



## DAFTAR PUSTAKA

- Alper, S., Akyol, M., Atakan, N., Başkan, E.B., Gürer, M.A., Koç, E., Onsun, N., Ozarmagan, G., Senturk, N., Savas, Y. 2012. Turkish guideline for the treatment of psoriasis. *Turkderm journal*, 46:1–36. Turkish.
- Asahina, A., Kubo, N., Umezawa, Y., Honda, H., Yanaba, K., Nakagawa, H. 2017. Neutrophil-lymphocyte ratio, platelet-lymphocyte ratio and mean platelet volume in Japanese patients with psoriasis and psoriatic arthritis: Response to therapy with biologics. *J Dermatol*, 44:1112-21.
- Baliwag, J., Barnes, D.H., Johnston, A. 2015. Cytokines in psoriasis. *Cytokine*, 73(2): 342–50.
- Balta, S. dan Ozturk, C. 2015. The platelet-lymphocyte ratio: A simple, inexpensive and rapid prognostic marker for cardiovascular events. *Platelets*, 26, 680-1.
- Bhat, T., Teli, S., Rijal, J., Bhat, H., Raza., Khoueiry, G., Meghani, M., Akhtar, M., Costantino., T. 2013. Neutrophil to lymphocyte ratio and cardiovascular diseases: a review. *Expert Rev Cardiovasc Ther*, 11: 55–59.
- Brown, M dan Wittwer. 2000. Flow Cytometry: Principles and Clinical Applications in Hematology. *Clinical Chemistry*, 46(8): 1221-1229.
- Budianti, W.K., Anindya, S., Debinta, A.A., Novianto, E., Fitri, E.M., Effendi, E.H. 2019. Kesesuaian tatalaksana psoriasis dengan panduan praktik klinis (PPK) di RSUPN Dr. Ciptomangunkusumo. *Media Dermato Venereologi Indonesia*, 46: 172-177.
- Burden, D.A dan Kirby, B. Psoriasis and related disorders. Dalam: Griffiths, C., Barker, J., Bleiker, T., Chalmers, R., Creamer, D., penyunting. 2016. Rook's Textbook of Dermatology 9 edition. UK: Willey Blackwell.
- Chandrashekhar, L., Rajappa, M., Revathy, G., Sundar, I., Munisamy, M., Ananthanarayanan, P.H., Thappa, D.M., Basu, D. 2015. Is enhanced platelet activation the missing link leading to increased cardiovascular risk in psoriasis?. *Clin Chim Acta*, 446: 181–5.
- Chiang, C.C., Cheng, W.J., Korinek, M., Lin, C.Y., Hwang, T.L. 2019. Neutrophils in psoriasis. *Frontiers in Immunology*, 10:1-12.
- Cho, H., Hur, H.W., Kim, S.W. 2009. Pre-treatment neutrophil to lymphocyte ratio is elevated in epithelial ovarian cancer and predicts survival after treatment. *Cancer Immunol Immunother*, 58: 15–23.
- Coimbra, S., Oliveira, H., Reis, F., Belo, L., Rocha, S., Quintanilha, A., Figueiredo, A., Teixeira, F., Castro, E., Rocha-Pereira, P., Santos-Vila, A. 2010. C-reactive protein and leucocyte activation in psoriasis vulgaris according to severity and therapy. *JEADV*, 24: 789-796.
- Dahlan, M.S. 2016. *Besar sampel dalam penelitian kedokteran dan kesehatan. Seri Evidence Based Medicine 2. Ed. 4.* Lembaga Epidemiologi Indonesia, Jakarta.



- Di Meglio, P., Villanova, F., Nestle, F.O. 2014. Psoriasis. *Cold Spring Harb. Perspect. Med.*, 4: 6.
- Fan, W., Zhang, Y., Wang, Y., Yao, X., Yang, J., Li, J. 2015. Neutrophil-to-lymphocyte and platelet-to-lymphocyte ratios as predictors of survival and metastasis for recurrent hepatocellular carcinoma after transarterial chemoembolization. *PLoS One*, 1:1-14.
- Fan, Z., Wang, L., Jiang, H., Lin, Y., Wang, Z. 2020. Platelet Dysfunction and Its Role in the Pathogenesis of Psoriasis. *Dermatology*, 237:56–65.
- Garshick, M., Tawil, M., Azarchi, S., Barrett, T., Lee, A., Fuentes-Duculan, J., Fisher, E., Krueger, J., Berger, J. 2019. Activated Platelets Induce Endothelial Activation in Patients with Psoriasis. *J Am Coll Cardiol*, 73(9): 2041.
- Gaspari, A.A. 2006. Innate and adaptive immunity and the pathophysiology of psoriasis. *J Am Acad Dermatol*, 54(Suppl. 2): 567-80
- Gear, A.R., Camerini, D. 2003. Platelet chemokines and chemokine receptors: linking hemostasis, inflammation, and host defense. *Microcirculation*, 10(3–4): 335–50.
- George, Y., Aldeen, M., dan Garnavi, R. 2018. Psoriasis Image Representation using Patch-based Dictionary Learning for Erythema Severity Scoring. *Computerized Medical Imaging and Graphics*, 66: 44-45.
- Glennon-Alty, L., Hackett, A.P., Chapman, E.A., Wright, H.L. 2018. Neutrophils and redox stress in the pathogenesis of autoimmune disease. *Free Radic Biol Med*, 125:25–35.
- 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.
- Gruchala, A., Cislak, A., dan Golanski, J. 2019. Neutrophil-lymphocyte ratio and platelet-lymphocyte ratio as an alternative to C-reactive protein in diagnostics of inflammatory state in patients with psoriasis. *Odermatol*, 1: 7-11.
- Gudjonsson, J.E., Elder, J.T. Psoriasis. Dalam: Kang S, Amagai M, Bruckner A, Enk A, Margolis D, McMichael A, penyunting. 2018. Fitzpatrick's Dermatology. 9 ed. New York: McGraw-Hill .h.457–497.
- Guo, J., Tu, J., Hu, Y., Song, G., Yin, Z. 2019. Cathepsin G cleaves and activates IL-36 $\gamma$  and promotes the inflammation of psoriasis. *Drug Des Devel Ther*, 13:581–8.
- Hansel, A., Gunther, C., Ingwersen, J., Starke, J., Schmitz, M., Bachmann, M., 2011. Human slan (6-sulfo LacNAc) dendritic cells are inflammatory dermal dendritic cells in psoriasis and drive strong TH17/TH1 T-cell responses. *J. Allergy Clin. Immunol*, 127:787–794.
- Harden, J.L., Krueger, J.G., Bowcock, A.M. 2015. The immunogenetics of psoriasis: A comprehensive review. *J. Autoimmun*, 64: 66–73.
- Herster, F., Karbach, S., Chatterjee, M., dan Weber, A.N. 2021. Platelets: underestimated regulators of autoinflammation in psoriasis. *Journal of Investigative Dermatology*, 141: 1395-1403.



- Kanelleas, A., Liapi, C., Katoulis, A., Stavropoulos, P., Avgerinou, G., Georgala, S., Economopoulos, T., Stavrianeas, N.G., Katsambas, A. 2011. The role of inflammatory markers in assessing disease severity and response to treatment in patients with psoriasis treated with etanercept. *Clin Exp Dermatol*, 36:845–850.
- Kao, S.C., Pavlakis, N., Harvie, R. 2010. High blood neutrophil-to-lymphocyte ratio is an indicator of poor prognosis in malignant mesothelioma patients undergoing systemic therapy. *Clin Cancer Res*, 16: 5805–5813.
- Karabudak, O., Ulusoy, R.E., Erikci, A.A., Solmazgul, E., Dogan, B. 2008. Inflammation and hypercoagulable state in adult psoriatic men. *Acta Derm Venereol*, 88:337-40.
- Karamehic, J., Zecevic, L., Resic, H., Jukic, M., Jukic, T., Ridjic, O., Panjeta, M., Coric, J. 2014. Immunophenotype lymphocyte of peripheral blood in patients with psoriasis. *Met Ach*, 68(4): 236-238.
- Katoh, N. 2009. Platelets as versatile regulators of cutaneous inflammation. *J Dermatol Sci*, 53(2): 89–95.
- Khatun, F., Ahmed, Z., Paul, H.K., Amin, Z., Chowdhury, M.S. 2021. Profile of mean platelet volume, neutrophil-lymphocyte ratio and platelet-lymphocyte ratio in patient with psoriasis. *International Journal of Research in Dermatology*, 7(6): 765-770.
- Kim, D.S., Shin, D., Lee, M.S., Kim, H.J., Kim, D.Y., Kim, S.M., Lee., M.G. 2016. Assessments of neutrophil to lymphocyte ratio and platelet to lymphocyte ratio in Korean patients with psoriasis vulgaris and psoriatic arthritis. *Journal of Dermatology*, 43:305-310.
- Kishi, Y., Kopetz, S., Chun, Y.S. 2009. Blood neutrophil-to-lymphocyte ratio predicts survival in patients with colorectal liver metastases treated with systemic chemotherapy. *Ann Surg Oncol*, 16: 614–622.
- Ko, H.C., Jwa, S.W., Song, M., Kim, M.B., Kwon, K.S. 2010. Clinical course of guttate psoriasis: Long-term follow-up study. *J. Dermatol*, 37: 894–899.
- Krisnarto, E., Novitasari, A., Aulirahma, D.M. 2016. Faktor prediktor kualitas hidup pasien psoriasis: studi cross sectional. *Jurnal Kedokteran Unimus*, 1:43-51.
- Krueger, J.G., dan Bowcock, A. 2005. Psoriasis pathophysiology: current concepts of pathogenesis. *Ann Rheum Dis*, 64: 30–36.
- Liang, Y., Sarkar, M.K., Tsoi, L.C., Gudjonsson, J.E. 2017. Psoriasis: A mixed autoimmune and autoinflammatory disease. *Curr. Opin. Immunol*, 49: 1–8.
- Liu, C.C., Ko, H.J., Liu, W.S., Hung, C.L., Hu, K.C., Yu, L.Y., Shih, S.C. 2019. Neutrophil-to-lymphocyte ratio as a predictive marker of metabolic syndrome. *Medicine*, 98(43): 1-12.
- Morizane, S dan Gallo, R.L. 2012. Antimicrobial peptides in the pathogenesis of psoriasis. *J. Dermatol*, 39:225–230.
- Navarini, A.A., Burden, A.D., Capon, F., Mrowietz, U., Puig, L., Koks, S., Kingo, K., Smith, C., Barker, J.N. 2017. European consensus statement on phenotypes of pustular psoriasis. *J. Eur. Acad. Dermatol. Venereol*, 31:1792–1799.



- 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: 135–143.
- Oggie, A dan Weiss, P. 2015. The epidemiology of psoriatic arthritis. *Rheum Dis Clin North Am*, 41(4):545–568.
- Okun, M. 2008. Psoriasis Area and Severity Index: Nuts and bolts of measuring disease severity in psoriasis. *Clinics in Dermatology*, 26: 653–656.
- Paliogiannis, P., Satta, R., Deligia, G., Farina, G., Bassu, S., Mangoni, A.A., Carru, C., Zinelli, A. 2019. Associations between the neutrophil-to-lymphocyte and the platelet-to-lymphocyte ratios and the presence and severity of psoriasis: a systematic review and meta-analysis. *Clinical and Experimental Medicine*, 19:37–45.
- Parisi, R., Symmons, D.P., Griffiths, C.E., Ashcroft, D.M. 2013. Global epidemiology of psoriasis: A systematic review of incidence and prevalence. *J. Investig. Dermatol*, 133: 377–385.
- Paul, C., Gourraud, P.A., Bronsard, V., Prey, S., Puzenat, E., Aractingi, S., Aubin, F., Bagot, M., Cribier, B., Joly, P., Jullien, D., Maitre, M.L., Richard-Lallemand, M.A., Ortonne, J.P. 2010. Evidence-based recommendations to assess psoriasis severity: systematic literature review and expert opinion of a panel of dermatologists. *J Eur Acad Dermatol Venereol*, 24: 2–9.
- Perdoski. 2017. Panduan praktik klinis bagi dokter spesialis kulit dan kelamin di Indonesia. Jakarta: Ruko Grand Salemba.
- Perdoski, 2019. Alur tatalaksana psoriasis vulgaris (tipe plak) di Indonesia. Jakarta: Kelompok Studi Psoriasis Indonesia
- Polat, M., Bugdayci, G., Kaya, H., Oguzman, H. 2017. Evaluation of neutrophil-to-lymphocyte ratio and platelet-to-lymphocyte ratio in Turkish patients with chronic plaque psoriasis. *Acta Dermatovenerologica*, 26: 97-100.
- Raychaudhuri, S.P., Farber, E.M. 2001. The prevalence of psoriasis in the world. *J Eur Acad Dermatol Venereol*, 15(1):16-17.
- Rendon, A dan Schakel, K. 2019. Psoriasis pathogenesis and treatment. *International Journal of Molecular Sciences*, 20(1475):1-28.
- Rocha-Pereira, P., Santos-Silva, A., Rebelo I. 2004. The inflammatory response in mild and in severe psoriasis. *Br J Dermatol*, 150:917–928.
- Rosales, C., Lowell, C.A., Schnoor, M., Uribe-Querol, E. 2017. Neutrophils: Their Role in Innate and Adaptive Immunity. *J Immunol Res*, 1:974-834.
- Salamah, M.F., Ravishankar, D., Kodji, X., Moraes, L.A., Williams, H.F., Vallance, T.M., Albadawi, D.A., Vaiyapuri, R., Watson, K., Gibbins, J.M., Brain, S.D., Perretti, M., Vaiyapuri, S. 2018. The endogenous antimicrobial cathelicidin LL37 induces platelet activation and augments thrombus formation. *Blood Adv*, 2:2973-85.
- Schon, M.P dan Erpenbeck, L. 2018. The interleukin-23/interleukin-17 axis links adaptive and innate immunity in psoriasis. *Front Immunol*, 9:1323.



- Sen, B.B., Rifaioglu, E.N., Ekiz, O., Inan, M.U., Sen, T., Sen, N. 2013. Neutrophil to lymphocyte ratio as a measure of systemic inflammation in psoriasis. *Cutaneous and Ocular Toxicology*, 1: 1-5.
- Tecchio, C dan Cassatella, M.A. 2016. Neutrophil-derived chemokines on the road to immunity. *Semin Immunol*, 28:119–28.
- Uslu, A.U., Kucuk, A., Sahin, A., Ugan, Y., Yilmaz, R., Gungor, T., Bagcaci, S., Kucuksen, S. 2015. Two new inflammatory markers associated with disease activity score-28 in patients with rheumatoid arthritis: neutrophil–lymphocyte ratio and platelet–lymphocyte ratio. *Int J Rheum Dis*. 18(7):731–5.
- Von Hundelshausen, P dan Weber, C. 2007. Platelets as immune cells: bridging inflammation and cardiovascular disease. *Circ Res*, 100(1): 27–40.
- Wang, W.M., Wu, C., Gao, Y.M., Li, F., Yu, X.L., Jin, H.Z. 2021. Neutrophil to lymphocyte ratio, platelet to lymphocyte ratio, and other hematological parameters in psoriasis patients. *BMC Immunol*, 22(64): 1-7.
- Wiedow, O., Wiese, F., Christophers, E. 1995. Lesional elastase activity in psoriasis. Diagnostic and prognostic significance. *Arch Dermatol Res*, 287:632–325.
- Wu, L., Zou, S., Wang, C., Tan, X., Yu, M. 2019. Neutrophil-to-lymphocyte and platelet-to-lymphocyte ratio in Chinese Han population from Chaoshan region in South China. *BMC Cardiovasc Disord*, 1:125.
- Zheng, Y., Niyonsaba, F., Ushio, H. 2008. Microbicidal protein psoriasin is a multifunctional modulator of neutrophil activation. *Immunology*, 124:357–367.
- Zareifar, S., Farahmand, M.R., Golafshan, F., Cohan, N. 2014. Changes in platelet count and mean platelet volume during infectious and inflammatory disease and their correlation with ESR and CRP. *J Clin Lab Anal*. 28(3): 245–8.