

## DAFTAR PUSTAKA

- Adams, S. Gray R. J., Demaria, S. Goldstein, L. Perez E. A. Shulman, L. Martino S. Wang, M. Jones, V. E. Saphner, T. J. Wolff, A. C. Wood, W. C. Davidson, N. E. Sledge, G. W. Sparano, dan Badve, S. (2014) 'Prognostic Value of Tumor-Infiltrating Lymphocytes in Triple-Negative Breast Cancers From Two Phase III Randomized Adjuvant Breast Cancer Trials : ECOG 2197 and ECOG 1199', *Journal of Clinical Oncology*, 32(27). doi: 10.1200/JCO.2013.55.0491.
- Ali, H. R. Khaja, A. S. S. Toor, S. M. Salhat, Faour, Haq, dan Elkord, E. (2016) 'Patterns of Immune Infiltration in Breast Cancer and Their Clinical Implications : A Gene-Expression-Based Retrospective Study', *PLoS Med*, 13(12), pp. 1–24. doi: 10.1371/journal.pmed.1002194.
- Allison, K. H. dan Sam, C. M. E. (2012) 'Molecular Pathology of Breast Cancer What a Pathologist Needs to Know', pp. 770–780. doi: 10.1309/AJCPIV9IQ1MRQMOO.
- Ayu, G. Hendrati, L. (2015) 'Analisis risiko kanker payudara berdasar riwayat pemakaian kontrasepsi hormonal dan usia', *Jurnal Berkala Epidemiologi*, 3(1), pp. 12–23.
- Blankenstein, T., Coulie, P. G. dan Jaffee, E. M. (2013) 'The determinants of tumour immunogenicity', *Nat Rev Cancer*, 12(4), pp. 307–313. doi: 10.1038/nrc3246.The.
- Bombonati, A. dan Sgroi, D. C. (2012) 'The Molecular Pathology of Breast Cancer Progression', *J Pathol*, 223(2), pp. 307–317. doi: 10.1002/path.2808.The.
- Bray, F., Ferlay, J. Soerjomataram, I., Siegel, R., Torre, L. dan Jemal, A. (2018) 'Global Cancer Statistics 2018 : GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries', *Ca Cancer J Clin*, 68, pp. 394–424. doi: 10.3322/caac.21492.
- Castro, F., Cardoso, A. P., Gonçalves, R. M., Serre, K. dan Oliveira, M. J. (2018) 'Interferon-Gamma at the Crossroads of Tumor Immune Surveillance or Evasion', *Frontiers in Immunology*, 9(May), pp. 1–19. doi: 10.3389/fimmu.2018.00847.
- Catakovic, K., Klieser, E., Neureiter, D. dan Geisberger, R. (2017) 'T cell exhaustion : from pathophysiological basics to tumor immunotherapy', *Cell Communication and Signaling*. *Cell Communication and Signaling*, 15(1), pp. 1–16. doi: 10.1186/s12964-016-0160-z.
- Charan, J. dan Biswas, T. (2013) 'How to Calculate Sample Size for Different Study Designs in Medical Research?', *Indian J Psychol Med.*, 35(2), pp. 121–126. doi: 10.4103/0253-7176.116232.

- Dai, X., Xiang, L., Li, T. dan Bai, Z. (2016) 'Cancer Hallmarks , Biomarkers and Breast Cancer Molecular Subtypes', *Journal of Cancer*, 7(10), pp. 1281–1294. doi: 10.7150/jca.13141.
- Dushyanthen, S., Beavis, P. A., Savas, P., Teo, Z., Zhou. M., Mansour, M., Darcy, P. K. dan Loi, S. (2015) 'Relevance of tumor-infiltrating lymphocytes in breast cancer'. *BMC Medicine*, 1, pp. 1–13. doi: 10.1186/s12916-015-0431-3.
- Eftekhari, R., Esmaeili, R., Mirzaei, R., Bidad, K., de Lima, S., Ajami, M., Shirzad, H., Hadjati, J. dan Majidzadeh, K. (2017) 'Study of the tumor microenvironment during breast cancer progression', *Cancer Cell International*. BioMed Central, 17, pp. 1–10. doi: 10.1186/s12935-017-0492-9.
- Escors, D. (2014) 'Tumour immunogenicity , antigen presentation and immunological barriers in cancer immunotherapy', *New J Sci*. doi: 10.1155/2014/734515.Tumour.
- Fernández, M., Miguel, F., Elguezabalb, M., Casta, P., Royo, M., Ferrerasa, C., Benavidesa, J. dan Pérez, V. (2017) 'Immunohistochemical expression of interferon gamma in different types of granulomatous lesions associated with bovine paratuberculosis', *Comparative Immunology, Microbiology and Infectious Diseases*, 51, pp. 1–8. doi: 10.1016/j.cimid.2017.01.002.
- Grosso, J. F. dan Jurekunkel, M. N. (2013) 'CTLA-4 blockade in tumor models : an overview of preclinical and translational research', *Cancer Immunity Review*, 13(January), pp. 1–14.
- Hammerl, D., Smid, M., Timmermans, A. M., Sleijfer, S., Martens, J. W. M. dan Debets, R. (2017) 'Breast cancer genomics and immuno-oncological markers to guide immune therapies', *Seminars in Cancer Biology*. Elsevier, (October), pp. 1–11. doi: 10.1016/j.semcancer.2017.11.003.
- Hellwig, B. (2019) 'Guest editorial: HIGHLIGHT REPORT: TUMOR INFILTRATING LYMPHOCYTES IN BREAST CANCER', *EXCLI Journal*, 18, pp. 129–131.
- Kaja, S. L., Kiran, S. V. N. S. dan Chitturi, R. T. (2017) 'A Review on Tumor Immunology', *J Orofac Sci*, 9, pp. 7–15. doi: 10.4103/0975-8844.207949.
- Karachaliou, N., Gonzalez-cao, M., Crespo, G., Drozdowskyj, A., Aldeguer, E. dan Gimenez-capitan, A. (2018) 'Interferon gamma , an important marker of response to immune checkpoint blockade in non-small cell lung cancer and melanoma patients', *Therapeutic Advances in Medical Oncology*, 10, pp. 1–23. doi: 10.1177/https.
- Kotoula, V., Chatzopoulos, K., Lakis, S., Alexopoulou, Z., Timotheadou, E., Zagouri, F., Pentheroudakis, G., Gogas, H., Galani, E., Efstratiou, I., Zaramboukas, T., Koutras, A., Aravantinos, G., Samantas, E., Psyrris, A., Kourea, H., Bobos, M., Papakostas, P., Kosmidis, P., Pectasides, D. dan

- Fountzilias, G. (2015) 'Tumors with high-density tumor infiltrating lymphocytes constitute a favorable entity in breast cancer : a pooled analysis of four prospective adjuvant trials', *Oncotarget*, 7(4).
- Krell, J., Frampton, A. E. dan Stebbing, J. (2012) 'The clinical significance of tumor infiltrating lymphocytes in breast cancer : does subtype matter ?', pp. 12–14.
- Lan, G. Li, J., Wen, Q., Lin, L., Chen, L. dan Chen, X. (2018) 'Cytotoxic T lymphocyte associated antigen 4 expression predicts poor prognosis in luminal B HER2-negative breast cancer', *Oncology Letters*, 15, pp. 5093–5097. doi: 10.3892/ol.2018.7991.
- Law, A., Lim, E., Ormandy, C. J. dan Gallego-Ortega, D. (2017) 'The innate and adaptive infiltrating immune systems as targets for breast cancer immunotherapy', *Endocr Relat Cancer*, 24(4), pp. R123–R144.
- Lin, C., Lin, C., Lee, K. Y., Wu, S. Y., Feng, P. H., Chen, K. Y., Chuang, H. C., Chen, C. L., Wang, Y. C., Tseng, P. C. dan Tsai, T. (2017) 'Escape from IFN- $\gamma$ -dependent immunosurveillance in tumorigenesis', *Journal of Biomedical Science*. *Journal of Biomedical Science*, 24(10), pp. 1–9. doi: 10.1186/s12929-017-0317-0.
- Liu, Z., Li, M. dan Jiang, Z. (2018) 'A Comprehensive Immunologic Portrait of Triple-Negative Breast Cancer', *Translational Oncology*. Elsevier Inc., 11(2), pp. 311–329. doi: 10.1016/j.tranon.2018.01.011.
- Loi, S., Michiels, S., Salgado, R., Sirtaine, N., Jose, V., Fumagalli, D., Kellokumpu-Lehtinen, P. L., Bono, P., Kataja, V., Desmedt, C., Piccart, M. J., Loib S., Denkert, C., Smyth, M. J., Joensuu, H. dan Sotiriou, C. (2014) 'Tumor infiltrating lymphocytes are prognostic in triple negative breast cancer and predictive for trastuzumab benefit in early breast cancer : results from the FinHER trial', *Annals of Oncology*, pp. 1–7. doi: 10.1093/annonc/mdu112.
- Makhoul, I., Atiq, M. dan Alwbari, A. (2018) 'Breast Cancer Immunotherapy : An Update', *Breast Cancer: Basic and Clinical Research*, 12, pp. 1–15. doi: 10.1177/1178223418774802.
- Makki, J. (2015) 'Diversity of Breast Carcinoma : Histological Subtypes and Clinical Relevance', pp. 23–31. doi: 10.4137/CPath.S31563.TYPE.
- Malhotra, G. K., Zhao, X., Band, H dan Band, V. (2010) 'Histological , molecular and functional subtypes of breast cancers', pp. 955–960. doi: 10.4161/cbt.10.10.13879.
- Mao, H., Zhang, L., Yang, Y., Zuo, W., Bi, Y., Gao, W., Deng, B., Sun, J., Shao, Q. dan Qu, X. (2010) 'New Insights of CTLA-4 into Its Biological Function in Breast Cancer', *Current Cancer Drug Target*, 10, pp. 728–736.
- Miyan, M., Schmidt-Mende, J., Kiessling, R., Poschke, I. dan de Boniface, J.

- (2016) 'Differential tumor infiltration by T - cells characterizes intrinsic molecular subtypes in breast cancer', *Journal of Translational Medicine*. BioMed Central, 14, pp. 1–11. doi: 10.1186/s12967-016-0983-9.
- Mo, X., Zhang, H., Preston, S., Martin, K., Zhou, B., Vadalía, N., Ana, M., Soboloff, J., Tempera, I. dan Zaidi, M R. (2017) 'Interferon gamma signaling in melanocytes and melanoma cells regulates expression of CTLA - 4', *American Association for Cancer Journal*. doi: 10.1158/0008-5472.CAN-17-1615.
- Moraes, M., Neto, D., de Matos, F., Lopes, M., de Azevedo, P. dan Costa, A. (2014) 'Immunoexpression of Transforming Growth Factor Beta and Interferon Gamma in Radicular and Dentigerous Cysts', *Journal of Endodontics*. Elsevier Ltd, 40(9), pp. 1293–1297. doi: 10.1016/j.joen.2014.01.010.
- Nagarajan, D. dan Mcardle, S. E. B. (2018) 'Immune Landscape of Breast Cancers', *Biomedicines*, 6(20), pp. 1–12. doi: 10.3390/biomedicines6010020.
- Nizuwan, A., Nurdianah, H. F. dan Musa, M. Y. (2016) 'Interrelationship Of Clinicopathological Features Of Breast Cancer Among Different Ethnic Groups', *Jurnal Teknologi (Sciences and Engineering)*, 3(2), pp. 51–56.
- Pandiyan, P., Hegel, J. K. E., Kueger, M., Quandt, D. dan Brunner-weinzierl, M. C. (2007) 'High IFN-  $\gamma$  Production of Individual CD8 T Lymphocytes Is Controlled by CD152 (CTLA-4)', *The Journal of Immunology*, 152(178), pp. 2132–2140. doi: 10.4049/jimmunol.178.4.2132.
- Pandya, P. H. Murray, M. E. Pollok, K. E. dan Renbarger, J. L. (2016) 'The Immune System in Cancer Pathogenesis: Potential Therapeutic Approaches', *Journal of Immunology Research*, 2016, pp. 1–13.
- Raval, R. R., Sharabi, A. B., Walker, A. J., Drake, C. G. dan Sharma, P. (2014) 'Tumor immunology and cancer immunotherapy: summary of the 2013 SITC primer', *Journal for ImmunoTherapy of Cancer*, 2(14), pp. 1–11.
- Ravelli, A., Roviello, G., Cretella, D., Cavazzoni, A., Biondi, A., Cappelletti, M. R., Zanotti, L., Ferrero, G., Ungari, M., Zanconati, F., Bottini, A., Alfieri, R., Petronini, P. G. dan Generali, D. (2017) 'Tumor-infiltrating lymphocytes and breast cancer: Beyond the prognostic and predictive utility', *Tumor Biology*. doi: 10.1177/1010428317695023.
- Rowshanravan, B., Halliday, N. dan Sansom, D. M. (2017) 'CTLA-4: a moving target in immunotherapy', *Blood*, 131(1), pp. 58–67. doi: 10.1182/blood-2017-06-741033.
- Rudd, C. E. (2012) 'CTLA-4 co-receptor impacts on the function of Treg and CD8 + T- cell subsets', *Eur J Immunol.*, 39(3), pp. 687–690. doi: 10.1002/eji.200939261.CTLA-4.

- Sajid, A. Toor, S. M., Salhat, H. E., Faour, I., Haq, N. U., Ali, B. R. dan Elkord, E. (2017) 'Preferential accumulation of regulatory T cells with highly immunosuppressive characteristics in breast tumor microenvironment', *Oncotarget*, 8(20), pp. 33159–33171.
- Salgado, R., Denkert, S., Demaria, N., Sirtaine, F., Klauschen, G., Pruneri, S., Wienert, G., Van den Eynden, F. L., Baehner, F., Penault-Llorca, E. A., Perez, E. A., Thompson, W. F., Symmans, A. L., Richardson, J., Brock, C., Criscitiello, H., Bailey, M., Ignatiadis, G., Floris, J., Sparano, Z., Kos, T., Nielsen, D. L., Rimm, K. H., Allison, J. S., Reis-Filho, S., Loibl, C., Sotiriou, G., Viale, S., Badve, S., Adams, S., Willard-Gallo, K. dan Loi, S. (2015) 'The evaluation of tumor-infiltrating lymphocytes (TILs) in breast cancer: recommendations by an International TILs Working Group 2014', *Annals of Oncology*, 26(September 2014), pp. 259–271. doi: 10.1093/annonc/mdu450.
- Schroder, K., Hertzog, P. J., Ravasi, T. dan Hume, D. A. (2004) 'Interferon gamma: an overview of signals, mechanisms and functions', *Journal of Leukocyte Biology*, 75(February), pp. 163–189. doi: 10.1189/jlb.0603252.Journal.
- SgROI, D. C. (2010) 'Preinvasive Breast Cancer', *Annu Rev Pathol*, 5, pp. 193–221. doi: 10.1146/annurev.pathol.4.110807.092306.Preinvasive.
- Si, W., Li, Y., Han, Y., Zhan, F., Wang, Y., Linghu, R. X., Zhang, X. dan Yang, J. (2015) 'Epidemiological and Clinicopathological Trends of Breast Cancer in Chinese Patients During 1993 to 2013. A Retrospective Study', *Medicine*, 94(26), pp. 1–7. doi: 10.1097/MD.0000000000000820.
- Sinn, H. dan Kreipe, H. (2013) 'A Brief Overview of the WHO Classification of Breast Tumors, 4th Edition, Focusing on Issues and Updates from the 3rd Edition', *Breast Care*, 8, pp. 149–154. doi: 10.1159/000350774.
- Solinas, C., Carbognin, L., De Silva, P., Criscitiello, C. dan Lambertini, M. (2017) 'Tumor-infiltrating-lymphocytes in breast cancer according to tumor subtype: Current state of the art', *The Breast*. Elsevier Ltd, 35, pp. 142–150. doi: 10.1016/j.breast.2017.07.005.
- Spurrell, E. L. dan Lockley, M. (2014) 'Adaptive immunity in cancer immunology and therapeutics', *e-cancer medical science*, 8(441), pp. 1–10. doi: 10.3332/ecancer.2014.441.
- Staton, S. E., Adams, S. dan Disis, M. L. (2016) 'Variation in the Incidence and Magnitude of Tumor-Infiltrating Lymphocytes in Breast Cancer Subtypes. A Systematic Review', *JAMA Oncol.*, 8050. doi: 10.1001/jamaoncol.2016.1061.
- Staton, S. E. dan Disis, M. L. (2016) 'Clinical significance of tumor-infiltrating lymphocytes in breast cancer', *Journal for ImmunoTherapy of Cancer*. Journal for ImmunoTherapy of Cancer, pp. 1–7. doi: 10.1186/s40425-016-0165-6.

- Varn, F. S., Mullins, D. W., Arias-Pulido, H., Fiering, S. dan Cheng, C. (2016) 'Adaptive immunity programmes in breast cancer', *Immunology*, 150, pp. 25–34. doi: 10.1111/imm.12664.
- Wherry, E. J. dan Kurachi, M. (2016) 'Molecular and cellular insights into T cell exhaustion', *Nat Rev Immunol*, 15(8), pp. 486–499. doi: 10.1038/nri3862.
- Widodo, I., Dwianingsih, E. K., Triningsih, E. dan Utoro, T. (2014) 'Clinicopathological Features of Indonesian Breast Cancers with Different Molecular Subtypes', 15(15), pp. 6109–6113.
- Yu, H., Yang, J., Jiao, S., Li, Y. dan Zhang, W. (2015) 'Cytotoxic T lymphocyte antigen 4 expression in human breast cancer : implications for prognosis', *Cancer Immunology, Immunotherapy*. Springer Berlin Heidelberg, 64, pp. 853–860. doi: 10.1007/s00262-015-1696-2.
- Yu, L., Tang, J., Zhang, C. M., Zeng, W. J., Yan, H., Li, M. P. dan Chen, X. P. (2017) 'New Immunotherapy Strategies in Breast Cancer', *International Journal of Environmental Research and Public Health*, 14(68), pp. 1–18. doi: 10.3390/ijerph14010068.
- Yu, X. dan Zhang, Z. (2016) 'Prognostic and predictive value of tumor-infiltrating lymphocytes in breast cancer : a systematic review and meta-analysis', *Clin Transl Oncol*, 18, pp. 497–506. doi: 10.1007/s12094-015-1391-y.
- Zaidi, M. R. dan Merlino, G. (2012) 'The Two Faces of Interferon- $\gamma$  in cancer', *Clin Cancer Res*, 17(19), pp. 6118–6124. doi: 10.1158/1078-0432.CCR-11-0482.The.
- Zhao, Y., Yang, W., Huang, Y., Cuia, R., Lie, X. dan Lia, B. (2018) 'Evolving Roles for Targeting CTLA-4 in Cancer Immunotherapy', *Cell Physiol Biochem*, (47), pp. 721–734. doi: 10.1159/000490025.