

## DAFTAR PUSTAKA

- Abbas, A. K. Lichtman, A. H. Pillai, S. (2015) *Basic immunology, functions and disorders of the immune system* (5th ed), Elsevier. pp. 218-223.
- Baaten, B. J., Li, C. R., & Bradley, L. M. (2010) 'Multifaceted regulation of T cells by CD44', *Communicative & integrative biology*, 3(6), 508–512. doi:10.4161/cib.3.6.13495.
- Barnes, T. A., dan Amir, E. (2017) 'HYPER or HOPE: the prognostic value of infiltrating immune cells in cancer', *British Journal of Cancer*, 117(4), pp. 451–460. doi:10.1038/bjc.2017.220.
- Belov, L., Zhou, J., dan Christopherson, R. I. (2010) 'Cell surface markers in colorectal cancer prognosis', *International Journal of Molecular Sciences*, 12(1), 78–113. doi:10.3390/ijms12010078.
- Bollyky, P. L., Falk, B. A., Long, S. A., Preisinger, A., Braun, K. R., Wu, R. P., Evanko, S. P., Buckner, J. H., Wight, T. N., Nepom, G. T. (2009) 'CD44 costimulation promotes FoxP3+ regulatory T cell persistence and function via production of IL-2, IL-10, and TGF-beta. *Journal of immunology (Baltimore, Md. : 1950)*, 183(4), 2232–2241. doi:10.4049/jimmunol.0900191.
- Chaitra, L. P., Prashant, A., Gowthami, C. S., Hajira, B., Suma, M. N., Mahesh, S. S., Manjunath, G. V., Sheeladevi, C. S. (2019) 'Detection of cancer stem cell-related markers in different stages of colorectal carcinoma patients of Indian origin by immunohistochemistry. *Journal of cancer research and therapeutics*, 15(1), 75–81. doi:10.4103/jcrt.JCRT\_991\_16.
- Charan, J., dan Biswas, T. (2013) 'How to calculate sample size for different study designs in medical research?', *Indian Journal of Psychological Medicine*, 35(2), 121–126. doi:10.4103/0253-7176.116232.
- Chen, C. Zhao, S. Karnad, A dan Freeman, J. W. (2018) 'The biology and role of CD44 in cancer progression : therapeutic implication' , *Journal of Hematology*, 11(64), pp. 1-23. doi: 10.1186/s13045-018-0605-5.
- Chen, M. L., Pittet, M. J., Gorelik, L., Flavell, R. A., Weissleder, R., von Boehmer, H., Khazaie, K. (2005) 'Regulatory T cells suppress tumor-specific CD8 T cell cytotoxicity through TGF-beta signals in vivo', *Proceedings of the National Academy of Sciences of the United States of America*, 102(2), pp. 419–424. doi:10.1073/pnas.0408197102.
- Chiba, T., Ohtani, H., Mizoi, T., Naito, Y., Sato, E., Nagura, H., Ohuchi, A., Ohuchi, K., Shiiba, K., Kurokawa, Y., Satomi, S. (2004) 'Intraepithelial

- CD8+ T-cell-count becomes a prognostic factor after a longer follow-up period in human colorectal carcinoma: possible association with suppression of micrometastasis', *British Journal of Cancer*, 91(9), pp.1711–1717. doi:10.1038/sj.bjc.6602201.
- Cho, J., Chang, Y. H., Heo, Y. J., Kim, S., Kim, N. K., Park, J. O., Kang, W. K., Lee, J., Kim, K. M. (2018) 'Four distinct immune microenvironment subtypes in gastric adenocarcinoma with special reference to microsatellite instability', *ESMO open*, 3(3), e000326. doi:10.1136/esmoopen-2018-000326.
- Chu, P. G. dan Weiss, L. M. (2009) 'Modern immunohistochemistry', *Cambridge Illustrated Surgical Pathology*, pp. 489-490.
- Cooper, H. S. (2015) 'Intestinal neoplasms. In: Mills, S.E. Carter, D. Greenson, J.K. Reuter, V.E & Stoler, M.H (Eds): Sternberg's Diagnostic Surgical Pathology. 6th Ed. Philadelphia: Wolters Kluwer Health, pp. 1534-1547.
- de Vries, N. L., Swets, M., Vahrmeijer, A. L., Hokland, M., Kuppen, P. J. (2016) 'The immunogenicity of colorectal cancer in relation to tumor development and treatment' *International Journal of Molecular Sciences*, 17(7), 1030. doi:10.3390/ijms17071030.
- Du, L., Wang, H., He, L., Zhang, J., Ni, B., Wang, X., Jin, H., Cahuzac, N., Mehrpour, M., Lu, Y., & Chen, Q. (2008) 'CD44 is of functional importance for colorectal cancer stem cells' *Clinical cancer research : an official journal of the American Association for Cancer Research*, 14(21), 6751–6760. doi:10.1158/1078-0432.CCR-08-1034.
- Dushyanthen, S., Beavis, P. A., Savas, P., Teo, Z. L., Zhou, C., Mansour, M., Darcy, P. K., Loi, S. (2015) 'Relevance of tumor-infiltrating lymphocytes in breast cancer', *BMC Medicine*, 13, 202. doi:10.1186/s12916-015-0431-3.
- Fenoglio-Preiser, C. M. Noffsinger, A. E & Stemmermann, G. N. (2008) 'Gastrointestinal pathology: an atlas and text (3rd ed)', *Philadelphia: Lippincott Williams & Wilkins*, pp. 954-979.
- Hamilton, S. R., Bosman, F. T., Boffeta, P., Ilyas, M. Morreau, H., Nakamura, S. I., Quirke, P., Riboli, E., Sobin, L. H. (2010) 'WHO classification of tumours of the digestive system (4th ed)', *Lyon: IARC Press*, pp. 131-146.
- Nagtegaal, I. D., Arend, M. J., Odze, R. D., Lam, A. K. (2019) 'Tumours of the colon and rectum in WHO classification of tumours of the digestive system (4th ed)', *Lyon: IARC Press*, pp. 156-187.

- Holah, N. S., Aaid, H. A., Assad, N. Y., Elkhoully, E. A., Lasheen, A. G., (2017) 'Evaluation of the role of CD44 as a cancer stem cell marker in colorectal carcinoma: immunohistochemical study', *Menoufia Medical Journal*, 30, pp. 174-183. doi: 10.4130/mmj. Mmj\_151\_16.
- Hong, I., Hong, S. W., Chang, Y. G., Lee, W. Y., Lee, B., Kang, Y. K., Kim, Y. S., Paik, I. W., & Lee, H. (2015) 'Expression of the cancer stem cell markers CD44 and CD133 in colorectal cancer: an immunohistochemical staining analysis', *Annals of Coloproctology*, 31(3), 84–91. doi:10.3393/ac.2015.31.3.84.
- Idos, G. E., Kwok, J., Bonthala, N., Kysh, L., Gruber, S. B., Qu, C. (2020) 'The prognostic implications of tumor infiltrating lymphocytes in colorectal cancer: a systematic review and meta-analysis' *Scientific Reports*, 10(1), 3360. doi:10.1038/s41598-020-60255-4.
- Iseki, Y. Shibutani, M. Maeda, K. Nagahara, H. Fukuoka, T. Matsutani, S. Kashigawa, S. Tanaka, H. Hirakawa, K., Ohira, M. (2018) 'Infiltrating Lymphocytes (TILs) in colorectal cancer using hematoxylin and eosin (HE)-stained tumor sections', *PLoS ONE*, 13(4), pp. 1-12. doi: 10.1371/journal.pone.0192744.
- Jackute, J., Zemaitis, M., Pranys, D., Sitkauskiene, B., Miliauskas, S., Bajoriunas, V., Lavinskiene, S., & Sakalauskas, R. (2015) 'The prognostic influence of tumor infiltrating Foxp3(+)/CD4(+), CD4(+) and CD8(+) T cells in resected non-small cell lung cancer', *Journal of Inflammation*. 12, 63. doi:10.1186/s12950-015-0108-x.
- Khedr, R.A.E, Ghannam A.A.E, El-Rahidy. M. A.,El-Deen, A.A.S. (2016) 'The prognostic role of tumor infiltrating lymphocytes CD8 and FOXP3 and their impact on recurrence in breast cancer patients', *Journal of Cancer Science & Therapy*. 8(7), pp. 206-212. doi:10.4172/1948-5956.1000414.
- Kolligs F. T. (2016) 'Diagnostics and epidemiology of colorectal cancer', *Visceral Medicine*, 32(3), pp. 158–164. doi:10.1159/000446488.
- Kumar, V. Abbas, A., & Aster, J. (2015). *Robbins and Cotran pathologic basis of disease (9th ed)*, Saunders, pp. 810-813.
- Li, X. D., Ji, M., Wu, J., Jiang, J. T., & Wu, C. P. (2013) 'Clinical significance of CD44 variants expression in colorectal cancer', *Tumori*, 99(1), 88–92. doi:10.1700/1248.13794.
- Lu, L., Wu, M., Sun, L., Li, W., Fu, W., Zhang, X., & Liu, T. (2016) 'Clinicopathological and prognostic significance of cancer stem cell markers CD44 and CD133 in patients with gastric cancer: A comprehensive meta-

- analysis with 4729 patients involved', *Medicine*, 95(42), e5163. doi:10.1097/MD.00000000000005163.
- Ma, L., Dong, L., & Chang, P. (2019) 'CD44v6 engages in colorectal cancer progression', *Cell Death & Disease*, 10(1), p. 30. doi:10.1038/s41419-018-1265-7.
- Ma, L., Jiang, T. (2013) 'Clinical implications of Ezrin and CD44 co-expression on breast cancer', *Oncology Reports*, 30, p.1899-1905
- Magee, J. A., Piskounova, E., & Morrison, S. J. (2012) 'Cancer stem cells: impact, heterogeneity, and uncertainty', *Cancer Cell*, 21(3), pp. 283–296. doi:10.1016/j.ccr.2012.03.003.
- Meguid, R. A., Slidell, M. B., Wolfgang, C. L., Chang, D. C., Ahuja, N. (2008) 'Is there a difference in survival between right- versus left-sided colon cancers?', *Annals of surgical oncology*, 15(9), 2388–2394. doi:10.1245/s10434-008-0015-y
- Ngan, C. Y., Yamamoto, H., Seshimo, I., Ezumi, K., Terayama, M., Hemmi, H., Takemasa, I., Ikeda, M., Sekimoto, M., Monden, M. (2007) 'A multivariate analysis of adhesion molecules expression in assessment of colorectal cancer' *Journal of surgical oncology*, 95(8), 652–662. doi:10.1002/jso.20638
- O'Connell, J. B., Maggard, M. A., dan Ko, C. Y. (2004) 'Colon cancer survival rates with the new American Joint Committee on Cancer sixth edition staging', *Journal of the National Cancer Institute*, 96(19), 1420–1425. doi:10.1093/jnci/djh275.
- Ozawa, M., Ichikawa, Y., Zheng, Y. W., Oshima, T., Miyata, H., Nakazawa, K., Guan, H. B., Shiozawa, M., Akaike, M., Watanabe, K., Ota, M., Fujii, S., Kunisaki, C., Ishikawa, T., Tanaka, K., Akiyama, H., Endo, I., & Taniguchi, H. (2014) 'Prognostic significance of CD44 variant 2 upregulation in colorectal cancer', *British Journal of Cancer*, 111(2), 365–374. doi:10.1038/bjc.2014.253.
- Patel, M., McSorley, S., Park, J. *et al.* (2018) 'The relationship between right-sided tumour location, tumour microenvironment, systemic inflammation, adjuvant therapy and survival in patients undergoing surgery for colon and rectal cancer', *Br J Cancer* 118, 705–712. doi:10.1038/bjc.2017.441.
- Peddareddigari, V. G., Wang, D., dan Dubois, R. N. (2010) 'The tumor microenvironment in colorectal carcinogenesis' *Cancer microenvironment, Official Journal of the International Cancer Microenvironment Society*, 3(1), 149–166. doi:10.1007/s12307-010-0038-3.

- Peng, G. L., Li, L., Guo, Y. W., Yu, P., Yin, X. J., Wang, S., Liu, C. P. (2019) 'CD8<sup>+</sup> cytotoxic and FoxP3<sup>+</sup> regulatory T lymphocytes serve as prognostic factors in breast cancer', *American Journal of Translational Research*, 11(8), 5039–5053.
- Pitule, P., Cedikova, M., Daum, O., Vojtisek, J., Vycital, O., Hosek, P., Treska, V., Hes, O., Kralickova, M., Liska, V. (2014) 'Immunohistochemical detection of cancer stem cell related markers CD44 and CD133 in metastatic colorectal cancer patients', *BioMed Research International*, 432139. doi:10.1155/2014/432139.
- Pusdatin (2015) *Infodatin 2015*. Jakarta
- Rawla, P. Sunkara, T. Barsouk, A. (2019) 'Epidemiology of colorectal cancer: incidence, mortality, survival, and risk factors', *Gastroenterology Review*, 14(2), pp: 89-90. doi:105114/pg.2018.81072.
- Redston, M. dan Driman, D.K. (2015) 'Epithelial neoplasm of large intestine, In: Odze and Goldblum, J.R, (Eds). *Odze and Goldblum pathology of the GI tract, liver, billiary tract, and pancreas*. Philadelphia: Saunders, Elsevier Inc., pp. 737-770.
- Rohani, P., Noroozina, F., Modarresi, P., dan Abbasi, A. (2017) 'CD44 standard isoform: not a good marker for colon cancer', *Int J Cancer Manag*, 10(9), pp. 1-5. doi: 10.5812/ijcm.9166.
- Schneider, M., Huber, J., Hadaschik, B., Siegers, G. M., Fiebig, H. H., Schüler, J. (2012). Characterization of colon cancer cells: a functional approach characterizing CD133 as a potential stem cell marker. *BMC cancer*, 12, 96. doi:10.1186/1471-2407-12-96.
- Song, W., Mazzieri, R., Yang, T., dan Gobe, G. C. (2017) 'Translational significance for tumor metastasis of tumor-associated macrophages and epithelial-mesenchymal transition', *Frontiers in Immunology*, 8, 1106. doi:10.3389/fimmu.2017.01106.
- Sounni, N.E. dan Noel, A (2013) 'Targeting the tumor microenvironment for cancer therapy:', *Clinical Chemistry*, 59(1), pp. 85–93, doi: doi:10.1373/clinchem.2012.185363.
- Schwertfeger, K. L., Cowman, M. K., Telmer, P. G., Turley, E. A., & McCarthy, J. B. (2015) 'Hyaluronan, Inflammation, and Breast Cancer Progression', *Frontiers in immunology*, 6, 236. doi:10.3389/fimmu.2015.00236.

- Tao, L., Huang, G., Song, H., Chen, Y., dan Chen, L. (2017) 'Cancer associated fibroblasts: an essential role in the tumor microenvironment', *Oncology Letters*, 14(3), 2611–2620. doi:10.3892/ol.2017.6497
- Todaro, M., Gaggianesi, M., Catalano, V., Benfante, A., Iovino, F., Biffoni, M., Apuzzo, T., Sperduti, I., Volpe, S., Cocorullo, G., Gulotta, G., Dieli, F., De Maria, R., Stassi, G. (2014) 'CD44v6 is a marker of constitutive and reprogrammed cancer stem cells driving colon cancer metastasis' *Cell Stem Cell*, 14(3), 342–356. doi:10.1016/j.stem.2014.01.009.
- Wang, M., Zhao, J., Zhang, L., Wei, F., Lian, Y., Wu, Y., Gong, Z., Zhang, S., Zhou, J., Cao, K., Li, X., Xiong, W., Li, G., Zeng, Z., Guo, C. (2017) 'Role of tumor microenvironment in tumorigenesis', *Journal of Cancer*, 8(5), 761–773. doi:10.7150/jca.17648.
- Wang, Z., Tang, Y., Xie, L., Huang, A., Xue, C., Gu, Z., Wang, K., Zong, S. (2019) 'The prognostic and clinical value of CD44 in colorectal cancer: a meta-analysis', *Frontiers in Oncology*, 9, 309. doi:10.3389/fonc.2019.00309
- West, N. R., McCuaig, S., Franchini, F., & Powrie, F. (2015) 'Emerging cytokine networks in colorectal cancer. *Nature reviews. Immunology*, 15(10), 615–629. doi:10.1038/nri3896.
- Xu, C., Zhao, H., Chen, H., dan Yao, Q. (2015) 'CXCR4 in breast cancer: oncogenic role and therapeutic targeting', *Drug Design, Development and Therapy*, 9, 4953–4964. doi:/10.2147/DDDT.S84932.
- Yang, L., & Zhang, Y. (2017). Tumor-associated macrophages: from basic research to clinical application. *Journal of Hematology & Oncology*, 10(1), 58. doi:10.1186/s13045-017-0430-2.
- Yuen, E. Pui, N., dan Kin, T. (2017) 'Cancer stem cells and their microenvironment: biology and therapeutic implications', *Stem Cells International*, 2017, pp. 1-11. doi: 10.1155/2017/3714190.
- Zhao, L. H., Lin, Q. L., Wei, J., Huai, Y. L., Wang, K. J., Yan, H. Y. (2015) 'CD44v6 expression in patients with stage II or stage III sporadic colorectal cancer is superior to CD44 expression for predicting progression', *International Journal of Clinical and Experimental Pathology*, 8(1), pp. 692–701.
- Zhou, Y., Xia, L., Wang, H., Oyang, L., Su, M., Liu, Q., Lin, J., Tan, S., Tian, Y., Liao, Q., Cao, D. (2017) 'Cancer stem cells in progression of colorectal cancer', *Oncotarget*, 9(70), 33403–33415. doi:10.18632/oncotarget.23607.

Ziai, J., Gilbert, H. N., Foreman, O., Eastham-Anderson, J., Chu, F., Huseni, M., & Kim, J. M. (2018) "CD8+ T cell infiltration in breast and colon cancer: a histologic and statistical analysis", *PloS One*, 13(1), e0190158. doi:10.1371/journal.pone.0190158.