



DAFTAR PUSTAKA

- Amsen, D., De Visser, K. E. & Town, T. 2009. Approaches to determine expression of inflammatory cytokines. *Methods Mol Biol*, 511, 107-42.
- Armstrong, A. W., Mehta, M. D., Schupp, C. W., Gondo, G. C., Bell, S. J. & Griffiths, C. E. M. 2021. Psoriasis Prevalence in Adults in the United States. *JAMA Dermatol*, 157, 940-946.
- Austin, L. M., Ozawa, M., Kikuchi, T., Walters, I. B. & Krueger, J. G. 1999. The majority of epidermal T cells in Psoriasis vulgaris lesions can produce type 1 cytokines, interferon-gamma, interleukin-2, and tumor necrosis factor-alpha, defining TC1 (cytotoxic T lymphocyte) and TH1 effector populations: a type 1 differentiation bias is also measured in circulating blood T cells in psoriatic patients. *J Invest Dermatol*, 113, 752-9.
- Bienvenu, J., Monneret, G., Fabien, N. & Revillard, J. P. 2000. The clinical usefulness of the measurement of cytokines.
- Boehner, A., Navarini, A. A. & Eyerich, K. 2018. Generalized pustular psoriasis - a model disease for specific targeted immunotherapy, systematic review. *Exp Dermatol*, 27, 1067-1077.
- Boutet, M. A., Bart, G., Penhoat, M., Amiaud, J., Brulin, B., Charrier, C., Morel, F., Lecron, J. C., Rolli-Derkinderen, M., Bourreille, A., Vigne, S., Gabay, C., Palmer, G., Le Goff, B. & Blanchard, F. 2016. Distinct expression of interleukin (IL)-36alpha, beta and gamma, their antagonist IL-36Ra and IL-38 in psoriasis, rheumatoid arthritis and Crohn's disease. *Clin Exp Immunol*, 184, 159-73.
- Chen, H., Fang, Q. Q. & Wang, B. 2020. The age of paraffin block influences biomarker levels in archival breast cancer samples. *Oncol Lett*, 20, 525-532.
- Chiang, C. C., Cheng, W. J., Korinek, M., Lin, C. Y. & Hwang, T. L. 2019. Neutrophils in Psoriasis. *Front Immunol*, 10, 2376.
- De Matos, L. L., Trufelli, D. C., De Matos, M. G. L. & Da Silva Pinhal, M. A. 2010. Immunohistochemistry as an important tool in biomarkers detection and clinical practice. *Biomarker insights*, 5, BMI. S2185.
- De Rosa, G. & Mignogna, C. 2007. The Histopathology of Psoriasis. *Reumatismo*, 59, 46-8.
- Diaz-Barreiro, A., Huard, A. & Palmer, G. 2022. Multifaceted roles of IL-38 in inflammation and cancer. *Cytokine*, 151, 155808.
- Dinarello, C. A. 2000. Proinflammatory cytokines. *Chest*, 118, 503-508.
- Elshal, M. F. & Mccoy, J. P. 2006. Multiplex bead array assays: performance evaluation and comparison of sensitivity to ELISA. *Methods*, 38, 317-323.
- Favre, N., Bordmann, G. & Rudin, W. 1997. Comparison of cytokine measurements using ELISA, ELISPOT and semi-quantitative RT-PCR. *Journal of immunological methods*, 204, 57-66.
- Ferrandiz, C., Pujol, R. M., Garcia-Patos, V., Bordas, X. & Smandia, J. A. 2002. Psoriasis of early and late onset: a clinical and epidemiologic study from Spain. *J Am Acad Dermatol*, 46, 867-73.
- Furue, K., Yamamura, K., Tsuji, G., Mitoma, C., Uchi, H., Nakahara, T., Kido-Nakahara, M., Kadono, T. & Furue, M. 2018. Highlighting Interleukin-36



Signalling in Plaque Psoriasis and Pustular Psoriasis. *Acta Derm Venereol*, 98, 5-13.

- Gelfand, J. M., Neumann, A. L., Shin, D. B., Wang, X., Margolis, D. J. & Troxel, A. B. 2006. Risk of myocardial infarction in patients with psoriasis. *JAMA*, 296, 1735-41.
- Georgescu, S. R., Tampa, M., Caruntu, C., Sarbu, M. I., Mitran, C. I., Mitran, M. I., Matei, C., Constantin, C. & Neagu, M. 2019. Advances in Understanding the Immunological Pathways in Psoriasis. *Int J Mol Sci*, 20.
- Girolomoni, G., Strohal, R., Puig, L., Bachelez, H., Barker, J., Boehncke, W. H. & Prinz, J. C. 2017. The role of IL-23 and the IL-23/T(H) 17 immune axis in the pathogenesis and treatment of psoriasis. *J Eur Acad Dermatol Venereol*, 31, 1616-1626.
- Gisondi, P., Bellinato, F., Girolomoni, G. & Albanesi, C. 2020. Pathogenesis of Chronic Plaque Psoriasis and Its Intersection With Cardio-Metabolic Comorbidities. *Front Pharmacol*, 11, 117.
- Greb, J. E., Goldminz, A. M., Elder, J. T., Lebwohl, M. G., Gladman, D. D., Wu, J. J., Mehta, N. N., Finlay, A. Y. & Gottlieb, A. B. 2016. Psoriasis. *Nat Rev Dis Primers*, 2, 16082.
- Griffiths, C. E. M., Armstrong, A. W., Gudjonsson, J. E. & Barker, J. N. W. N. 2021. Psoriasis. *The Lancet*, 397, 1301-1315.
- Grillo, F., Bruzzone, M., Pigozzi, S., Prosapio, S., Migliora, P., Fiocca, R. & Mastracci, L. 2017. Immunohistochemistry on old archival paraffin blocks: is there an expiry date? *J Clin Pathol*, 70, 988-993.
- Grillo, F., Campora, M., Pigozzi, S., Bonadio, S., Valle, L., Ferro, J., Paudice, M., Dose, B. & Mastracci, L. 2021. Methods for restoration of ki67 antigenicity in aged paraffin tissue blocks. *Histochem Cell Biol*, 156, 183-190.
- Gudjonsson, J. E. & Elder, J. T. 2019. Psoriasis. In: KANG, S., AMAGAI, M., BRUCKNER, A. L., ENK, A. H., MARGOLIS, D., MCMICHAEL, A. J. & ORRINGER, J. S. (eds.) *Fitzpatrick's Dermatology*. 9 ed. New York: McGraw Hill Education.
- Han, G., Havnaer, A., Lee, H. H., Carmichael, D. J. & Martinez, L. R. 2020. Biological depletion of neutrophils attenuates pro-inflammatory markers and the development of the psoriatic phenotype in a murine model of psoriasis. *Clin Immunol*, 210, 108294.
- Han, M. M., Yuan, X. R., Shi, X., Zhu, X. Y., Su, Y., Xiong, D. K., Zhang, X. M., Zhou, H. & Wang, J. N. 2021. The Pathological Mechanism and Potential Application of IL-38 in Autoimmune Diseases. *Front Pharmacol*, 12, 732790.
- Han, Y., Mora, J., Huard, A., Da Silva, P., Wiechmann, S., Putyrska, M., Schuster, C., Elwakeel, E., Lang, G., Scholz, A., Scholz, T., Schmid, T., De Bruin, N., Billuart, P., Sala, C., Burkhardt, H., Parnham, M. J., Ernst, A., Brune, B. & Weigert, A. 2019. IL-38 Ameliorates Skin Inflammation and Limits IL-17 Production from gammadelta T Cells. *Cell Rep*, 27, 835-846 e5.
- Hoegler, K. M., John, A. M., Handler, M. Z. & Schwartz, R. A. 2018. Generalized pustular psoriasis: a review and update on treatment. *J Eur Acad Dermatol Venereol*, 32, 1645-1651.



- Ito, T., Takahashi, H., Kawada, A., Iizuka, H., Nakagawa, H. & Japanese Society for Psoriasis, R. 2018. Epidemiological survey from 2009 to 2012 of psoriatic patients in Japanese Society for Psoriasis Research. *J Dermatol*, 45, 293-301.
- Iznardo, H. & Puig, L. 2021a. Exploring the Role of IL-36 Cytokines as a New Target in Psoriatic Disease. *Int J Mol Sci*, 22.
- Iznardo, H. & Puig, L. 2021b. The interleukin-1 family cytokines in psoriasis: pathogenetic role and therapeutic perspectives. *Expert Rev Clin Immunol*, 17, 187-199.
- Jiang, Q. 2021. Role of Th22 Cells in the Pathogenesis of Autoimmune Diseases.
- Johnston, A., Xing, X., Wolterink, L., Barnes, D. H., Yin, Z., Reingold, L., Kahlenberg, J. M., Harms, P. W. & Gudjonsson, J. E. 2017. IL-1 and IL-36 are dominant cytokines in generalized pustular psoriasis. *J Allergy Clin Immunol*, 140, 109-120.
- Kardaun, S. H., Kuiper, H., Fidler, V. & Jonkman, M. F. 2010. The histopathological spectrum of acute generalized exanthematous pustulosis (AGEP) and its differentiation from generalized pustular psoriasis. *J Cutan Pathol*, 37, 1220-9.
- Karlsson, C. & Karlsson, M. G. 2011. Effects of long-term storage on the detection of proteins, DNA, and mRNA in tissue microarray slides. *J Histochem Cytochem*, 59, 1113-21.
- Katayama, H. 2018. Development of psoriasis by continuous neutrophil infiltration into the epidermis. *Exp Dermatol*, 27, 1084-1091.
- Keijzers, R. R., Joosten, I., Van Erp, P. E., Koenen, H. J. & Van De Kerkhof, P. C. 2014. Cellular sources of IL-17 in psoriasis: a paradigm shift? *Exp Dermatol*, 23, 799-803.
- Kim, B. Y., Choi, J. W., Kim, B. R. & Youn, S. W. 2015. Histopathological findings are associated with the clinical types of psoriasis but not with the corresponding lesional psoriasis severity index. *Ann Dermatol*, 27, 26-31.
- Kolliker Frers, R., Otero-Losada, M., Kobiec, T., Herrera, M. I., Udoval, L., Kusnier, C. F. & Capani, F. 2021. Interleukin-1 Links Autoimmune and Autoinflammatory Pathophysiology in Mixed-Pattern Psoriasis. *Mediators Inflamm*, 2021, 2503378.
- Kubota, K., Kamijima, Y., Sato, T., Ooba, N., Koide, D., Iizuka, H. & Nakagawa, H. 2015. Epidemiology of psoriasis and palmoplantar pustulosis: a nationwide study using the Japanese national claims database. *BMJ Open*, 5, e006450.
- Liu, X. T., Shi, Z. R., Lu, S. Y., Hong, D., Qiu, X. N., Tan, G. Z., Xiong, H., Guo, Q. & Wang, L. 2022. Enhanced Migratory Ability of Neutrophils Toward Epidermis Contributes to the Development of Psoriasis via Crosstalk With Keratinocytes by Releasing IL-17A. *Front Immunol*, 13, 817040.
- Lofvendahl, S., Norlin, J. M. & Schmitt-Egenolf, M. 2022. Prevalence and incidence of generalized pustular psoriasis in Sweden: a population-based register study. *Br J Dermatol*, 186, 970-976.
- Madonna, S., Girolomoni, G., Dinarello, C. A. & Albanesi, C. 2019. The Significance of IL-36 Hyperactivation and IL-36R Targeting in Psoriasis. *Int J Mol Sci*, 20.



- Martin, P., Goldstein, J. D., Mermoud, L., Diaz-Barreiro, A. & Palmer, G. 2021. IL-1 Family Antagonists in Mouse and Human Skin Inflammation. *Front Immunol*, 12, 652846.
- Mehta, S., Singal, A., Singh, N. & Bhattacharya, S. 2009. A study of clinicohistopathological correlation in patients of psoriasis and psoriasisiform dermatitis. *Indian Journal of Dermatology, Venereology and Leprology*, 75, 100.
- Mercurio, L., Morelli, M., Scarponi, C., Eisenmesser, E. Z., Doti, N., Pagnanelli, G., Gubinelli, E., Mazzanti, C., Cavani, A., Ruvo, M., Dinarello, C. A., Albanesi, C. & Madonna, S. 2018. IL-38 has an anti-inflammatory action in psoriasis and its expression correlates with disease severity and therapeutic response to anti-IL-17A treatment. *Cell Death Dis*, 9, 1104.
- Murphy, M., Kerr, P. & Grant-Kels, J. M. 2007. The histopathologic spectrum of psoriasis. *Clin Dermatol*, 25, 524-8.
- Nestle, F. O., Conrad, C., Tun-Kyi, A., Homey, B., Gombert, M., Boyman, O., Burg, G., Liu, Y. J. & Gilliet, M. 2005. Plasmacytoid dendritic cells initiate psoriasis through interferon-alpha production. *J Exp Med*, 202, 135-43.
- Nograles, K. E., Zaba, L. C., Guttman-Yassky, E., Fuentes-Duculan, J., Suarez-Farinás, M., Cardinale, I., Khatcherian, A., Gonzalez, J., Pierson, K. C., White, T. R., Pensabene, C., Coats, I., Novitskaya, I., Lowes, M. A. & Krueger, J. G. 2008. Th17 cytokines interleukin (IL)-17 and IL-22 modulate distinct inflammatory and keratinocyte-response pathways. *Br J Dermatol*, 159, 1092-102.
- Ogawa, E., Sato, Y., Minagawa, A. & Okuyama, R. 2018. Pathogenesis of psoriasis and development of treatment. *J Dermatol*, 45, 264-272.
- Palomo, J., Troccaz, S., Talabot-Ayer, D., Rodriguez, E. & Palmer, G. 2018. The severity of imiquimod-induced mouse skin inflammation is independent of endogenous IL-38 expression. *PLoS One*, 13, e0194667.
- Pfaff, C. M., Marquardt, Y., Fietkau, K., Baron, J. M. & Luscher, B. 2017. The psoriasis-associated IL-17A induces and cooperates with IL-36 cytokines to control keratinocyte differentiation and function. *Sci Rep*, 7, 15631.
- Puri, N., Bb, M. & Kaur, S. 2012. Clinicohistopathological Correlation of Psoriasis in Acute Exacerbation. *Journal of Cancer Science & Therapy*, 01.
- Reich, K., Papp, K. A., Matheson, R. T., Tu, J. H., Bissonnette, R., Bourcier, M., Gratton, D., Kunynetz, R. A., Poulin, Y., Rosoph, L. A., Stingl, G., Bauer, W. M., Salter, J. M., Falk, T. M., Blodorn-Schllicht, N. A., Hueber, W., Sommer, U., Schumacher, M. M., Peters, T., Kriehuber, E., Lee, D. M., Wieczorek, G. A., Kolbinger, F. & Bleul, C. C. 2015. Evidence that a neutrophil-keratinocyte crosstalk is an early target of IL-17A inhibition in psoriasis. *Exp Dermatol*, 24, 529-35.
- Rendon, A. & Schakel, K. 2019. Psoriasis Pathogenesis and Treatment. *Int J Mol Sci*, 20.
- Rivera-Diaz, R., Dauden, E., Carrascosa, J. M., Cueva, P. & Puig, L. 2023. Generalized Pustular Psoriasis: A Review on Clinical Characteristics, Diagnosis, and Treatment. *Dermatol Ther (Heidelb)*, 13, 673-688.
- Sachen, K. L., Arnold Greving, C. N. & Towne, J. E. 2022. Role of IL-36 cytokines in psoriasis and other inflammatory skin conditions. *Cytokine*, 156, 155897.



- Samotij, D., Szczech, J. & Reich, A. 2021. Generalized Pustular Psoriasis: Divergence of Innate and Adaptive Immunity. *Int J Mol Sci*, 22.
- Sastroasmoro, S. & Ismael, S. 2011. *Dasar-dasar metodologi penelitian klinis*, Jakarta, Sagung Seto.
- Schafer, I., Rustenbach, S. J., Radtke, M., Augustin, J., Glaeske, G. & Augustin, M. 2011. [Epidemiology of psoriasis in Germany--analysis of secondary health insurance data]. *Gesundheitswesen*, 73, 308-13.
- Schon, M. P., Broekaert, S. M. & Erpenbeck, L. 2017. Sexy again: the renaissance of neutrophils in psoriasis. *Exp Dermatol*, 26, 305-311.
- Talabot-Ayer, D., Mermoud, L., Borowczyk, J., Drukala, J., Wolnicki, M., Modarressi, A., Boehncke, W. H., Bremilla, N. & Palmer, G. 2019. Interleukin-38 interacts with destrin/actin-depolymerizing factor in human keratinocytes. *PLoS One*, 14, e0225782.
- Trozak, D. J. 1994. Histologic grading system for psoriasis vulgaris. *International journal of dermatology*, 33, 380-381.
- Uppala, R., Tsoi, L. C., Harms, P. W., Wang, B., Billi, A. C., Maverakis, E., Michelle Kahlenberg, J., Ward, N. L. & Gudjonsson, J. E. 2021. "Autoinflammatory psoriasis"-genetics and biology of pustular psoriasis. *Cell Mol Immunol*, 18, 307-317.
- Van De Veerdonk, F. L., Stoeckman, A. K., Wu, G., Boeckermann, A. N., Azam, T., Netea, M. G., Joosten, L. A., Van Der Meer, J. W., Hao, R., Kalabokis, V. & Dinarello, C. A. 2012. IL-38 binds to the IL-36 receptor and has biological effects on immune cells similar to IL-36 receptor antagonist. *Proc Natl Acad Sci U S A*, 109, 3001-5.
- Wang, Z. & Shi, D. 2023. Research progress on the neutrophil components and their interactions with immune cells in the development of psoriasis. *Skin Res Technol*, 29, e13404.
- Who 2016. Global report on Psoriasis.
- Xie, R., Chung, J. Y., Ylaya, K., Williams, R. L., Guerrero, N., Nakatsuka, N., Badie, C. & Hewitt, S. M. 2011. Factors influencing the degradation of archival formalin-fixed paraffin-embedded tissue sections. *J Histochem Cytochem*, 59, 356-65.
- Xing, X., Liang, Y., Sarkar, M. K., Wolterink, L., Swindell, W. R., Voorhees, J. J., Harms, P. W., Kahlenberg, J. M., Johnston, A. & Gudjonsson, J. E. 2016. IL-17 Responses Are the Dominant Inflammatory Signal Linking Inverse, Erythrodermic, and Chronic Plaque Psoriasis. *J Invest Dermatol*, 136, 2498-2501.
- Zheng, M., Jullien, D. & Eyerich, K. 2022. The Prevalence and Disease Characteristics of Generalized Pustular Psoriasis. *Am J Clin Dermatol*, 23, 5-12.
- Zhou, J., Luo, Q., Cheng, Y., Wen, X. & Liu, J. 2021. An update on genetic basis of generalized pustular psoriasis (Review). *Int J Mol Med*, 47.
- Zhou, L. & Todorovic, V. 2021. Interleukin-36: Structure, Signaling and Function. *Adv Exp Med Biol*, 21, 191-210.