

DAFTAR PUSTAKA

- Amalia H, Tabri F, Vitayani S, Petellongi I. 2017. Hemoglobin and Ferritin Serum Levels on Leprosy Patients before Multi Drug Therapy - World Health Organization (Mdt-Who) Compared with Healthy Control Group. *Int. J. Sci. Basic Appl. Res.* 36(4):74–82
- Anum Q, Darwin E, Linuwih S, Tjong D. 2019. SNP PARK2-e01 (-2599) Polymorphism PARK2 Gene As A Risk Factor Caused Leprosy. *ICOMHER*. 01.doi:10.4108/eai.13-11-2018.2283656.
- Bakija-Konsuo A, Mulić R, Boraska V, Pehlic M, Huffman JE, Hayward C, Marlais M, Zemunik T, Rudan I. 2011. Leprosy epidemics during history increased protective allele frequency of PARK2/PACRG genes in the population of the Mljet Island, Croatia. *Eur. J. Med. Genet.* 54(6):548–552.doi:10.1016/j.ejmg.2011.06.010.
- Bhandari J, Awais M, Robbins B, et al. 2021. *Leprosy*. Treasure Island (FL): StatPearls Publishing LLC.
- Bhat RM, Vaidya TP. 2020. What is New in the Pathogenesis and Management of Erythema Nodosum Leprosum. *Indian Dermatol. Online J.* 4:482–492.doi:10.4103/idoj.IDOJ.
- Brochado MJ, Gatti MF, Zago MA, Roselino AM. Association of the solute carrier family 11 member 1 gene polymorphisms with susceptibility to leprosy in a Brazilian sample. *Mem Inst Oswaldo Cruz.* 2016 Feb;111(2):101-5. doi: 10.1590/0074-02760150326
- Bujawati E, Nildawati, Alam AS. 2016. Gambaran Persepsi Pasien Tentang Penyakit Kusta dan Dukungan Keluarga Pada Pasien Kusta di RS Dr. Tadjuddin Chalid Makassar Tahun 2015. *Al-Sihah Public Heal. Sci. J.* 8(1):29–38.
- Buschman E, Skamene E. 2004. Linkage of leprosy susceptibility to Parkinson's disease genes. *Int. J. Lepr. Other Mycobact. Dis.* 72(2):169–170.doi:10.1489/1544-581X(2004)072<0169:LOLSTP>2.0.CO;2.

- Cambri G, Mira MT. 2018. Genetic susceptibility to leprosy-from classic immune-related candidate genes to hypothesis-free, whole genome approaches. *Front. Immunol.* 9(JUL):1–9.doi:10.3389/fimmu.2018.01674.
- Chopra R, Ali S, Srivastava AK, Aggarwal S, Kumar B, Manvati S, Kalaiarasan P, Jena M, Garg VK, Bhattacharya SN, *et al.* 2013. Mapping of PARK2 and PACRG Overlapping Regulatory Region Reveals LD Structure and Functional Variants in Association with Leprosy in Unrelated Indian Population Groups. *PLoS Genet.* 9(7).doi:10.1371/journal.pgen.1003578.
- Da Costa CA, Duplan E, Rouland L, Checler F. 2019. The transcription factor function of Parkin: Breaking the dogma. *Front. Neurosci.* 13(JAN):1–8.doi:10.3389/fnins.2018.00965.
- Eichelmann K, González SEG. 2013. Leprosy. An Update : Definition, Pathogenesis, Classification, Diagnosis, and Treatment. *Actas Dermosifiliogr.* 104(7):554–563.
- Fava VM, Xu YZ, Lettre G, Thuc N Van, Orlova M, Thai VH, Tao S, Croteau N, Eldeeb MA, MacDougall EJ, *et al.* 2019. Pleiotropic effects for Parkin and LRRK2 in leprosy type-1 reactions and Parkinson's disease. *Proc. Natl. Acad. Sci. U. S. A.* 116(31):15616–15624.doi:10.1073/pnas.1901805116.
- Fransisca C, Zulkarnain I, Ervianti E, Damayanti D, Sari M, Budiono B, Prakoeswa CRS, Alinda MD, Kusumaputra BH, Listiawan MY. 2021. A Retrospective Study: Epidemiology, Onset, and Duration of Erythema Nodosum Leprosum in Surabaya, Indonesia. *Berk. Ilmu Kesehat. Kulit dan Kelamin.* 33(1):8.doi:10.20473/bikk.v33.1.2021.8-12.
- Hastuti R, Kesuma PZ, Utami HP. 2022. Karakteristik paien eritema nodosum leprosum di Rumah Sakit Umum Pusat Rivai Abdullah Tahun 2019. *Syifa' Med.* 12(2):139–145.doi:10.24036/perspektif.v4i4.466.

- Kemenkes RI. 2018. Hapuskan Stigma dan Diskriminasi terhadap Kusta. *InfoDatin Pus. Data dan Inf. Kementrian Kesehat. RI.*:1–11.
- Lastória JC, de Abreu MAMM. 2014. Leprosy: Review of the epidemiological, clinical, and etiopathogenic aspects - Part 1. *An. Bras. Dermatol.* 89(2):205–218.doi:10.1590/abd1806-4841.20142450.
- Legua P. 2018. Leprosy. *Int. J. of Infectious Dis.*:3–398.doi:10.1016/j.ijid.2018.04.3574.
- Li J, Liu H, Liu J, Fu X, Yu Y, Yu G, Chen S, Chu T, Lu N, Bao F, *et al.* 2012. Association study of the single nucleotide polymorphisms of PARK2 and PACRG with leprosy susceptibility in Chinese population. *Eur. J. Hum. Genet.* 20(5):488–489.doi:10.1038/ejhg.2011.190.
- Maymone MBC, Laughter M, Venkatesh S, Dacso MM, Rao PN, Stryjewska BM, Hugh J, Dellavalle RP, Dunnick CA. 2020. Leprosy: Clinical aspects and diagnostic techniques. *J. Am. Acad. Dermatol.* 83(1):1–14.doi:10.1016/j.jaad.2019.12.080.
- Mi Z, Liu H, Zhang F. 2020. Advances in the Immunology and Genetics of Leprosy. *Front. Immunol.* 11(April):1–15.doi:10.3389/fimmu.2020.00567.
- Mira MT, Alcaïs A, Van Thuc N, Thai VH, Huong NT, Ba NN, Verner A, Hudson TJ, Abel L, Schurr E. 2003. Chromosome 6q25 is linked to susceptibility to leprosy in a Vietnamese population. *Nat. Genet.* 33(3):412–415.doi:10.1038/ng1096.
- Moreira AL.,Gilla K, 1998.C omparison of Pentoxifylline,Thalidomide and Prednisone in the Treathment of ENL. *Int J Lepr* 61-4.
- Negera E, Walker SL, Bobosha K, Howe R, Aseffa A, Dockrell HM, Lockwood DN. 2017. T-cell regulation in Erythema Nodosum Leprosum. *PLoS Negl. Trop. Dis.* 11(10):1–23.doi:10.1371/journal.pntd.0006001.
- Nobre ML, Illarramendi X, Dupnik KM, Hacker M de A, Nery JA da C, Jerônimo SMB, Sarno EN. 2017. Multibacillary leprosy by population

- groups in Brazil: Lessons from an observational study. *PLoS Negl. Trop. Dis.* 11(2):1–14.doi:10.1371/journal.pntd.0005364.
- Polycarpou A, Walker SL, Lockwood DNJ. 2017. A systematic review of immunological studies of erythema nodosum leprosum. *Front. Immunol.* 8(MAR).doi:10.3389/fimmu.2017.00233.
- Rêgo JL, de Lima Santana N, Machado PRL, Ribeiro-Alves M, de Toledo-Pinto TG, Castellucci LC, Moraes MO. 2018. Whole blood profiling of leprosy type 1(reversal) reactions highlights prominence of innate immune response genes. *BMC Infect. Dis.* 18(1):1–5.doi:10.1186/s12879-018-3348-6.
- Sawangareetrakul P, Ngiwsara L, Champattanachai V, Chokchaichamnankit D, Saharat K, Ketudat Cairns JR, Srisomsap C, Khwanraj K, Dharmasaroja P, Pulkes T, *et al.* 2021. Aberrant proteins expressed in skin fibroblasts of Parkinson’s disease patients carrying heterozygous variants of glucocerebrosidase and parkin genes. *Biomed. Reports.* 14(4):1–13.doi:10.3892/BR.2021.1412.
- Scollard DM. 2020. Leprosy treatment: Can we replace opinions with research? *PLoS Negl. Trop. Dis.* 14(10):1–3.doi:10.1371/journal.pntd.0008636.
- Scuderi S, La Cognata V, Drago F, Cavallaro S, D’Agata V. 2014. Alternative splicing generates different parkin protein isoforms: Evidences in human, rat, and mouse brain. *Biomed Res. Int.* 2014.doi:10.1155/2014/690796.
- Serra MAADO, Santos CDS, Lima Neto PM, Oliveira KGZ, Oliveira FJF De, Gordon ASDA, Matos DP, Lima RJCP, Bezerra JM, Costa Maia Dias IC, *et al.* 2019. Factors Associated with Multibacillary Leprosy in a Priority Region for Disease Control in Northeastern Brazil: A Retrospective Observational Study. *J. Trop. Med.* 2019.doi:10.1155/2019/5738924.
- Serra S, Chetty R. 2018. Stefano Serra, Runjan Chetty. *J Clin Pathol.* 71:853–858.doi:10.1136/jclinpath-2018-205216.

- Tamara R, Muchtar SV, Amin S, Seweng A, Sjahril R, Adam AM. 2018. Serum Iron, Total Iron Binding Capacity and Transferrin Saturation Levels in Leprosy Patients before Multi Drug Therapy - World Health Organization (MDT-WHO) Compared with Healthy Control Group. *Int. J. Med. Rev. Case Reports*. 2(4):105–108.
- Thungady E, Mas Rusyati LM, Praharsini I. 2020. Kadar serotonin serum yang rendah merupakan factor resiko terjadinya eritema nodosum leprosum. *Medicina (B. Aires)*. 51(1):23–27.doi:10.15562/medicina.v51i1.388.
- Walker SL, Balagon M, Darlong J, Doni SN, Hagge A, Halwai V, John A, Lambert SM, Maghanoy A, Jose A. 2015. ENLIST 1 : An International Multi-centre Cross-sectional Study of the Clinical Features of Erythema Nodosum Leprosum. :1–14.doi:10.1371/journal.pntd.0004065.
- World Health Organization. 2019. Erythema Nodosum Leprosum or Type 2 Reaction. India.

LAMPIRAN

Lampiran 1. Etik Penelitian



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN
KOMITE ETIK PENELITIAN UNIVERSITAS HASANUDDIN
RSPTN UNIVERSITAS HASANUDDIN
RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR
Sekretariat : Lantai 2 Gedung Laboratorium Terpadu
JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245.
Contact Person: dr. Agussalim Bukhari.,MMed,PhD, SpGK TELP. 081241850858, 0411 5780103, Fax : 0411-581431



REKOMENDASI PERSETUJUAN ETIK

Nomor : 528/UN4.6.4.5.31/ PP36/ 2022

Tanggal: 19 September 2022

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH22090499		No Sponsor Protokol	
Peneliti Utama	dr. Safruddin Amin, Sp.KK(K), FINSDV, FAADV		Sponsor	
Judul Peneliti	Analisis kadar serum NRAMP, PARK-2 dan VDR pada pasien ENL, MB Tanpa ENL dan Orang Sehat			
No Versi Protokol	1		Tanggal Versi	2 September 2022
No Versi PSP			Tanggal Versi	
Tempat Penelitian	Laboratorium Imunologi dan Biologi Molekuler Fakultas Kedokteran Universitas Hasanuddin Makassar			
Jenis Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard Tanggal		Masa Berlaku 19 September 2022 sampai 19 September 2023	Frekuensi review lanjutan
Ketua KEP Universitas Hasanuddin	Nama Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)		Tanda tangan	
Sekretaris KEP Universitas Hasanuddin	Nama dr. Agussalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)		Tanda tangan	

Kewajiban Peneliti Utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 jam dan dilengkapi dalam 7 hari dan Lapo SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
- Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
- Menyerahkan laporan akhir setelah Penelitian berakhir
- Melaporkan penyimpangan dari prokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan

Lampiran 2. Dokumentasi Penelitian

