

DAFTAR PUSTAKA

- Abramovits, W. (2005). Atopic dermatitis. *J Am Acad Dermatol*, 53:86-93. <https://doi.org/10.1016/j.jaad.2005.04.034>
- Aleksic, M., & Meng, X. (2024). Protein haptentation and its role in allergy. *Chemical Research in Toxicology*, 37(6), 850-872. <https://doi.org/10.1021/acs.chemrestox.4c00062>
- Alizadeh, A., Sadr, S., Azizzadeh, M., & Khoshnegah, J. (2024). Feline dermatoses at Ferdowsi University of Mashhad (Iran): 154 cases (2009–2020). *Veterinary Dermatology*, 35(4), 450-452. <https://doi.org/10.1111/vde.13244>
- Andarini, M. Y., Suwarsa, O., & Gunawan, H. (2020). Kadar Interleukin (IL) 17 dan Tumor Necrosis Factor- α (TNF- α) Serum Pasien DA Fase Akut Dibanding dengan Fase Kronik. *Jurnal Integrasi Kesehatan & Sains*, 2(1), 57-61. <https://ejournal.unisba.ac.id/index.php/jiks>
- Ariantini, N.S., Tukan, T.T., Gunawan, A.P., Dwiranti, F., Padang, E., Rosalina, Risdianti, H., Purwanto, C.R., Mardiyansih, E., Muslikh, F.A., Nurani, R.D., Muhalla, H.I., Firmansyah, Y., Nurjanah, U., Khoirot R.M., Firstania, A., & Revani, H. D. (2025). *Buku Ajar Ilmu Biomedik Dasar*. PT. Sonpedia Publishing Indonesia.
- Azmi, N. I., Widiyana, A. P., & Purnomo, Y. (2022). Pengaruh jenis basis krim terhadap pelepasan senyawa aktif antibakteri asam salisilat pada media *Staphylococcus aureus*. *Jurnal Bio Komplementer Medicine*, 9(2). <https://repository.unisma.ac.id/handle/123456789/5595>
- Bieber T. (2008). Atopic dermatitis. *N Eng J Med*, 358:1483-94. <https://doi.org/10.1056/NEJMra074081>
- Brandes, N., Hahn, H., & Uhmman, A. (2025). CD4 Expression Controls Epidermal Stem Cell Balance. *Scientific Reports*, 15(1), 4185. <https://doi.org/10.1038/s41598-025-87915-7>
- Brown, S.J. & McLean, W.H. (2012). One remarkable molecule: filaggrin. *J Invest Dermatol*, 132:751-762. <https://doi.org/10.1038/jid.2011.393>
- Buddhisuharto, A. K., Pramastya, H., Insanu, M., & Fidrianny, I. (2021). An updated review of phytochemical compounds and pharmacology activities of *Artocarpus* genus. *Biointerface Res Appl Chem*, 11(6), 14898-14905. <https://doi.org/10.33263/BRIAC116.1489814905>
- Cahya, C. A. D., & Saragih, P. A. (2025). Anti-Inflammatory Effectiveness Test Of Ethanol Extract Of Ara Sungsang Leaf (*Asystasia gangetica*) On Male

- White Mice (*Mus musculus*) Induced By 1% Carrageenan. *Jurnal Farmasimed (JFM)*, 8(1), 377-383. <https://doi.org/10.35451/brjms302>
- Chairani, L., Saraswati, N. A., Hastuti, R., & Vayari, T. D. (2020). Hubungan Derajat Keparahannya Dermatitis Atopik Pada Bayi Dan Anak Dengan Kualitas Hidup Keluarga. *Syifa' Medika*, 11(1): 41-48. <https://doi.org/10.32502/sm.v11i1.2216>
- Chan, E.W.C., Siu K.W., Joseph T & Hung T. C. (2018). Chemistry and Pharmacology of Artocarpin: An Isoprenyl Flavone from *Artocarpus* Species. *Systematic Reviews in Pharmacy*. 9(1): 58-63. <https://doi.org/10.5530/srp.2018.1.12>
- Charoensit, P., Luangpraditkun, K., Mahasaranon, S., Jongjitwimol, J., Ross, G. M., Ross, S., Viennet, C., Higuchi, Y., & Viyoch, J. (2026). Artocarpin: Multi-Targeted Mechanisms Against UV-Induced Skin Aging and Its Skin Penetration Enhancement Strategies. *Cosmetics*, 13(2), 61. <https://doi.org/10.3390/cosmetics13020061>
- Chieosilapatham, P., Kiatsurayanon, C., Umehara, Y., Trujillo-Paez, J.V., Peng, G., Yue, H., Nguyen, L.T.H., & Niyonsaba, F. (2021). Keratinocytes: innate immune cells in atopic dermatitis. *Clinical & experimental immunology*, 204(3), 296-309. <https://doi.org/10.1111/cei.13575>
- Chiricozzi, A., Maurelli, M., Peris, K., & Girolomoni. (2020). Targeting IL-4 for the Treatment of Atopic Dermatitis. *Immunotargets Ther*, 29(9): 151-156. <https://doi.org/10.2147/itt.s260370>
- Čižmarová, B., Hubková, B., Tomečková, V., & Birková, A. (2023). Flavonoids as promising natural compounds in the prevention and treatment of selected skin diseases. *International Journal of Molecular Sciences*, 24(7), 6324. <https://doi.org/10.3390/ijms24076324>
- Couceiro GA, Ribeiro SMM, Monteiro MM, Meneses AMC, Sousa SKS, Coutinho LN. (2021). Prevalence of canine atopic dermatitis at the Veterinary Hospital of the “Universidade Federal Rural da Amazônia” in Belém/Pará, Brazil . *Pesquisa Veterinária Brasileira*, 41, e06778, 2021. <https://doi.org/10.1590/1678-5150-PVB-6778>
- Dong, S., Li, D., & Shi, D. (2024). Skin barrier-inflammatory pathway is a driver of the psoriasis-atopic dermatitis transition. *Frontiers in Medicine*, 11, 1335551. <https://doi.org/10.3389/fmed.2024.1335551>
- Earlia, N., Lestari, W., & Prakoeswa, C. R. (2022). *Dermatitis Atopik*. Syiah Kuala University Press.
- Egawa, G. & Kabashima, K. (2016). Multifactorial skin barrier deficiency and atopic dermatitis: essential topics to prevent the atopic march. *J Allergy Clin Immunol*, 138:350-358. <https://doi.org/10.1016/j.jaci.2016.06.002>

- Fania, L., Moretta, G., Antonelli, F., Scala, E., Abeni, D., Albanesi, C., & Madonna, S. (2022). Multiple Roles for Cytokines in Atopic Dermatitis: From Pathogenic Mediators to Endotype-Specific Biomarkers to Therapeutic Targets. *International Journal of Molecular Sciences*, 23(5). <https://doi.org/10.3390/ijms23052684>
- Federer W. 1963. *Experimental Design, Theory and Application*. Mac Millan. New York.
- Gadani, S. P., Cronk, J. C., Norris, G. T., & Kipnis, J. (2012). IL-4 in the brain: a cytokine to remember. *The journal of immunology*, 189(9), 4213-4219. <https://doi.org/10.4049/jimmunol.1202246>
- Haryanto, Ariawan, M.W., Utami, Y.P., Duppa, M.T., Ghozaly, M.R., Paerah, I.A.P., Husain, F., Junita, N., Salman, Puspitasari, A., Halimatushadyah, E., Rahmadani, & Subehan. (2024). *Fitokimia dan Farmakognosi*. CV Eureka Media Aksara.
- Hidaka, T. · Ogawa, E. · Kobayashi, E.H. Suzuki, T., Funayama, R., Nagashima, T., Fujimura, T., Aiba, S., Nakayama, K., Okuyama, & Yamamoto, M. (2017). The aryl hydrocarbon receptor AhR links atopic dermatitis and air pollution via induction of the neurotrophic factor artemin. *Nature Immunology*, 18(1): 64–73. <https://doi.org/10.1038/ni.3614>
- Huang, B., Zhu, J., & Chai, X. (2025). Case-Control Study: Evaluating the Role and Therapeutic Potential of FSTL1 in Type 2 Inflammation of Chronic Rhinosinusitis. *Journal of Inflammation Research*, 2545-2556. <https://doi.org/10.2147/JIR.S507059>
- International League of Dermatological Societies (ILDS). (2022). *Global Atopic Dermatitis Atlas 2022 Report*. London: Willan House.
- Istiqomah, I. A., Pambudi, D. B., & Slamet, S. (2021). Evaluasi Granul Ekstrak Daun Nangka (*Artocarpus heterophyllus* L.) dengan Menggunakan Metode Granulasi Basah. In *Prosiding Seminar Nasional Kesehatan* (Vol. 1, pp. 1182-1193). <https://doi.org/https://doi.org/10.48144/prosiding.v1i.810>
- Jabłońska, K., Kmiecik, A., Nowińska, K., Piotrowska, A., Suchański, J., Ratajczak-Wielgomas, K., Partynska, A., Romanowicz, H., Smolarz, B., Matkowski, R., & Dzięgiel, P. (2025). Association of Selected STAT Inhibitors with Prolactin-Induced Protein (PIP) in Breast Cancer. *International Journal of Molecular Sciences*, 26(4), 1416. <https://doi.org/10.3390/ijms26041416>
- Kalsum, U., Nastiti, K., & Melviani, M. (2023). Skrining Fitokimia Dan Penetapan Kadar Flavonoid Total Ekstrak Daun Tunjuk Langit (*Helminthostachys zeylanica*) Pada Tingkat Fraksi. *Sains Medisina*, 1(3), 123-129. <https://doi.org/10.63004/snsmed.v1i3.36>

- Kasim, M. V. N. K., Lee, Y. Z., Bakrin, I. H., Hussain, M. K., Israf, D. A., Shaari, K., Tan J.W., Lee M.T., & Tham, C. L. (2024). Oral And Topical Administration Of A Geranyl Acetophenone Attenuates Dncb-Induced Atopic Dermatitis-Like Skin Lesions In Balb/C Mice. *Scientific Reports*, 14(1), 17623. <https://doi.org/10.1038/s41598-024-66601-0>
- Kementerian Kesehatan Republik Indonesia. (2020). *Farmakope Indonesia Edisi VI*. Jakarta: Kementerian Kesehatan Republik Indonesia.
- Kim, S. W., Roh, J., & Park, C. S. (2016). Immunohistochemistry for pathologists: protocols, pitfalls, and tips. *Journal of pathology and translational medicine*, 50(6), 411-418. <https://doi.org/10.4132/jptm.2016.08.08>
- Kong, H. H., Oh, J., Deming, C., Conlan, S., Grice, E.A., Beatson, M.A., Nomicos, E., Polley, E.C., Komarow, H.D., NISC, C.S.P., Murray, P.R., Turner, M.L., & Segre, J.A. (2012). Temporal Shifts In The Skin Microbiome Associated With Disease Flares And Treatment In Children With Atopic Dermatitis. *Genome Research*, 22(5), 850–859. <https://doi.org/10.1101/gr.131029.111>
- Kumar, A., Mishra, A., & Singh, A. (2022). Phytochemistry, Pharmacological, Medicinal Significance of *Artocarpus Heterophyllus* Lam. (Jackfruit). *International journal of health sciences*, 6(S5), 6578-6590. <https://doi.org/10.53730/ijhs.v6nS5.10134>
- Lazuardi, M. (2020). *Bagian Khusus Ilmu Farmasi Veteriner Ed 1*. Airlangga University Press.
- Lee, S., Jegal, H.; Bong, SK; Yoon, KN; Park, NJ; Shin, MS; Yang, MH; Kim, YK; Kim, SN. (2019). Anti-Atopic Effect of Acorn Shell Extract on Atopic Dermatitis-Like Lesions in Mice and Its Active Phytochemicals. *Biomolecules* , 10 , 57. <https://doi.org/10.3390/biom10010057>
- Lisi, A.K.F., Runtuwene, M.R.J., & Wewengkang, D.S. (2017). Uji Fitokimia Dan Aktivitas Antioksidan Dari Ekstrak Metanol Bunga Soyogik (*Saurauia bracteosa* Dc.). *Farmasi UNSRAT*, 6 (1):53-61. <https://media.neliti.com/media/publications/160401-ID-uji-fitokimia-dan-aktivitas-antioksidan.pdf>
- Luckheeram, R. V., Zhou, R., Verma, A. D., & Xia, B. (2012). CD4+ T cells: differentiation and functions. *Journal of immunology research*, 2012(1), 925135. <https://doi.org/10.1155/2012/925135>.
- Luangpraditkun, K., Tissot, M., Joompang, A., Charoensit, P., Grandmottet, F., Viyoch, J., & Viennet, C. (2021). Prevention by the Natural Artocarpin of Morphological and Biochemical Alterations on UVB-Induced HaCaT Cells. *Oxidative medicine and cellular longevity*, 2021(1), 5067957. <https://doi.org/10.1155/2021/5067957>

- Lupita, S., Nugrahani, S., & Supriyatna, A. (2023). Inventarisasi Jenis Tumbuhan Famili Moraceae di Kawasan Universitas Islam Negeri Sunan Gunung Djati Bandung. *International Journal of Engineering, Economic, Social Politic and Government*, 1(3), 36-43. <http://ijespjournal.org>
- Marsella, R., & De Benedetto, A. (2017). Atopic Dermatitis In Animals And People: An Update And Comparative Review. *Veterinary sciences*, 4(3), 37. <https://doi.org/10.3390/vetsci4030037>
- Meng, X., Qiu, L., Song, H., & Dang, N. (2018). MAPK pathway involved in epidermal terminal differentiation of normal human epidermal keratinocytes. *Open Medicine*, 13(1), 189-195. <https://doi.org/10.3390/cosmetics13020061>
- Miao, F., Luo, C., Chen, J., Shang, C., Zhang, Z., Yang, L., & Zhu, M. (2025). A Review of CD4+ T Cell-mediated Immune Drift and Mechanisms in the Treatment of Immune Inflammatory Skin Diseases with Biological Agents. *Future Integrative Medicine*, 4(2), 128-134. <https://doi.org/10.14218/FIM.2024.00057>
- Min, H. J., Park, C. W., Jeong, J. H., Cho, S. H., Kim, K. R., & Lee, S. H. (2012). Comparative analysis of the expression of involucrin, filaggrin and cytokeratin 4, 10, 16 in cholesteatoma. *Korean Journal of Audiology*, 16(3), 124. <https://doi.org/10.7874/kja.2012.16.3.124>
- Mitachi, K., Ariake, K., Shima, H., Sato, S., Miura, T., Maeda, S., Ishida, M., Mizuma, M., Ohtsuka, H., Kamei, T., Igarashi, K., & Unno, M. (2021). Novel Candidate Factors Predicting The Effect Of S-1 Adjuvant Chemotherapy Of Pancreatic Cancer. *Scientific Reports*, 11(1), 6541. <https://doi.org/10.1038/s41598-021-86099-0>
- Morizane, S., Mukai, T., Sunagawa, K., Tachibana, K., Kawakami, Y., & Ouchida, M. (2023). "Input/Output Cytokines" In Epidermal Keratinocytes And The Involvement In Inflammatory Skin Diseases. *Frontiers in immunology*, 14, 1239598. <https://doi.org/10.3389/fimmu.2023.1239598>
- Murlistyarini, S., & Yuniasih, D. I. (2023). Role Of *Artocarpus Heterophyllus* Jackfruit Leaf In Dermatology: A Literature Review. *Journal of Dermatology, Venereology and Aesthetic*, 4(1), 1-6. <https://jdva.ub.ac.id>
- Murota, H. · Izumi, M. · Abd El-Latif, M.I. Nishioka, M., Terao, M., Tani, M., Matsui, S., Sano, S., Katayama, I. (2012). Artemin Causes Hypersensitivity To Warm Sensation, Mimicking Warmth-Provoked Pruritus In Atopic Dermatitis. *Journal of Allergy and Clinical Immunology*, 130(3), 671–682.e4. <https://doi.org.10.1016/j.jaci.2012.05.027>
- Nakajima, S., Nakamizo, S., Nomura, T., Ishida, Y., Sawada, Y., & Kabashima, K. (2024). Integrating Multi-omics Approaches In Deciphering Atopic Dermatitis Pathogenesis And Future Therapeutic Directions. *Allergy*, 79(9), 2366-2379. <https://doi.org/10.1111/all.16183>

- Nakashima, C. · Otsuka, A. · Kabashima, K. (2018). Interleukin-31 And Interleukin-31 Receptor: New Therapeutic Targets For Atopic Dermatitis. *Exp Dermatol.* 27:327-331. <https://doi.org/10.1111/exd.13533>
- Nomura, T. · Honda, T. · Kabashima, K. Multipolarity Of Cytokine Axes In The Pathogenesis Of Atopic Dermatitis In Terms Of Age, Race, Species, Disease Stage And Biomarkers. *Int Immunol.* 2018; 30:419-428. <https://doi.org/10.1093/intimm/dxy015>
- Oetjen, L.K. · Mack, M.R. · Feng, J., Whelan, T.M., Niu, H., Guo, C.J., Chen, S., Trier, A.M., Xu, A.Z., Tripathi, S.V., Luo, J., Gao, X., Yang, L., Hamilton, S.L., Wang, P.L., Brestoff, J.R., Council, M.L., Brasington, R., Schaffer, A., Brombacher, F., Hsieh, C.S., Gereau, R.W., Miller, M.J., Chen, Z.F., Hu, H., Davidson, S., Liu, Q., & Kim, B.S. (2017). Sensory neurons co-opt classical immune signaling pathways to mediate chronic itch. *Cell*, 171(1), 217–228. <https://doi.org/10.1016/j.cell.2017.08.006>
- Omar, H. S., El-Beshbishy, H. A., Moussa, Z., Taha, K. F., & Singab, A. N. B. (2011). Antioxidant Activity Of *Artocarpus Heterophyllus* Lam.(Jack Fruit) Leaf Extracts: Remarkable Attenuations Of Hyperglycemia And Hyperlipidemia In Streptozotocin-diabetic Rats. *The Scientific World Journal*, 11(1), 788-800. <https://doi.org/10.1100/tsw.2011.71>
- Ottman, N., Barrientos-Somarribas, M., Fyhrquist, N., Alexander, H., Wisgrill, L., Olah, P., Tsoka, S., Greco, D., Schaffer, F.L., Soumelis, V., Schroder, J.M., Kere, J., Nestle, F.O., Barker, J., Ranki, A., Lauerma, A., Homey, B., Andersson, B., & Alenius, H. (2021). Microbial and transcriptional differences elucidate atopic dermatitis heterogeneity across skin sites. *Allergy*, 76(4), 1173-1187. <https://doi.org/10.1111/all.14606>
- Pappa, G., Sgouros, D., Theodoropoulos, K., Kanelleas, A., Bozi, E., Gregoriou, S., Krasagakis, K., & Katoulis, AC (2022). Sumbu Il-4/-13 Dan Penghambatannya Dalam Pengobatan Dermatitis Atopik. *Jurnal Kedokteran Klinis*, 11 (19), 5633. <https://doi.org/10.3390/jcm11195633>
- Pawitri, D., Sulistiawati, E., & Budiarsa, I. N. 2015. Laporan Kasus Dermatitis Atopik pada Monyet Ekor Panjang (*Macaca fascicularis*). *The Indonesian Journal of Primatology*, 12(1): 30-32. <https://portal.issn.org/resource/ISSN/1410-5373>
- Pelu, A. D., Sangkala, H., & Ismail, A. M. (2022). Uji Aktivitas Antibakteri Ekstrak Etanol Daun Nangka (*Artocarpus Heterophyllus* Lam) Terhadap Pertumbuhan Bakteri *Staphylococcus Aureus*. *Jurnal Sains Dan Kesehatan*, 6(1), 46-54. <https://doi.org/10.57214/jusika.v6i1.221>
- Perhimpunan Dokter Spesialis Kulit dan Kelamin Indonesia (PERDOSKI). 2024. *Panduan Diagnosis dan Tata Laksana Dermatitis Atopik Pada Anak dan Dewasa di Indonesia*. Jakarta: Centra Communications.

- Pickard, C., Smith, AM, Cooper, H., Strickland, I., Jackson, J., Healy, E., & Friedmann, PS (2007). Investigation Of Mechanisms Underlying The T-Cell Response To The Hapten 2,4-Dinitrochlorobenzene. *Jurnal dermatologi investigatif*, 127 (3), 630-637. <https://doi.org/10.1038/sj.jid.5700581>
- Prasdiatika, R., Nugroho, P. S. A., & Merdekawati, A. (2025). Flavonoid Total Ekstrak Daun Nangka (*Artocarpus Heterophyllus* Lam.) Dengan Metode Ekstraksi Maserasi. *Merdeka Indonesia Jurnal International*, 5(1), 82-90. <https://doi.org/10.69796/miji.v5i1.331>
- Raimondo, A., & Lembo, S. (2021). Atopic dermatitis: epidemiology and clinical phenotypes. *Dermatology practical & conceptual*, 11(4), e2021146. <https://doi.org/10.5826/dpc.1104a146>
- Rhodes, K. H., & Werner, A. H. (2018). *Blackwell's Five-Minute Veterinary Consult Clinical Companion: Small Animal Dermatology*. John Wiley & Sons.
- Riedl, R., Kühn, A., Hupfer, Y., Hebecker, B., Peltner, L. K., Jordan, P. M., Werz, O., Lorkowski, S., Wiegand, C., & Wallert, M. (2024). Characterization Of Different Inflammatory Skin Conditions In A Mouse Model Of Dncb-Induced Atopic Dermatitis. *Inflammation*, 47(2), 771-788. <https://doi.org/10.1007/s10753-023-01943-x>
- Robinson, T., 1983, *The Organic Constituents of Higher Plants Their Chemistry and Interrelationships*, 5th Ed., 200, Cordus Press., North Amherst.
- Rohmana, V. M., Kalsum, U., Fadhila, M., Ilyas, I. L., & Jafar, G. (2025). *Teori Farmasetika Dasar*. Padang: CV Get Press Indonesia.
- Shiyan, S. (2024). *Senyawa Fitokimia: Karakteristik Senyawa Jalur Shikimat dan Mevalonat dalam Pengembangan Teknologi Fitofarmasetika*. Yogyakarta: Deepublish.
- Sikumbang, I. M., Nurani, L. H., Yuliani, S., & Edityaningrum, C. A. 2022. Pengaruh Spray Ekstrak Daun Sirih Terhadap Histopatologi Penyembuhan Luka The Effect Of Betel Leaf Extract Spray On Histopathology Of Wound Healing. *Jurnal Farmasi Sains dan Praktis (JFSP)*, 8(2): 185-193. <https://doi.org/10.31603/pharmacy.v8i2.6902>
- Simanjuntak, H. A., Singarimbun, N. B., Zega, D. F., Sinaga, S. P., Simanjuntak, H., & Situmorang, T. S. (2022). Kajian Potensi Tumbuhan Nangka (*Artocarpus heterophyllus* Lam.) dalam Pengobatan Penyakit Infeksi. *Herbal Medicine Journal*, 5(1), 1-7. <https://doi.org/10.58996/hmj.v5i1.36>
- Suwiti, N. K., Besung, I. N. K., & Widyastuti, S. K. (2023, December). Dermatitis Pada Anjing dan Gambaran Histologi Kulit. In *Prosiding Seminar Nasional FKH UNUD* (pp. 90-95). <https://doi.org/10.19087/jveteriner.2022.23.4.498>

- Tauber, M., Balica, S., Hsu, C. Y., Decoster, C.J., Lauze, C., Redoules, D., Viodé, C., Schmitt, A.M., Serre, G., Simon, M., & Paul, C.F. (2016). *Staphylococcus Aureus* Density On Lesional And Nonlesional Skin Is Strongly Associated With Disease Severity In Atopic Dermatitis. *Journal of Allergy and Clinical Immunology*, 137(4), 1272–1274.e3. <https://doi.org/10.1016/j.jaci.2015.07.052>
- Theerawatanasirikul, S., Suriyaphol, G., Thanawongnuwech, R., & Sailasuta, A. (2012). Histologic Morphology And Involucrin, Filaggrin, And Keratin Expression In Normal Canine Skin From Dogs Of Different Breeds And Coat Types. *Journal of Veterinary Science*, 13(2), 163-170. <https://doi.org/10.4142/jvs.2012.13.2.163>
- Torreilles SL, Richard HL, Stephen AF, Diane EM. 2009. Tacrolimus Ointment: A Novel And Effective Topical Treatment Of Localized Atopic Dermatitis In A Rhesus Macaque (*Macaca mulatta*). *J Am Assoc Lab Animal Sci*. May; 48(3) hlm:307-311. <https://pubmed.ncbi.nlm.nih.gov/19476723/>
- Torres, T., Mendes-Bastos, P., Cruz, M. J., Duarte, B., Filipe, P., Lopes, M. J., & Gonçalves, M. (2025). Interleukin-4 And Atopic Dermatitis: Why Does It Matter? A Narrative Review. *Dermatology and Therapy*, 15(3), 579-597. <https://doi.org/10.1007/s13555-025-01352-y>
- Totsuka, A., Omori-Miyake, M., Kawashima, M., Yagi, J., & Tsunemi, Y. (2017). Expression Of Keratin 1, Keratin 10, Desmoglein 1 And Desmocollin 1 In The Epidermis: Possible Downregulation by Interleukin-4 And Interleukin-13 In Atopic Dermatitis. *European Journal of Dermatology*, 27(3), 247-253. <https://doi.org/10.1684/ejd.2017.2985>
- Wahyuni, S., Simanjuntak, H. A., Purba, H., & Ginting, J. G. (2024). Penetapan Kadar Flavonoid dan Tanin Ekstrak Etanol Daun Nangka (*Artocarpus Heterophyllus* Lam.) Dengan Spektrofotometri Uv-Vis. *Jurnal Kesehatan Bakti Tunas Husada: Jurnal Ilmu-ilmu Keperawatan, Analisis Kesehatan dan Farmasi*, 24(2), 37-47. <https://doi.org/10.36465/jkbth.v24i2.1405>
- Waldman, S.A., Terzic A., Egan, L.J., Elghozi, J.L., Jahangir, A., Kane, GC., Kraft, W.K., Lewis, L.D., Morrow J.D., Zingman L.V., Abernethy, D.R., Atkinson, A.J., Benowitz, N.L., Brater, D.C., Gray, J., Honig, P.K., Kearns, G.L., Levey, B.A., Spielberg, S.P., Weinshilboum, R., & Woosley, R.L.. (2008). *Pharmacology and therapeutics: Principles to practice*. Saunders Elsevier.
- Wang, S. H., Hu, Y. L., & Liu, T. X. (2019). Plant Distribution And Pharmacological Activity of Flavonoids. *Tradit. Med. Res*, 4, 269-287. <https://doi.org/10.53388/TMR20190824131>
- Wang, H., Remke, M., Horn, T., Schwamborn, K., Chen, Y., Steiger, K., Weichart, W., Wester, H.J., Schottelius, M., Weber, W.A., & Eiber, M. (2023).

Heterogeneity of Prostate-Specific Membrane Antigen (PSMA) and PSMA-Ligand Uptake Detection Combining Autoradiography and Postoperative Pathology in Primary Prostate Cancer. *EJNMMI research*, 13(1), 99. <https://doi.org/10.1186/s13550-023-01044-8>

Wijaya, H., Syamsul, E. S., Octavia, D. R., Mardiana, L., Sentat, T., Rusnaeni, R., Mayefis, D., Helmidanora, R., Mentari, I.A., Hanifa, D.N.C., Kurniawan, K., Soemarie, Y.B., Basir, N., Juliyanti, J., Praditasari, A.L., Sawiji, R.T., Sa'adah, H., Febriani, A., Erlianti, K., Hasniah, H., & Retno, E. K. (2023). *Farmasetika: Dasar-dasar Ilmu Farmasi*. PT. Sonpedia Publishing Indonesia.

Zawawi, N. A., Ahmad, H., Madatheri, R., Fadilah, N. I. M., Maarof, M., & Fauzi, M. B. (2025). Flavonoids As Natural Anti-Inflammatory Agents in The Atopic Dermatitis Treatment. *Pharmaceutics*, 17(2), 261. <https://doi.org/10.3390/pharmaceutics17020261>

Zeng, L., Liu, Y., Xing, C., Huang, Y., Sun, X., & Sun, G. (2020). Saponin from *Periploca forrestii* Schltr Mitigates Oxazolone-induced Atopic Dermatitis Via Modulating Macrophage Activation. *Mediators of inflammation*, 2020(1), 4346367. <https://doi.org/10.1155/2020/4346367>

Zhang, L., Woltering, I., Holzner, M., Brandhofer, M., Schaefer, C. C., Bushati, G., Ebert, S., Yang, B., Muenchhoff, M., Hellmuth, J.C., Scherer, C., Wichmann, C., Effinger, D., Hubner, M., Bounkari, O.E., Scheiermann, P., Bernhagen, J., & Hoffmann, A. (2024). CD74 is a functional MIF receptor on activated CD4+ T cells. *Cellular and Molecular Life Sciences*, 81(1), 296. <https://doi.org/10.1007/s00018-024-05338-5>