., Nunes-Alves, C., Remold, H.G., and Behar, S.M. Eicosanoid pathways regulate adaptive immunity to *Mycobacterium tuberculosis*. *Nat. Immunol.* 2010. 11; 751-758. doi: 10.1038/ni.1904.
61. Tobin, D.M., Roca, F.J., Oh, S.F., McFarland, R., Vickery, T.W., Ray, J.P., et al. Host genotype -specific therapies can optimize the inflammatory mediator leukotriene b4 restricts mycobacterial infection. *Plos one*.2013. 8; E67828.
62. Howard NC, Khader SA. Immunometabolism during *Mycobacterium Tuberculosis*Infection. *Trends in Microbiology*.2020. 20; 19-38.
63. Chen, M. et al.Lipid mediators in innate immunity against tuberculosis: opposing roles of PGE2 and LXA4 in the induction of macrophage death. *J. Exp. Med.* 2008.205, 2791.