

DAFTAR PUSTAKA

- Abba, M.C., Zhong, Y., Lee, J., Kil, H., Lu, Y., Takata, Y., Melissa, S.S., Gaddis, S., Shen, J., Aldaz, C.M., 2016. DMBA induced mouse mammary kankers display high incidence of activating $\text{Pik3ca}^{\text{H1047}}$ and loss of function Pten mutations. *Oncotarget*. 7 (39): 64289-64299
- Ahmed, A.U., 2011. An overview of inflammation: mechanism and consequen. *Front. Biol.* 6(4): 274–281
- Akira, S., Uematsu, S., Takeuchi, O., 2006. Pathogen Recognition and Innate Immunity. *Cell*. 124 : 783-801.
- Alamsyah, F., Ajrina, I. N., Dewi, F. N. A., Iskandriarti, D., Prabandari., S. A., dan Taruno, W. P., 2015. Antiproliferative Effect of Electric Fields on Breast Kanker Cells In Vitro and In Vivo. *Indonesian Journal of Cancer Chemoprevention*. 6(3). Hal: 71-77.
- Alvarado, A, Lopes A.C., Faustino-Rocha A.I., Cabrita A.M.S, Ferreira R., Oliveira P.A., Colaço B. 2017. Prognostic factors in MNU and DMBA-induced mammary kankers in female rats. *Pathol Res Pract*. 213(5):441-446
- Amjed, G. & Al-Khaleel, M. 2018. AC Electrical Field for the Isolation of Cancer Cells. *International Conference on Information and Communication Systems (ICICS)*. 223-226
- Anonim. 2017. Types of Cancer Treatment. [online]. <https://www.cancer.gov/about-cancer/treatment/types>. Diakses pada 7 November 2018.
- Anonim. 2018. Side Effects of Cancer Treatment. [online]. <https://www.cancer.gov/about-cancer/treatment/side-effects>. Diakses pada 7 November 2018
- Anonim. 2010. *Cancer*. Swiss : World Health Organisation World Health Organisation. 2018. *Breast Cancer*. [online]. <http://www.who.int/cancer/prevention/diagnosis-screening/breast-cancer/en/>. Diakses pada 7 November 2018
- Anonim. 2015. What is cancer?. [online]. <https://www.cancer.gov/about-cancer/understanding/what-is-cancer>. Diakses pada 10 November 2018.
- Bendall, L. J., & Green, D. R. (2014). Autopsy of a cell. *Leukemia*, 28(6), 1341–1343.
- Bingle, L., Brown, N.J., Lewis, C.E., 2002. The role of tumour-associated macrophages in tumour progression: implications for new anticancer therapies. *Journal of Pathology*. 196 : 254-265
- Bernstam, F.M., Hung, M.C., 2006, Advances in Targeting Human Epidermal Growth Factor Receptor-2 Signaling for Cancer Therapy, *Clinical Cancer Research*, 12 (21) : 6326-6330
- Berstein, L.H., David G., Rucinski, J., Coifman, R.R. 2012. Converting Hematology Based Data into an Inferential Interpretation. *Hematology – Science and Practice*.
- Bignold, L.P., 2015. *Principles of cancers : translation approach to foundation*. London : Academic Press. p. 3



- Chatterjee, M., Janarthan, M., Manivannan, R., Rana, A., Chatterjee, M., 2010. Combinatorial effect of fish oil (Maxepa) and 1,25-dihydroxyvitamin D3 in the chemoprevention of DMBA-induced mammary carcinogenesis in rats. *Chemico-Biological Interactions*. 188 (1) : 102-110
- Cho, M.R., Thatte, H.S., Lee, R.C., Golan, D.E. 2000. Integrin-Dependent Human Macrophage Migration Induced by Oscillatory Electrical Stimulation. *Annals of Biomedical Engineering*. Vol. 28, pp. 234–243.
- Costa, M. Solanas, E., Escrich, 2002. Histopathologic characterization of mammary neoplastic lesions induced with 7,12-dimethylbenz()anthracene in the rat: a comparative analysis with human breast kankers, *Arch. Pathol. Lab. Med.* 126 : 915–927.
- Currier, N., Solomon, S. E., Demicco, E. G., Chang, D. L. F., Farago, M., Ying, H., ... Seldin, D. C. 2005. Oncogenic Signaling Pathways Activated in DMBA-Induced Mouse Mammary Tumors. *Toxicologic Pathology*, 33(6), 726–737.
- David, G.H., Linda S., 2011, Standardized Assessment of the HER2 Status in Breast Cancer by Immunohistochemistry, *Laboratory Medicine*, 42(8): Pages 459–467.
- Denisov, E. V., Skryabin, N. A., Gerashchenko, T. S., Tashireva, L. A., Wilhelm, J., Buldakov, M. A., Perelmuter, V. M. *et all.* 2017. Clinically relevant morphological structures in breast cancer represent transcriptionally distinct kanker cell populations with varied degrees of epithelial-mesenchymal transition and CD44+CD24- stemness. *Oncotarget*, 8(37), 61163–61180.
- Denkers, E.Y., Gazzinelli, R.T., 2007. *Protozoans in macrophage*. America : CRC Press Taylor and francis.
- Dive, A. M., Bodhade, A. S., Mishra, M. S., & Upadhyaya, N. 2014. Histological patterns of head and neck tumors: An insight to tumor histology. *Journal of oral and maxillofacial pathology : JOMFP*, 18(1), 58–68.
- Duffy, M.J., Harbeck, N., Nap, M., Molina, R., Nicolini, A., Senkus, E., Cardoso, F. 2017. Clinical use of biomarkers in breast cancer: Updated guidelines from the European Group on Kanker Markers (EGTM). *European Journal of Cancer*. 75 : 284-298.
- Epelman, S., Lavine, K.J., Randolph, G.J., 2014. Origin and Functions of Tissue Macrophages. *Immunity*. 41 (1): 21-35.
- Fatmasari, Hindana, 2018. Pengaruh medan listrik statis frekuensi 150 khz terhadap pertumbuhan nodul kanker payudara tikus (*Rattus norvegicus* berkenhout, 1769). Penelitian Seminar, Fakultas Biologi, Universitas Gadjah Mada.
- Feng, M., Feng, C., Yu, Z., Fu, Q., Ma, Z., Wang, F., Wang, F., Yu, L. 2015. Histopathological alterations during breast carcinogenesis in a rat model induced by 7,12-Dimethylbenz (a) anthracene and estrogen-progestogen combinations. *International journal of clinical and experimental medicine*, 8(1), 346-57.
- Freire, M. O., & Van Dyke, T. E. 2013. Natural resolution of inflammation. *Periodontology* 2000, 63(1), 149–164.
- Furth, R.V., 1992. *Mononuclear Phagocytes: Biology of Monocytes and Macrophages*. Netherlands : Springer-Science Bussines Media. p. 4



- Kirubba, A.S. P., Anburajan, M., Venkataraman, B., Akila, R., Sharath, D., & Raj, B. 2012. Evaluation of mammary cancer in 7,12-dimethylbenz(a)anthracene-induced Wister rats by asymmetrical temperature distribution analysis using thermography: a comparison with serum CEA levels and histopathology. *Journal of biomedicine & biotechnology*, 2012, 786417.
- Ghoncheh, M., Z. Pournamdar, dan H. Salehiniya. 2016. Incidence and Mortality and Epidemiology of Breast Cancer in the World. *Asian Pacific Journal of Cancer Prevention*. 17. Hal 43.
- Giladi, M., Schneiderman, R. S., Voloshin, T., Porat, Y., Munster, M., Blat, R., ... Palti, Y. (2015). Mitotic Spindle Disruption by Alternating Electric Fields Leads to Improper Chromosome Segregation and Mitotic Catastrophe in Cancer Cells. *Scientific reports*, 5.
- Hicks D.G., Kulkarni S. 2008, Trastuzumab as adjuvant therapy for early breast cancer: The importance of accurate human epidermal growth factor receptor 2 testing. *Arch Pathol Lab Med* . 32:1008–1015.
- Hsu, J. L., & Hung, M. C. 2016. The role of HER2, EGFR, and other receptor tyrosine kinases in breast cancer. *Cancer metastasis reviews*, 35(4), 575–588.
- Heffelfinger, S.C., Gear, R.B., Taylor, K., *et al.*,... 2000. DMBA-Induced Mammary Pathologies are Angiogenic In Vivo and In Vitro. *Laboratory investigation*. Vol. 80, No. 4, p. 485
- Ivashkiv, L.B. 2011. Inflammatory signaling in macrophages: transitions from acute to toleranta and alternative activation states. *European Journal of Immunology* 41: 2477–2481.
- Idikio, H. A. 2011. Human cancer classification: a systems biology- based model integrating morphology, cancer stem cells, proteomics, and genomics. *Journal of Cancer*, 2, 107–115.
- Jacobson, M.D., McCarthy, N., 2002. *Apoptosis the molecular biology of programmed cell death*. New York: Oxford University Press. p. 4-5
- Hoare, J.I., Rajnicek, A.M., McCaig, C.D., Barker, R.N., Wilson, H.M., 2016, Electric fields are novel determinants of human macrophage functions. *Jurnal of Leukocyte Biology*. 99 (6): 1141-51.
- Kaune W. T. 1993. Introduction to power-frequency electric and magnetic fields. *Environmental health perspectives*, 101 Suppl 4(Suppl 4), 73–81.
- Kedrin, D., J. Wyckoff, P. Boimel, S. Coniglio, N. Hynes. 2009. ErbB1 and ErbB2 Have Distinct Function in Kanker Cell Invasion and Intravasation. *Clin Cancer Res*. 15 (11) : 3733-3739.
- Kirsch, D. L., dan J. A. Marksberry. 2015. *Bioelectromagnetic and Subtle Energy Machine* 2nd ed. “The Evolution of Cranial Electrotherapy Stimulation for Anxiety, Insomnia, Depression, and Pain and Its Potential for Other Indications” dalam Rosch, P. I. CRC Press. Boca Raton. Hal: 206.
- Kirson, E. D., Dbalý, V., Tovarys, F., Vymazal, J., Soustiel, J. F., Itzhaki, A., Mordechovich, D., Steinberg-Shapira, S., Gurvich, Z., Schneiderman, R., Wasserman, Y., Salzberg, M., Ryffel, B., Goldsher, D., Dekel, E., ... Palti, Y. 2007. Alternating electric fields arrest cell proliferation in animal kanker models and human brain kankers. *Proceedings of the National Academy of Sciences of the United States of America*, 104(24), 10152-7.
- Kirson, E. D., Z. Gurvich, R. Schneiderman, E. Dekel, A. Itzhaki, Y. Wasserman, R. Schatzberger, dan Y. Palti. 2004. Disruption of Cancer Cell Replication by

- Alternating Electric Fields. *Journal of Experimental therapeutics, Molecular Targets, and Chemical Biology*. 64. Hal: 3288-3295.
- Lat, T. & Paul, M. 2019. Malignant Effusion. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2019 Jan-. <https://www.ncbi.nlm.nih.gov/books/NBK519522/>. Diakses pada tanggal 28 Juni 2019
- Lee, H. S., Stachelek, S. J., Tomczyk, N., Finley, M. J., Composto, R. J., & Eckmann, D. M. 2013. Correlating macrophage morphology and cytokine production resulting from biomaterial contact. *Journal of biomedical materials research. Part A*, 101(1), 203–212.
- Líška, J., Brtko, J., Dubovický, M., Macejová, D., Kissová, V., Polák, Š., & Ujházy, E. 2016. Relationship between histology, development and kankerigenesis of mammary gland in female rat. *Experimental animals*, 65(1), 1–9.
- Lodish H, Berk A, Zipursky SL, *et al.* 2000. *Molecular Cell Biology*. 4th edition. New York: W. H. Freeman. Section 20.4, Receptor Tyrosine Kinases and Ras. <https://www.ncbi.nlm.nih.gov/books/NBK21720/>
- Makki. 2015. Diversity of Breast Carcinoma: Histological Subtypes and Clinical Relevance. *Clinical Medicine Insights: Pathology*. 8 23–31
- Mills, C.D., 2012. M1 and M2 Macrophages: Oracles of Health and Disease. *Critical Reviews in Immunology*. 32 (6): 463–88.
- McWhorter, F. Y., Wang, T., Nguyen, P., Chung, T., & Liu, W. F. 2013. Modulation of macrophage phenotype by cell shape. *Proceedings of the National Academy of Sciences of the United States of America*, 110(43), 17253–17258.
- Medrek, C., Pontén, F., Jirström, K., & Leandersson, K. 2012. The presence of kanker associated macrophages in kanker stroma as a prognostic marker for breast cancer patients. *BMC cancer*, 12, 306.
- Murphy, D. A., & Courtneidge, S. A. 2011. The 'ins' and 'outs' of podosomes and invadopodia: characteristics, formation and function. *Nature reviews. Molecular cell biology*, 12(7), 413–426.
- Moi, L. L., Flångeng, M. H., Gjerde, J., Madsen, A., Røst, T. H., Gudbrandsen, O. A., ... Mellgren, G. 2012. Steroid receptor coactivators, HER-2 and HER-3 expression is stimulated by tamoxifen treatment in DMBA-induced breast cancer. *BMC cancer*, 12, 247.
- Newman, M. S., B. Tierney, dan S. Veeraraghavan. 1988. *The chemistry and Biology of Benz[a] anthracenes*. Cambridge University Press. Cambridge. Hal: 84 dan 101.
- Papaconstatinou, A.D., Shanmugam, I., Shan, L., Schroeder, I.S., Qui, C., Yu, M., Snyderwine, E.G., 2006. Gene expression profiling in the mammary gland of rats treated with 7,12-dimethylbenz[a]anthracene. *Int. J. Cancer*. 118: 17–24
- Petri, A. K., Schmiedchen, K., Stunder, D., Dechent, D., Kraus, T., Bailey, W. H., & Driessen, S. (2017). Biological effects of exposure to static electric fields in humans and vertebrates: a systematic review. *Environmental health : a global access science source*, 16(1), 41.
- Pichler, M., Hutterer, G.C., Chromecki, T.F., Jesche, J., Kampel-Kettner, K., Rehak, P., Pummer, K., Zigeuner, R. 2012. Histologic Tumor Necrosis Is an

- Independent Prognostic Indicator for Clear Cell and Papillary Renal Cell Carcinoma. *Am J Clin Pathol.* 137: 283–289.
- Pugalendhi, P., Manoharan, S., 2010. Chemoresentive potential of genistein and daidzein n combination during 7,12-dimethylbenz(a)anthracene (DMBA) induced mammary carcinogenesis in Sprague-dawley rats. *Pakistan Journal of Biology Science.* 13 (6) : 279-286
- Pello, J. I. M., 2018. Pengaruh medan listrik statis terhadap proliferasi dan kematian sel pada jaringan kanker payudara tikus (*Rattus norvegicus* berkenhout, 1769) galur sprague dawley. Penelitian Skripsi, Fakultas Biologi, Universitas Gadjah Mada.
- Rini, C., Edi, W., R.M. Loekito, 2011. Peranan Curcumin terhadap Proliferasi, Apoptosis dan Diferensiasi Hepatosit Mice Balb/C yang Dipapar dengan Benzapyrene. *J.Exp. Life Sci.* Vol. 1 No. 2
- Ross., J.S., Slodkowska E.A., Symmans W.F.,... et al. 2009. The HER-2 receptor and breast cancer: Ten years of targeted anti-HER-2 therapy and personalized medicine. *Oncologist* .14:320–368.
- Saqib, U., Sarkar, S., Suk, K., Mohammad, O., Baig, MS, & Savai, R. (2018). Fitokimia sebagai modulator makrofag M1-M2 dalam peradangan. *Oncotarget* , 9 (25), 17937-17950
- Subowo, 2009. *Histologi Umum edisi 2*. Jakarta : CV. Sagung Seto
- Slamon, D., Godolphin, W., Jones, L., Holt, J., Wong, S., Keith, D.,...*et, al.* 1989. Studies of the HER-2/neu proto-oncogene in human breast and ovarian cancer. *Science*, 244(4905), 707–712.
- Sobri, M. 2017. Pengantar teknologi informasi konsep dan teori. Penerbit Andi : Yogyakarta. Hal. 111
- Tashireva, L.A., Denisov, E.V., Gerashchenko, T.S., Pautova, D.N., Buldakov, M.A., Zavyalova, M.V., Kzhyshkowska, J., Cherdyntseva, N.V., Perelmuter, V.M. 2017. Intrakankeral heterogeneity of macrophages and fibroblasts in breast cancer is associated with the morphological diversity of kanker cells and contributes to lymph node metastasis. *Immunobiology.* 222:631–40
- Tellez, D., Maschenka, B., Irene, O.H., *et all.*, 2018. Whole-Slide Mitosis Detection in H&E Breast Histology Using PHH3 as a Reference to Train Distilled Stain-Invariant Convolutional Networks," in IEEE Transactions on Medical Imaging, vol. 37, no. 9, pp. 2126-2136
- Tucker, D. K., Foley, J. F., Hayes-Bouknight, S. A., & Fenton, S. E. 2016. Preparation of High-quality Hematoxylin and Eosin-stained Sections from Rodent Mammary Gland Whole Mounts for Histopathologic Review. *Toxicologic pathology*, 44(7), 1059–1064
- Ueno, T., Toi, M., Saji, H., Muta, M., Bando, H., Kuroi, K., Koike, M., Inadera, H., Matsushima, K., 2000. Significance of Macrophage Chemoattractant Protein-1 in Macrophage Recruitment, Angiogenesis, and Survival in Human Breast Cancer. *Clinical Cancer Research.* 6 : 3282-3289
- Varghese, F., Bukhari, A. B., Malhotra, R., & De, A. (2014). IHC Profiler: an open source plugin for the quantitative evaluation and automated scoring of immunohistochemistry images of human tissue samples. *PloS one*, 9(5), e96801.



- Veta, M., van Diest, P. J., Jiwa, M., Al-Janabi, S., & Pluim, J. P. (2016). Mitosis Counting in Breast Cancer: Object-Level Interobserver Agreement and Comparison to an Automatic Method. *PloS one*, 11(8), e0161286.
- Vyberg, M., Nielsen, S., Røge, R., Sheppard, B., Ranger-Moore, J., Walk, E., ... Teichgräber, V. 2015. Immunohistochemical expression of HER2 in breast cancer: socioeconomic impact of inaccurate tests. *BMC health services research*, 15, 352
- Widjajanto, Edi. 2005. Peranan makrofag pada proliferasi, diferensiasi dan apoptosis pada proses hematopoiesis (penelitian pada limpa janin tikus dan aspirat sumsum tulang manusia). *Jurnal Kedokteran Brawijaya*, Vol. XXI, No. 1
- Yu, D. & Hung, M., 2000. Overexpression of ErbB2 in cancer and ErbB2-targeting strategies. *Oncogene*, 19 , 6115-6121.
- Zitvogel, L., Apetoh, L., Ghiringhelli, F., André, F., Tesniere, A., & Kroemer, G. 2008. The anticancer immune response: indispensable for therapeutic success?. *The Journal of clinical investigation*, 118(6), 1991–2001.
- Zhu, J., & Paul, W. E. 2008. CD4 T cells: fates, functions, and faults. *Blood*, 112(5), 1557–1569.