References

Abuabara, K., Yu, A. M., Okhovat, J. P., Allen, I. E., & Langan, S. M. (2018). The prevalence of atopic dermatitis beyond childhood: a systematic review and meta-analysis of longitudinal studies. Allergy, 73(3), 696-704. https://doi.org/10.1111/all.13320

Aktar, M. K., Kido-Nakahara, M., Furue, M., & Nakahara, T. (2015). Mutual upregulation of endothelin-1 and IL-25 in atopic dermatitis. *Allergy*, *70*(7), 846-854. https://doi.org/10.1111/all.12633

Allakhverdi, Z., Comeau, M. R., Jessup, H. K., Yoon, B. R. P., Brewer, A., Chartier, S., ... & Delespesse, G. (2007). Thymic stromal lymphopoietin is released by human epithelial cells in response to microbes, trauma, or inflammation and potently activates mast cells. *The Journal of experimental medicine*, *204*(2), 253-258. https://doi.org/10.1084/jem.20062211

Al-Shobaili, H. A., Ahmed, A. A., Alnomair, N., Alobead, Z. A., & Rasheed, Z. (2016). Molecular genetic of atopic dermatitis: an update. *International journal of health sciences*, *10*(1), 96. https://doi.org/10.12816/0031218

Ambriz-Pérez, D. L., Leyva-López, N., Gutierrez-Grijalva, E. P., & Heredia, J. B. (2016). Phenolic compounds: Natural alternative in inflammation treatment. A Review. Cogent Food & Agriculture, 2(1), 1131412. https://doi.org/10.1080/23311932.2015.1131412

Apfelbacher, C. J., Diepgen, T. L., & Schmitt, J. (2011). Determinants of eczema: population-based cross-sectional study in Germany. *Allergy*, *66*(2), 206-213. https://doi.org/10.1111/j.1398-9995.2010.02464.x

Armengot-Carbo, M., Hernández-Martín, Á., & Torrelo, A. (2015). The role of filaggrin in the skin barrier and disease development. *Actas Dermo-Sifiliográficas (English Edition)*, *106*(2), 86-95. https://doi.org/10.1016/j.adengl.2014.12.007

Augustin, M., Radtke, M. A., Glaeske, G., Reich, K., Christophers, E., Schaefer, I., & Jacobi, A. (2015). Epidemiology and comorbidity in children with psoriasis and atopic eczema. *Dermatology*, *231*(1), 35-40. https://doi.org/10.1159/000381913

Avena-Woods, C. (2017). Overview of atopic dermatitis. *The American journal of managed care*, *23*(8 Suppl), S115-S123.

Barnes, P. J. (2006). How corticosteroids control inflammation: quintiles prize lecture 2005. *British journal of pharmacology*, *148*(3), 245-254.

Bin, L., & Leung, D. Y. (2016). Genetic and epigenetic studies of atopic dermatitis. *Allergy, Asthma & Clinical Immunology*, *12*(1), 1-14. https://doi.org/10.1186/s13223-016-0158-5

Bjerkan, L., Schreurs, O., Engen, S. A., Jahnsen, F. L., Baekkevold, E. S., Blix, I. J., & Schenck, K. (2015). The short form of TSLP is constitutively translated in human keratinocytes and has characteristics of an antimicrobial peptide. *Mucosal immunology*, *8*(1), 49-56. https://doi.org/10.1038/sj.bjp.0706736

Cao, E., Chen, Y., Cui, Z., & Foster, P. R. (2003). Effect of freezing and thawing rates on denaturation of proteins in aqueous solutions. *Biotechnology and bioengineering, 82*(6), 684-690. https://doi.org/10.1002/bit.10612

Carr, W. W. (2013). Topical calcineurin inhibitors for atopic dermatitis: review and treatment recommendations. *Pediatric Drugs*, *15*(4), 303-310. https://doi.org/10.1007/s40272-013-0013-9

Cassien, M., Mercier, A., Thétiot-Laurent, S., Culcasi, M., Ricquebourg, E., Asteian, A., ... & Pietri, S. (2021). Improving the antioxidant properties of Calophyllum inophyllum seed oil from french polynesia: Development and biological applications of resinous ethanol-soluble extracts. *Antioxidants*, *10*(2), 199. https://doi.org/10.3390/antiox10020199

Cayrol, C. (2021). IL-33, an alarmin of the IL-1 family Involved in allergic and non allergic inflammation: focus on the mechanisms of regulation of its activity. *Cells*, *11*(1), 107. https://doi.org/10.3390/cells11010107

Cha, K. J., Song, C. S., Lee, J. S., Kashif, A., Hong, M. H., Kim, G., & Kim, I. S. (2019). Chaenomeles sinensis Koehne extract suppresses the development of atopic dermatitis-like lesions by regulating cytokine and filaggrin expression in NC/Nga mice. *International Journal of Medical Sciences, 16*(12), 1604. https://doi.org/10.7150/ijms.37854

Chen, L., Lin, S. X., Agha-Majzoub, R., Overbergh, L., Mathieu, C., & Chan, L. S. (2006). CCL27 is a critical factor for the development of atopic dermatitis in the keratin-14 IL-4 transgenic mouse model. *International immunology*, *18*(8), 1233-1242. https://doi.org/10.1093/intimm/dxl054

Chieosilapatham, P., Kiatsurayanon, C., Umehara, Y., Trujillo-Paez, J. V., Peng, G., Yue, 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

Chrostowska-Plak, D., Reich, A., & Szepietowski, J. C. (2013). Relationship between itch and psychological status of patients with atopic dermatitis. *Journal of the European Academy of Dermatology and Venereology*, *27*(2), e239-e242. https://doi.org/10.1111/j.1468-3083.2012.04578.x

Colombo, I., Sangiovanni, E., Maggio, R., Mattozzi, C., Zava, S., Corbett, Y., ... & Dell'Agli, M. (2017). HaCaT cells as a reliable in vitro differentiation model to dissect the inflammatory/repair response of human keratinocytes. *Mediators of inflammation*, *2017*. https://doi.org/10.1155/2017/7435621

Coondoo, A., Phiske, M., Verma, S., & Lahiri, K. (2014). Side-effects of topical steroids: A long overdue revisit. *Indian dermatology online journal*, *5*(4), 416. https://doi.org/10.4103/2229-5178.142483

Downey, J., Gour, N., & Wills-Karp, M. (2015). Mechanisms of Experimental Mouse Models of Airway Hyperresponsiveness. In *Mucosal Immunology* (pp. 1783-1803). Academic Press. https://doi.org/10.1016/B978-0-12-415847-4.00093-8

Dweck, A. C., & Meadows, T. (2002). Tamanu (Calophyllum inophyllum)-the African, Asian, polynesian and pacific panacea. *International journal of cosmetic science*, *24*(6), 341-348. https://doi.org/10.1046/j.1467-2494.2002.00160.x

Egawa, G., & Kabashima, K. (2016). Multifactorial skin barrier deficiency and atopic dermatitis: Essential topics to prevent the atopic march. *Journal of Allergy and Clinical Immunology, 138*(2), 350-358. https://doi.org/10.1016/j.jaci.2016.06.002

Elmose, C., & Thomsen, S. F. (2015). Twin studies of atopic dermatitis: interpretations and applications in the filaggrin era. *Journal of allergy*, *2015*. http://doi.org/10.1155/2015/902359

Fuggle, N. R., Bragoli, W., Mahto, A., Glover, M., Martinez, A. E., & Kinsler, V. A. (2015). The adverse effect profile of oral azathioprine in pediatric atopic dermatitis, and recommendations for monitoring. *Journal of the American Academy of Dermatology*, *72*(1), 108-114. https://doi.org/10.1016/j.jaad.2014.08.048

Furue, M. (2020). Regulation of filaggrin, loricrin, and involucrin by IL-4, IL-13, IL-17A, IL-22, AHR, and NRF2: pathogenic implications in atopic dermatitis. *International journal of molecular sciences, 21*(15), 5382. https://doi.org/10.3390/ijms21155382

Gallagher, S. R., & Wiley, E. A. (2008). 10. In *Current Protocols Essential Laboratory Techniques* (p. 10.2.26-10.2.27). chapter, Wiley.

Ghalia, M. A., & Dahman, Y. (2016). A*dvanced nanobiomaterials in tissue engineering*. Elsevier. https://doi.org/10.1016/b978-0-323-42865-1.00006-4

Ginigini, J., Lecellier, G. J., Nicolas, M., Nour, M., Hnawia, E., Lebouvier, N., ... & Raharivelomanana, P. (2019). Chemodiversity of Calophyllum inophyllum L. oil bioactive components related to their

specific geographical distribution in the South Pacific region. *PeerJ*, *7*, e6896. https://doi.org/10.7717/peerj.6896

Ginwala, R., Bhavsar, R., Chigbu, D. G. I., Jain, P., & Khan, Z. K. (2019). Potential role of flavonoids in treating chronic inflammatory diseases with a special focus on the anti-inflammatory activity of apigenin. *Antioxidants, 8(*2), 35. https://doi.org/10.3390/antiox8020035

Griffin, D. E. (2008). Cytokines and Chemokines. In Encyclopedia of Virology (pp. 620–624). Elsevier. https://doi.org/10.1016/b978-012374410-4.00374-5

Gurram, R. K., & Zhu, J. (2019). Orchestration between ILC2s and Th2 cells in shaping type 2 immune responses. *Cellular & molecular immunology*, *16*(3), 225-235. https://doi.org/10.1038/s41423-019-0210-8

Gutfreund, K., Bienias, W., Szewczyk, A., & Kaszuba, A. (2013). Topical calcineurin inhibitors in dermatology. Part I: properties, method and effectiveness of drug use. *Advances in Dermatology and Allergology/Postępy Dermatologii i Alergologii*, *30*(3), 165-169. https://doi.org/10.5114/pdia.2013.35619

Ha, Y., Lee, W. H., Jeong, J., Park, M., Ko, J. Y., Kwon, O. W., ... & Kim, Y. J. (2020). Pyropia yezoensis extract suppresses IFN-gamma-and TNF-alpha-induced proinflammatory chemokine production in HaCaT cells via the down-regulation of NF-κB. *Nutrients*, *12*(5), 1238. https://doi.org/10.3390/nu12051238

Hon, K. L., Kung, J. S. C., Ng, W. G. G., & Leung, T. F. (2018). Emollient treatment of atopic dermatitis: latest evidence and clinical considerations. *Drugs in context*, *7*. https://doi.org/10.7573/dic.212530

Huang, A., Cho, C., Leung, D. Y., & Brar, K. (2017). Atopic dermatitis: early treatment in children. *Current treatment options in allergy*, *4*(3), 355-369. https://doi.org/10.1007/s40521-017-0140-6

Idriss, H. T., & Naismith, J. H. (2000). TNFα and the TNF receptor superfamily: Structure-function relationship (s). *Microscopy research and technique*, *50*(3), 184-195. https://doi.org/10.1002/1097-0029(20000801)50:3%3c184::AID-JEMT2%3e3.0.CO;2-H

Imai, T., Yoshida, T., Baba, M., Nishimura, M., Kakizaki, M., & Yoshie, O. (1996). Molecular cloning of a novel T cell-directed CC chemokine expressed in thymus by signal sequence trap using Epstein-Barr virus vector. *Journal of Biological Chemistry*, *271*(35), 21514-21521. https://doi.org/10.1074/jbc.271.35.21514

Imai, T., Baba, M., Nishimura, M., Kakizaki, M., Takagi, S., & Yoshie, O. (1997). The T cell-directed CC chemokine TARC is a highly specific biological ligand for CC chemokine receptor 4. *Journal of Biological Chemistry*, *272*(23), 15036-15042. https://doi.org/10.1074/jbc.272.23.15036

Imai, Y. (2019). Interleukin-33 in atopic dermatitis. *Journal of dermatological science*, *96*(1), 2-7. https://doi.org/10.1016/j.jdermsci.2019.08.006

Jain, K., Salamat-Miller, N., & Taylor, K. (2021). Freeze–thaw characterization process to minimize aggregation and enable drug product manufacturing of protein based therapeutics. *Scientific Reports, 11*(1), 1-9. https://doi.org/10.1038/s41598-021-90772-9

Jaworek, A. K., Szafraniec, K., Zuber, Z., Wojas-Pelc, A., & Jaworek, J. (2020). Interleukin 25, thymic stromal lymphopoietin and house dust mites in pathogenesis of atopic dermatitis. inflammation, 6, 8. https://doi.org/10.26402/jpp.2020.2.14

Joshi, C. J., Ke, W., Drangowska-Way, A., O'Rourke, E. J., & Lewis, N. E. (2022). What are housekeeping genes?. *PLoS computational biology, 1*8(7), e1010295. https://doi.org/10.1371/journal.pcbi.1010295

Kage, P., Poblotzki, L., Zeynalova, S., Zarnowski, J., Simon, J. C., & Treudler, R. (2022). Depression, Anxiety, and Suicidal Ideation in Patients with Atopic Eczema in a Prospective Study in Leipzig, Germany.

International Archives of Allergy and Immunology, *183*(4), 409-414. https://doi.org/10.1159/000520159

Khan, I., Elhissi, A., Shah, M., Alhnan, M. A., & Ahmed, W. (2013). Liposome-based carrier systems and devices used for pulmonary drug delivery. *In Biomaterials and medical tribology* (pp. 395-443). Woodhead Publishing. https://doi.org/10.1533/9780857092205.395

Kim, B. E., Leung, D. Y., Boguniewicz, M., & Howell, M. D. (2008). Loricrin and involucrin expression is down-regulated by Th2 cytokines through STAT-6. *Clinical immunology*, *126*(3), 332-337. https://doi.org/10.1016/j.clim.2007.11.006

Kim, H. J., Baek, J., Lee, J. R., Roh, J. Y., & Jung, Y. (2018). Optimization of Cytokine Milieu to Reproduce Atopic Dermatitis-related Gene Expression in HaCaT Keratinocyte Cell Line. Immune network, 18(2), e9. https://doi.org/10.4110/in.2018.18.e9

Kim, J., Kim, B. E., & Leung, D. Y. (2019). Pathophysiology of atopic dermatitis: Clinical implications. In *Allergy and asthma proceedings* (Vol. 40, No. 2, p. 84). OceanSide Publications. https://doi.org/10.2500/aap.2019.40.4202

Klonowska, J., Gleń, J., Nowicki, R. J., & Trzeciak, M. (2018). New cytokines in the pathogenesis of atopic dermatitis—new therapeutic targets. *International journal of molecular sciences*, *19*(10), 3086. https://doi.org/10.3390/ijms19103086

Kuo, I. H., Carpenter-Mendini, A., Yoshida, T., McGirt, L. Y., Ivanov, A. I., Barnes, K. C., ... & Beck, L. A. (2013). Activation of epidermal toll-like receptor 2 enhances tight junction function: implications for atopic dermatitis and skin barrier repair. *Journal of Investigative Dermatology, 133*(4), 988-998. https://doi.org/10.1038/jid.2012.437

Lee, H., Lee, D. H., Oh, J. H., & Chung, J. H. (2021). Skullcapflavone ii suppresses tnf-α/ifn-γ-induced tarc, mdc, and ctss production in hacat cells. *International Journal of Molecular Sciences*, *22*(12), 6428. https://doi.org/10.3390/ijms22126428

Leung, D. Y. (2013). New insights into atopic dermatitis: role of skin barrier and immune dysregulation. Allergology international, 62(2), 151-161. https://doi.org/10.2332/allergolint.13-RAI-0564

Marković, I., & Savvides, S. N. (2020). Modulation of signaling mediated by TSLP and IL-7 in inflammation, autoimmune diseases, and cancer. *Frontiers in immunology*, *11*, 1557. https://doi.org/10.3389/fimmu.2020.01557

Matsuo, K.; Nagakubo, D.; Komori, Y.; Fujisato, S.; Takeda, N.; Kitamatsu, M.; Nishiwaki, K.; Quan, Y.S.; Kamiyama, F.; Oiso, N.; et al. CCR4 Is Critically Involved in Skin Allergic Inflammation of BALB/c Mice. J. Investig. Dermatol. 2018, 138, 1764–1773. https://doi.org/10.1016/j.jid.2018.02.027

Matthews, T., Danese, A., Wertz, J., Odgers, C. L., Ambler, A., Moffitt, T. E., & Arseneault, L. (2016). Social isolation, loneliness and depression in young adulthood: a behavioural genetic analysis. *Social psychiatry and psychiatric epidemiology*, *51*(3), 339-348. https://doi.org/10.1007/s00127-016-1178-7

Nakamura, N., Tamagawa-Mineoka, R., Yasuike, R., Masuda, K., Matsunaka, H., Murakami, Y., ... & Katoh, N. (2019). Stratum corneum interleukin-33 expressions correlate with the degree of lichenification and pruritus in atopic dermatitis lesions. *Clinical immunology (Orlando, Fla.)*, *201*, 1-3. https://doi.org/10.1016/j.clim.2019.02.006

Narbutt, J., Lesiak, A., Sysa-Jedrzeiowska, A., Zakrzewski, M., Bogaczewicz, J., Stelmach, I., & Kuna, P. (2009). The imbalance in serum concentration of Th-1-and Th-2-derived chemokines as one of the factors involved in pathogenesis of atopic dermatitis. *Mediators of inflammation*, *2009*. https://doi.org/10.1155/2009/269541

Novak, N., & Leung, D. Y. (2010). Role of barrier dysfunction and immune response in atopic dermatitis. *In Pediatric allergy: Principles and practice* (pp. 552-563). WB Saunders. https://doi.org/10.1016/j.coi.2011.09.007

Nowicki, R., Trzeciak, M., Wilkowska, A., Sokołowska-Wojdyło, M., Ługowska-Umer, H., Barańska-Rybak, W., ... & Petranyuk, A. (2015). 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. *Advances in Dermatology and Allergology/Postępy Dermatologii i Alergologii*, *32*(4), 239-249. https://doi.org/10.5114/pdia.2015.53319

Nygaard, U., van den Bogaard, E. H. J., Niehues, H., Hvid, M., Deleuran, M., Johansen, C., & Vestergaard, C. (2017). The" Alarmins" HMBG1 and IL-33 downregulate structural skin barrier proteins and impair epidermal growth. Acta Derm Venereol 97(3), 305-312. https://doi.org/10.2340/00015555-2552.

Oh, J. S., Seong, G. S., Kim, Y. D., & Choung, S. Y. (2021). Effects of deacetylasperulosidic acid on atopic dermatitis through modulating immune balance and skin barrier function in HaCaT, HMC-1, and EOL-1 *Cells. Molecules, 26*(11), 3298. https://doi.org/10.3390/molecules26113298

Park, C. O., Lee, H. J., Lee, J. H., Wu, W. H., Chang, N. S., Hua, L., ... & Lee, K. H. (2008). Increased expression of CC chemokine ligand 18 in extrinsic atopic dermatitis patients. *Experimental dermatology*, *17*(1), 24-29. https://doi.org/10.1111/j.1600-0625.2007.00634.x

Ried, J. S., Li, J., Zuo, X. B., Zheng, X. D., Yin, X. Y., Sun, L. D., ... & Weidinger, S. (2015). Multi-ancestry genome-wide association study of 21,000 cases and 95,000 controls identifies new risk loci for atopic dermatitis. *Nature genetics*, *47*(12), 1449-1456. https://doi.org/10.1038/ng.3424

Pribowo, A., Girish, J., Gustiananda, M., Nandhira, R. G., & Hartrianti, P. (2021). Potential of Tamanu (Calophyllum inophyllum) Oil for Atopic Dermatitis Treatment. *Evidence-Based Complementary and Alternative Medicine*, *2021*. https://doi.org/10.1155/2021/6332867

Raharivelomanana, P., Ansel, J. L., Lupo, E., Mijouin, L., Guillot, S., Butaud, J. F., Ho, R., Lecellier, G. & Pichon, C. (2018). Tamanu oil and skin active properties: from traditional to modern cosmetic uses. *Ocl-Oilseeds and Fats Crops and Lipids, 25*(5). https://doi.org/10.1051/ocl/2018048

Rodenbeck, D. L., Silverberg, J. I., & Silverberg, N. B. (2016). Phototherapy for atopic dermatitis. *Clinics in dermatology*, *34*(5), 607-613. https://doi.org/10.1016/j.clindermatol.2016.05.011

Roediger, B., Kyle, R., Le Gros, G., & Weninger, W. (2014). Dermal group 2 innate lymphoid cells in atopic dermatitis and allergy. *Current opinion in immunology*, *31*, 108-114. https://doi.org/10.1016/j.coi.2014.10.008

Saeki, H., & Tamaki, K. (2008). Role of TARC/CCL17 and CTACK/CCL27 in the Pathogenesis of Atopic Dermatitis. *Current Immunology Reviews,* *4*(4), 221-229. https://doi.org/10.2174/157339508786447878

Sanders, K. M., & Akiyama, T. (2018). The vicious cycle of itch and anxiety. *Neuroscience & Biobehavioral Reviews*, *87*, 17-26. https://doi.org/10.1016/j.neubiorev.2018.01.009

Sano, Y., Masuda, K., Tamagawa-Mineoka, R., Matsunaka, H., Murakami, Y., Yamashita, R., ... & Katoh, N. (2013). Thymic stromal lymphopoietin expression is increased in the horny layer of patients with atopic dermatitis. *Clinical & experimental immunology*, *171*(3), 330-337. https://doi.org/10.1111/cei.12021

Savinko, T., Matikainen, S., Saarialho-Kere, U., Lehto, M., Wang, G., Lehtimäki, S., ... & Alenius, H. (2012). IL-33 and ST2 in atopic dermatitis: expression profiles and modulation by triggering factors. *Journal of Investigative Dermatology*, *132*(5), 1392-1400. https://doi.org/10.1038/jid.2011.446

Schonmann, Y., Mansfield, K. E., Hayes, J. F., Abuabara, K., Roberts, A., Smeeth, L., & Langan, S. M. (2020). Atopic eczema in adulthood and risk of depression and anxiety: a population-based cohort study. *The Journal of Allergy and Clinical Immunology: In Practice*, *8*(1), 248-257. https://doi.org/10.1016/j.jaip.2019.08.030

Skrypina, N. A., Timofeeva, A. V., Khaspekov, G. L., Savochkina, L. P., & Beabealashvilli, R. S. (2003). Total RNA suitable for molecular biology analysis. *Journal of biotechnology*, *105*(1-2), 1-9. https://doi.org/10.1016/s0168-1656(03)00140-8

Song, T. W., Sohn, M. H., Kim, E. S., Kim, K. W., & Kim, K. E. (2006). Increased serum thymus and activation-regulated chemokine and cutaneous T cell-attracting chemokine levels in children with atopic dermatitis. *Clinical & Experimental Allergy*, *36*(3), 346-351. https://doi.org/10.1111/j.1365-2222.2006.02430.x

Soumelis, V., Reche, P. A., Kanzler, H., Yuan, W., Edward, G., Homey, B., ... & Liu, Y. J. (2002). Human epithelial cells trigger dendritic cell–mediated allergic inflammation by producing TSLP. *Nature immunology*, *3*(7), 673-680. https://doi.org/10.1038/ni805

Sroka-Tomaszewska, J., & Trzeciak, M. (2021). Molecular mechanisms of atopic dermatitis pathogenesis. *International Journal of Molecular Sciences*, *22*(8), 4130. https://doi/org/10.3390/ijms22084130

Thomsen, S. F. (2014). Atopic dermatitis: natural history, diagnosis, and treatment. *International Scholarly Research Notices*, *2014*. https://doi.org/10.1155/2014/354250

Tsai, T. F., Rajagopalan, M., Chu, C. Y., Encarnacion, L., Gerber, R. A., Santos-Estrella, P., ... & Tallman, A. M. (2019). Burden of atopic dermatitis in Asia. *The Journal of dermatology*, *46*(10), 825-834. https://doi.org/10.1111/1346-8138.15048

Valizadeh, A., Khosravi, A., Zadeh, L. J., & Parizad, E. G. (2015). Role of IL-25 in Immunity. *Journal of clinical and diagnostic research: JCDR*, *9*(4), OE01. https://doi.org/10.7860/JCDR/2015/12235.5814

Vasanthakumar, A., & Kallies, A. (2019). Interleukin (Il)-33 and the il-1 family of cytokines—regulators of inflammation and tissue homeostasis. *Cold Spring Harbor perspectives in biology*, *11*(3), a028506. https://doi.org/10.1101/cshperspect.a028506

Vestergaard, C., Deleuran, M., Gesser, B., & Larsen, C. G. (2004). Thymus-and activation-regulated chemokine (TARC/CCL17) induces a Th2-dominated inflammatory reaction on intradermal

injection in mice. *Experimental dermatology*, *13*(4), 265-271. https://doi.org/10.1111/j.0906-6705.2004.00149.x

Wadonda-Kabondo, N., Sterne, J. A. C., Golding, J., Kennedy, C. T. C., Archer, C. B., & Dunnill, M. G. S. (2004). Association of parental eczema, hayfever, and asthma with atopic dermatitis in infancy: birth cohort study. *Archives of disease in childhood*, *89*(10), 917-921. https://doi.org/10.1136/adc.2003.034033

Wang, R., Moon, S. K., Kim, W. J., Dhandapani, S., Kim, H., & Kim, Y. J. (2022). Biologically Synthesized Rosa rugosa-Based Gold Nanoparticles Suppress Skin Inflammatory Responses via MAPK and NF-κB Signaling Pathway in TNF-α/IFN-γ-Induced HaCaT Keratinocytes. *ACS Omega,* 7(40), 35951-35960. https://doi.org/10.1084/jem.20070406

Wang, Y. H., Angkasekwinai, P., Lu, N., Voo, K. S., Arima, K., Hanabuchi, S., ... & Liu, Y. J. (2007). IL-25 augments type 2 immune responses by enhancing the expansion and functions of TSLP-DC–activated Th2 memory cells. *The Journal of experimental medicine*, *204*(8), 1837-1847. https://doi.org/10.1084/jem.20070406

Wang, Y. H., & Liu, Y. J. (2009). Thymic stromal lymphopoietin, OX40-ligand, and interleukin-25 in allergic responses. *Clinical & Experimental Allergy*, *39*(6), 798-806. https://doi.org/10.1111/j.1365-2222.2009.03241.x

Weidinger, S., Beck, L. A., Bieber, T., Kabashima, K., & Irvine, A. D. (2018). *Atopic dermatitis. Nature Reviews Disease Primers, 4(1).* https://doi/10.1038/s41572-018-0001-z

Yang, G., Seok, J. K., Kang, H. C., Cho, Y. Y., Lee, H. S., & Lee, J. Y. (2020). Skin barrier abnormalities and immune dysfunction in atopic dermatitis. *International journal of molecular sciences, 21*(8), 2867. https://doi.org/10.3390/ijms21082867

Yasir, M., Goyal, A., Bansal, P., & Sonthalia, S. (2018). Corticosteroid adverse effects. In *StatPearls.* StatPearls Publishing. Retrieved November 14, 2022 from https://www.ncbi.nlm.nih.gov/books/NBK531462/

Yazd, N. K. K., Patel, R. R., Dellavalle, R. P., & Dunnick, C. A. (2017). Genetic risk factors for development of atopic dermatitis: a systematic review. *Current Dermatology Reports*, *6*(4), 297-308. https://doi.org/10.1007/s13671-017-0199-0

Zuccolo de Bortoli, S. P., Chong Neto, H. J., & Rosário Filho, N. A. (2021). Different Approaches to Atopic Dermatitis by Allergists, Dermatologists, and Pediatricians. *Dermatology Research and Practice*, *2021*. https://doi.org/10.1155/2021/6050091