

## DAFTAR PUSTAKA

- Aiba, S. *et al.* ‘Alteration in the production of IL-10 and IL-12 and aberrant expression of CD23, CD83 and CD86 by monocytes or monocyte-derived dendritic cells from atopic dermatitis patients’, *Experimental Dermatology*, 12(1). 2003
- Bin, L. and Leung, D. Y. M. ‘Genetic and epigenetic studies of atopic dermatitis’, *Allergy, Asthma and Clinical Immunology*. BioMed Central, 12(1)2016
- Choi, E.-J., Ryu, Y. B., Tang, Y., Kim, B. R., Lee, W. S., Debnath, T., Fan, M., Kim, E.-K. and Lee, H.-S.(2019) ‘Effect of cinnamamides on atopic dermatitis through regulation of IL-4 in CD4+ cells’, *Journal of Enzyme Inhibition and Medicinal Chemistry*. 34(1), pp. 613–619. doi: 10.1080/14756366.2019
- Cooper PJ, Barreto ML, Rodrigues LC. Human allergy and geohelminth infections: a review of the literature and a proposed conceptual model to guide the investigation of possible causal associations. *British Medical Bulletin*; 79 and 80: 203–218. 2006
- Croft AM, Bager P, Sushil K. Helminth therapy (worms) for allergic rhinitis. *Cochrane Databasesysrev*.2012 Apr 18;(4):CD009238. doi: 10.1002/1465
- Dharmawati, I., Mahadewa, T. and Widhyadharma, I. P. ‘Antibacterial Activity of Lumbricus Rubellus Earthworm Extract Against Porphyromonas Gingivalis as the Bacterial Cause of Periodontitis’, *Macedonian Journal of Medical Sciences*, 7. doi: 10.3889/oamjms.2019.
- Deleanu, D. and Nedea, I. ‘Biological therapies for atopic dermatitis: An update (Review)’, *Experimental and Therapeutic Medicine*. Spandidos Publications, 17(2), pp. 1061–1067. doi: 10.3892/etm.2018.
- Deng, Z *et al.* 2018. The effect of earthworm extract on promoting skin wound healing. *Bioscience Reports* (2018)
- Dewi, N. W. S., Mahendra, A. N., Putra, G. W. K., Jawi, I. M., Sukrama, D. M. and Kartini, N. L. ‘Ethanolic extract of the powder of red earthworm (Lumbricus rubellus) obtained from several organic farmlands in Bali, Indonesia: Analysis of total phenolic content and antioxidant capacity’, *Bali Medical Journal*, 6(3), p. 80. doi: 10.15562/bmj.v6i3.730.2017
- Dor-Wojnarowska, A., Liebhart, J., Miecielica, J., Rabski, M., Fal, A., Samoliński, B. and Nittner-Marszalska, M. ‘The Impact of Sex and Age on the Prevalence of Clinically Relevant Sensitization and Asymptomatic Sensitization in the General Population’, *Archivum Immunologiae et Therapiae Experimentalis*, 65(3), pp. 253–261. doi: 10.1007/s00005-016-0425-7.2017
- Irawan, Y., Rihatmadja, R., Legiawati, L., Yusharyahya, S. N. and Sularsito, S. A. ‘Atopic dermatitis in the elderly’, *Journal of General-Procedural Dermatology and Venereology Indonesia*, pp. 54–61. doi: 10.19100/jdvi.v1i2.32.2016
- Kanwar AJ. (2016). Adult-onset Atopic Dermatitis. *Indian J Dermatol* ; 61(6): 662–663.
- Kapur, S, Wade W, Stuart C. Atopic Dermatitis. Allergy Asthma Clin Immunol 2018, 14(Suppl 2):52. 43-53. 2018
- Katayama, I, Aihara, M, Ohya, Y, Saeki, H, Shimojo, N, Shoji, S, Yamada, H. Japanese guidelines for atopic dermatitis 2017. *Allergology International*.2017
- Kay, A. B.‘Allergy and allergic diseases. First of two parts’, *The New England journal of medicine*, 344(1).2011
- Kelompok Studi Dermatologi Anak Indonesia. Panduan Diagnosis dan Tata Laksana Dermatitis Atopik di Indonesia. Jakarta : Centra Communications. 2014

- Kim, J, Kim, B. E, & Leung, D. Y. M.. Pathophysiology of atopic dermatitis: Clinical implications. *Allergy and Asthma Proceedings*. 2019
- Klonowska, J, Gleń, J, Nowicki, R. J., & Trzeciak, M. New cytokines in the pathogenesis of atopic dermatitis—New therapeutic targets. *International Journal of Molecular Sciences*. 2018
- Khan AR, Fallon PG. Helminth therapies: Translating the unknown unknowns to known knowns. *International Journal for Parasitology*; 7; 3497. 2013
- Kusumawati, D., Rosita, C. and Prakoeswa, S. ‘Profil Kadar Interleukin-31 Serum pada Pasien Dermatitis Atopik ( Profile of Serum Interleukin-31 Levels in Atopic Dermatitis )’, *periodical of dermatology and veneeology*, 29(2), pp. 142–50.2017
- Le Lamer, M. et al. ‘Defects of corneocyte structural proteins and epidermal barrier in atopic dermatitis’, *Biological Chemistry*, 396(11). 2015
- Loukas, A., Hotez, P. J., Diemert, D., Yazdanbakhsh, M., McCarthy, J. S., Correa-Oliveira, R., Croese, J. and Bethony, J. M. ‘Hookworm infection’, *Nature Reviews. Disease Primers*, 2, p. 2016 .16088. doi: 10.1038/nrdp.2016.88.
- McPherson, T. Current understanding in pathogenesis of atopic dermatitis. *Indian Journal of Dermatology*. 2016
- Nowicki R, Trzeciak M, Wilkowska A, Sokolowska-Wojdyłł M, Ługowska-Umer H, et al. Atopic dermatitis: current treatment guidelines. Statement of the experts of the Dermatological Section, Polish Society of Allergology, and the Allergology Section, Polish Society of Dermatology’, *Postepy Dermatol Alergol*, 32(4): 239–249.2015
- Oyoshi, M. K. et al. *Chapter 3 Cellular and Molecular Mechanisms in Atopic Dermatitis*. 1st edn, *Advances in Immunology*. 1st edn. Elsevier Inc. 2776(09)01203-6.2009
- Parwanto, MLE et al. Fractionation and Characterization of Proteins in *Lumbricus rubellus* Powders. *International Journal of Pharmaceutical and Clinical Research* 2016; 8(1): 15-21
- Paul, W. E. History of interleukin-4. *Cytokine*. 2015
- Permana, S., Hadi, R., Norahmawati, E. and Endharti, A. ‘Coelomic fluid of *Lumbricus rubellus* enhances anti-proliferative effect of 5-fluorouracil by modulating focal adhesion kinase express and IL-1 $\beta$  of colorectal cancer in mice, *Journal of Applied Pharmaceutical Science*, 9, pp. 41–046. doi: 10.7324/JAPS.2019.
- Rambu, S. J. T. Hubungan kadar imunoglobulin-e spesifik dengan hasil uji tusuk kulit penderita dermatitis atopik anak. Hasanuddin University.2011
- Samatra DPGP, Mahadewa Tjokorda GB, Sukrama DM, et al. Extract of earthworms (*Lumbricus rubellus*) reduced malondialdehyde and 8-hydroxy-deoxyguanosine level in male wistar rats infected by salmonella typhi. *Biomed Pharmacol J*. 2017.
- Sayaseng KY, and Vernon P. ‘Pathophysiology and Management of Mild to Moderate Pediatric Atopic Dermatitis.’ *Journal of Pediatric Health Care*, 32 (2). 2018
- Shang, H., Cao, X. L., Wan, Y. J., Meng, J., & Guo, L. H. IL-4 Gene Polymorphism May Contribute to an Increased Risk of Atopic Dermatitis in Children. *Disease Markers*.2016
- Souza, VMO. Et al. Extracts of *Ascaris suum* egg and adult worm share similar immunosuppressive properties. *Brazilian Journal of Medical and Biological Research* (2012) 35: 81-89
- Thijs, J, Krastev, T, Weidinger, S, Buckens, C. F., De Bruin-Weller, M., Bruijnzeel-Koomen, C. Hijnen, D. Biomarkers for atopic dermatitis: A systematic review and meta-analysis. *Current Opinion in Allergy and Clinical Immunology*. 2015

- Thomsen. Atopic Dermatitis: Natural History, Diagnosis, and Treatment. Hindawi Publishing Corporation. 2014 : 1-7.
- Trisina, J., Sunardi, F., Suhartono, M. T. and Tjandrawinata, R. R A Protein Extract from *Lumbricus rubellus*, Possesses Antithrombotic and Thrombolytic Activities', *Journal of Biomedicine and Biotechnology*, 2011.
- Vakharia, P. P. & Silverberg, J. I. Monoclonal Antibodies for Atopic Dermatitis: Progress and Potential. *BioDrugs*. 2017
- Weidinger, S.& Novak, N. Atopic dermatitis revisited. *Allergy: European Journal of Allergy and Clinical Immunology*. 2014
- Werfel, T., Heratizadeh, A., Aberer, W. Ahrens, F. Augustin, M. Biedermann, T. Worm, M. S2k guideline on diagnosis and treatment of atopic dermatitis - Short version. *JDDG - Journal of the German Society of Dermatology*. 2016
- Widuri, A, Tri WK. Pemanfaatan Cacing Merah (*Lumbricus Rubellus*) Sebagai Terapi Rinitis Alergi Dan Respon Peradangan Dengan Menginduksi Produksi Makrofag IL-10 dan TGF- $\beta$ . Universitas Muhammadiyah Yogyakarta.2015
- Widuri A & Suryani L. Pengaruh Suplementasi Probiotik *Lactobacillus casei* L shirota strain terhadap Kadar Ig E Penderita Rhinitis Alergi. *Otolaryngology Indonesiana (ORLI)*; vol I. N0. 1. 2011
- Yamamoto-Hanada, K, Kobayashi, T, Williams, H. C, Mikami, M., Saito-Abe, M., Morita, K, Ohya, Y. Early aggressive intervention for infantile atopic dermatitis to prevent development of food %allergy: a multicenter, investigator-blinded, randomized, parallel group controlled trial (PACI Study)—protocol for a randomized controlled trial. *Clinical and Translational Allergy*. 2018
- Yang, Y, Wang, Q, Song, X, Jiang, W, Tang, S, Shen, F, & Xie, S. Association between IL-4, IL-6, IL-18 polymorphisms and atopic dermatitis risk: A meta-analysis. *International Journal of Clinical and Experimental Medicine*.2017

## LAMPIRAN

### Lampiran 1. Persetujuan Etik



## Lampiran 2.

ELISA (Enzyme-Linked Immunosorbent Assay) kits (IL- 4)

