

DAFTAR PUSTAKA

- Abdelhaleem, E.F., Abdelhameid, M.K., Kassab, A.E., Kandeel, M.M., 2017. Design and synthesis of thienopyrimidine urea derivatives with potential cytotoxic and pro-apoptotic activity against breast cancer cell line MCF-7. *European Journal of Medicinal Chemistry*, 2017, pp. 1-66.
- Aertgeerts, K., Skene, R., Yano, J., Sang, B.C., Zou, H., Snell, G., Jennings, A., Iwamoto, K., Habuka, N., Hirokawa, A., Ishikawa, T., Tanaka, T., Miki, H., Ohta, Y., Sogabe, S., 2011. Structural Analysis of The Mechanism of Inhibition and Allosteric Activation of the Kinase Domain of HER2 Protein. *The Journal of Biological Chemistry*, 286(21), pp. 18756-18765.
- Aggarwal, V., Tuli, H.S., Varol, A., Thakral, F., Yarer, M.B., Sak, K., Varol, M., Jain, A., Khan, M.A., Sethi, G., 2019. Role of reactive oxygen species in cancer progression: Molecular mechanism and recent advancements. *Biomolecules*, 9(735), pp.1-26.
- Airley, R., 2009. *Cancer chemotherapy, Basic Science to the Clinic*. Oxford: John Wiley and Sons Ltd, pp. 67 – 111.
- Alanazi, I.O., and Khan, Z., 2016. Understanding EGFR Signaling in Breast Cancer and Breast Cancer Stem Cells: Overexpression and Therapeutic Implications. *Asian Pacific Journal of Cancer Prevention*, 17(2), pp. 445-453
- Al-Hajj, M., 2003. Prospective identification of tumorigenic breast cancer cells. *Proceeding of the National Academy of Science of the United States of America (PNAS)*, 100, pp. 3983-3988.
- American Cancer Society, 2011. Breast cancer: What you need to know-Now.
- Asati, V., Mahapatra, D. K. and Bharti, S. K., 2017. K-Ras and its inhibitors towards personalized cancer treatment : Pharmacological and structural perspectives. *European Journal of Medicinal Chemistry*, 125 (2017), pp. 299–314.
- Badisa, R.B., Darling-Reed, S.F., Joseph, P., Cooperwood, J.S., Latinwo, L.M., Goodman, C.B., 2009. Selective cytotoxic activities of two novel synthetic drugs on human breast carcinoma MCF-7 cells. *Anticancer Research*, 29(8), pp. 2993-2996.
- Banerjee, K., and Resat, J., 2016. Constitutive activation of STAT3 in breast cancer cells: A review. *International Journal of Cancer*, 138, pp. 2570-2578.
- Barbosa, F.A.R., Siminski, T., Canto, R.F.S., Almeida, G.M., Mota, N.S.R.S., Ourique, F., Pedrosa, R.C., Braga, A.L., 2018. Novel pyrimidinic selenourea induces DNA damage, cell cycle arrest, and apoptosis in human breast carcinoma. *European Journal of Medicinal Chemistry*, 2018, pp. 1-55.

- Barosi, G., Besses, C., Birgegard, G., Briere, J., Cervantes., F., Finazzi, G., Gisslinger, H., Grisshammer, M., Gugliotta, L., Harrison, C., Hasselbalch, H., Lengfelder, E., Reilly, J.T., Michiels, J.J., and Barbui, T., 2009. A unified definition of clinical resistance/intolerance to hydroxyurea in essential thrombocythemia: results of a consensus process by an international working group. *Bioorganic & Medicinal Chemistry Letters*, 19, pp. 755-758.
- Basakran, N.S., 2015. CD44 as a potential diagnostic tumor marker. *Saudi Medical Journal*, 36(3), pp. 273-279.
- Biolegend, 2020. FITC Annexin V Apoptosis Detection Kit wit PI. Versi 3. Available online: <https://www.biolegend.com/en-gb/global-elements/pdf-popup/fitc-annexin-v-apoptosis-detection-kit-with-pi-8230?filename=FITC%20Annexin%20V%20Apoptosis%20Detection%20Kit%20with%20PI.pdf&pdfgen=true> (diakses: 18 Juni 2020).
- Bhattacharya, S., 2015. Reactive Oxygen Species and Cellular Defense System, In: V. Rani and U.C.S. Yadav, eds. *Free Radicals in Human Health and Disease*. India: Springer India, pp. 17-29.
- Birben, E., Sahiner, U.M., Sackesen, C., Erzurum, S., and Kalayci, O., 2012. Oxidative Stress and Antioxidant Defense. *WAO Journal*, 5, pp. 9-19.
- Brand, T.M., Lida, M., Li, C., Wheeler, D.L., 2011. The nuclear epidermal growth factor receptor signaling network and its role in cancer. *Discovery Medicine*, 12(66), pp. 419-432.
- Bruice, P. Y., 2014. *Organic Chemistry*, 7th Ed, Prentice Hall, Upper Saddle River, NJ, pp: 480–699.
- Carpenter, R. L., and Lo, H., 2014. STAT3 Target Genes Relevant to Human Cancers. *Cancers*, 6, pp. 897–925.
- CCRC, 2009. Prosedur Tetap Cancer Chemoprevention Research Center Fakultas Farmasi UGM.
- Cell Signaling Technology, 2017. A Guide to Successful Immunofluorescence. Available online : <http://media.cellsignal.com/www/pdfs/resources/product-literature/application-if-brochure.pdf> (diakses: 19 Agustus 2020).
- Chen., P.P., Li, C.Y., Han, Y., Chen, X.Y., Liu, H.L., Du, Y.M., Su, S.W., Z, Y.J., 2015. N-[4-(4,6-Dimethyl-2-pyrimidinyloxy)-3-methylphenyl]-N'-[2-(dimethylamino)] benzoylurea induces cell-cycle arrest and apoptosis in human cancer cells. *Anti-Cancer Drugs*, 26(6), pp. 620-631.
- Chen, J., Zeng, F., Forrester, S.J., Eguchi, S., Zhang, M.Z., Harris, R.C., 2016. Expression and function of the epidermal growth factor receptor in physiology and disease. *Physiological Reviews*, 96, pp. 1025-1069.

- Chu, B., Liu, F., Li, L., Ding, C., Chen, K., Sun, Q., Shen, Z., Tan, C., Jiang, Y., 2015. A benzimidazole derivative exhibiting antitumor activity blocks EGFR and HER2 activity and upregulates DR5 in breast cancer cells. *Cell Death and Disease*, 6, e1686. pp.1-10.
- Chung, S.S., Giehl, N., Wu, Y., Vadgama, J.V., 2014. STAT3 activation in HER2-overexpressing breast cancer promotes epithelial-mesenchymal transition and cancer stem cell traits. *International Journal of Oncology*, 44, pp. 403-411
- Dai, X., Li, T., Bai, Z., Yang, Y., Liu, X., Zhan, J. and Shi, B., 2015. Breast cancer intrinsic subtype classification. clinical use and future trends. *American Journal of Cancer Research*, 5(10), pp. 2929–2943.
- Dinaryanti, A., Karsari, D., Ertanti, N., Ihsan, I., Ariyanti, A., Rantam, F.A., Aulanni'am, A., Purwati, 2019. Isolation and characterization of skin derived mesenchymal stem cell (SMSCs) from New Zealand rabbit, *oryctolagus cuniculus*: a in vitro study. *Biochemical and Cellular Archives*, 19(2), pp. 4797-4801.
- Dipiro, J. T., Talbert, R. L., Yee, G. C., Matzke, G. R., Wells, B. G., Posey, L. M., 2016. *Pharmacotherapy: A Pathophysiologic Approach*. 10th ed. New York: McGraw-Hill.
- Dittmann, K., Mayer, C., Czemann, S., Huber, S.M., Rodemann, H.P., 2017. New roles for nuclear EGFR in regulating the stability and translation of mRNAs associated with VEGF-signaling. *Plos One*, 12(12), e0189087, pp. 1-21.
- Diyah, N.W., Siswandono, Hardjono, S., Purwanto, B.T., 2013. Pemodelan Molekul dan Hubungan Kuantitatif Struktur-Aktivitas Sitotoksik Turunan Benzoilurea Sebagai Antitumor. *Berkala Ilmiah Kimia Farmasi*, 2(2), hal. 20-27.
- Diyah, N.W., Ekowati, J., Siswandono, 2014. Synthesis And Antitumor Activity Evaluation of *N,N'-dibenzoyl-N,N'-diethylurea* Against Human Breast Cancer Cell Line (MCF-7). *International Journal of Pharmacy and Pharmaceutical Sciences*. 6(2), pp. 315-318.
- Diyah, N.W., Purwanto, B.T., Siswandono, 2015. Synthesis, molecular docking and antitumor activity of *N,N'-carbonylbis(N-ethylbenzamide)*. *World Journal of Pharmaceutical Sciences*. 3(7), pp. 1324-1329.
- ECACC-European Collection of Authenticated Cell Cultures, 2016. Cell line profile: Vero (catalogue no. 84113001).
- Eckert, L.B., Repasky, G.A., Ulku, A.S., McFall, A., Zhou, H., Sartor, C.I., Der, C.J., 2004. Involvement of Ras activation in human breast cancer cell signaling, invasion, and anoikis. *Cancer Research*, 64, pp. 4585-4592.

- Elkablawy, M.A., Albasri, A.M., Mohammed, R.A., Hussainy, A.S., Nouh, M.M., Alhujaily, A.S., 2016. Ki67 expression in breast cancer. *Saudi Medical Journal*, 37(2), pp. 137-141.
- Eustace, A.J., Conlon, N.T., McDermott, M.S.J., Browne, B.C., O'Leary, P., Holmes FA, et al., 2018. Development of acquired resistance to lapatinib may sensitise HER2-positive breast cancer cells to apoptosis induction by obatoclax and TRAIL. *BMC Cancer*, 18, 965.
- Farida, A., Wresnindyatsih, Yuliantini, V., 2019. Correlation CD24 and CD44 expression against aggressiveness breast cancer. In: IOP Conference Series, *Journal of Physics: Conf. Series* 1246 012012, pp. 1-6.
- Faridi, N., Bathaie, S.Z., Abroun, S., Farzaneh, P., Karbasian, H., Tamanoi, F., Mohagheghi, M.A., 2018. Isolation and characterization of the primary epithelialbreast cancer cells and the adjacent normal epithelial cells from Iranian women's breast cancer tumors. *Cytotechnology*, 70, pp. 625–639.
- Ferreira, P.M.P., and Pessoa, C., 2017. Molecular biology of human epidermal receptors, signaling pathways and targeted therapy against cancers: new evidences and old challenges. *Brazilian Journal of Pharmaceutical Sciences*, 53(2), e16076, pp.1-17.
- Galie, M., 2019. RAS as supporting actor in breast cancer. *Frontiers in Oncology*, 9(1199), pp. 1-9.
- GLOBOCAN, The Global Cancer Observatory, 2018. Available online: <https://gco.iarc.fr/today/data/factsheets/populations/360-indonesia-factsheets.pdf> (diakses: 6 December 2019).
- Handala, L., Fiore, T., Rouille, Y., Helle, F., 2019. QuantIF: an imageJ macro to automatically determine the percentage of infected cells after immunofluorescence. *Viruses*, 11(165), pp. 1-4.
- Hashmi, A.A., Hashmi, K.A., Irfan, M., Khan, S.M., Edhi, M.M., Ali, J.P., Hashmi, S.K., Asif, H., Faridi, N., Khan, A., 2019. Ki67 index in intrinsic breast cancer subtypes and its association with prognostic parameters. *BMC Research Notes*, 12(605), pp. 1-5.
- Hassan, M., Watari, H., AbuAlmaaty, A., Ohba, Y., Sakuragi, N., 2014. Apoptosis and molecular targeting therapy in cancer. *BioMed Research International*, 2014, pp. 1-23.
- Hawthorne, V.S., Huang, W.C., Neal, C.L., Tseng, L.M., Hung, M.C., Yu, D., 2009. ErbB2-mediated Src and STAT3 Activation Leads to Transcriptional Upregulation of p21^{Cip1} and Chemoresistance in Breast Cancer Cells. *Molecular Cancer Research*, 7(4), pp. 592-600

- Hincliffe, 2008. *Molecular Modelling for Beginners*. 2nd ed. Chichester: John Wiley and Sons Ltd.
- Huang, M., Li, Y., Zhang, H., Nan, F., 2010. Breast cancer stromal fibroblasts promote the generation of CD44⁺CD24⁻ cells through SDF-1/CXCR4 interaction. *Journal of Experimental & Clinical Cancer Research*, 29(80), pp. 1-10.
- Iqbal, N., and Iqbal, N., 2014. Human epidermal growth factor receptor 2 (HER2) in cancers: overexpression and therapeutic implications. *Molecular Biology International*, 2014, pp. 1-9.
- International Agency for Research on Cancer, World Health Organization. Available online: <https://www.who.int/cancer/PRGlobocanFinal.pdf>, (diakses: 18 November 2019).
- Jaggupilli,A., and Elkord, E., 2012. Significance of CD44 and CD24 as cancer stem cell markers: an enduring ambiguity. *Clinical and Developmental Immunology*, 2012, pp. 1-11.
- Jaswir, I., Noviendri, D., Salleh, H.M., Taher, M., Miyashita, K., 2011. Isolation of fucoxanthin and fatty acids analysis of *Padina australis* and cytotoxic effect of fucoxanthin on human lung cancer (H1299) cell lines. *African Journal of Biotechnology*, 10(81) pp. 18855-18862.
- Jensen, F., 2007. *Introduction to Computational Chemistry*, 2nd Ed, Chichester: John Wiley & Sons Ltd.
- Jensen, E.C., 2013. Quantitative analysis of histological staining and fluorescence using imageJ. *The Anatomical Record*, 296, pp. 378-381.
- Jing, X., Cui, X., Liang, H., Hao, C., Yang, Z., Li, X., Yang, X., Han, C., 2018. CD24 is a potential biomarker for prognosis in human breast carcinoma. *Cellular Physiology and Biochemistry*, 48, pp. 111-119.
- Juergens, R. A., Bratman, S. V., Tsao, M., Laurie, S. A., Kuruvilla, S., Razak, A. R. A. and Hansen, A. R., 2017. Biology and Patterns of Response to EGFR-Inhibition in Squamous Cell Cancers of the Lung and Head & Neck. *Cancer Treatment Reviews*, 2017, pp.1-41.
- Katz, M., Amit., I., Yarden, Y., 2007. Regulation of MAPKs by growth factors and receptor tyrosine kinases. *Biochimica et Biophysica Acta*, 1773, pp. 1161-1176.
- Kransinskas, A.M., 2011. EGFR signaling in colorectal carcinoma. *Pathology Research International*, volume 2011, pp.1-6.
- Kresno, S. B., 2011. Ilmu Dasar Onkologi. Edisi ke-2. Jakarta: Fakultas Kedokteran Universitas Indonesia, hal. 1, 12-16, 70-75.

- Kristiansen, G., Winzer, K.J., Mayordomo, E., Bellach, J., Schluns, K., Denkert, C., Dahl, E., Pilarsky, C., Altevogt, P., Guski, H., Dietel, M., 2003. CD24 expression is a new prognostic marker in breast cancer. *Clinical Cancer Research*, 9, pp. 4906-4913.
- Leslie, K., Lang, C., Devgan, G., Azare, J., Berishaj, M., Gerald, W., Kim, Y. B., Paz, K., Darnell, J. E., Albanese, C., Sakamaki, T., Pestell, R. and Bromberg, J., 2006. Cyclin D1 Is Transcriptionally Regulated by and Required for Transformation by Activated Signal Transducer and Activator of Transcription 3. *Cancer Research*, 66(5), pp. 2544–2553.
- Li, H.Q., Yan, T., Yang, Y., Shi, L., Zhou, C.F., Zhu, H.L., 2010. Synthesis and structure-activity relationships of N-benzyl-N-(X-2-hydroxybenzyl)-N'-phenylureas and thioureas as antitumor agents. *Bioorganic & Medicinal Chemistry*, 18, pp. 305-313.
- Li, L., Zhao, G.D., Shi, Z., Qi, L.L., Zhou, L.Y., Fu, Z.X., 2016. The Ras/Raf/MEK/ERK signaling pathway and its role in the occurrence and development of HCC (Review). *Oncology Letters*, 12, pp. 3045-3050.
- Li, W., Ma, H., Zhang, J., Zhu, L., Wang, C., Yang, Y., 2017. Unraveling the roles of CD44/CD24 and ALDH1 as cancer stem cell markers in tumorigenesis and metastasis. *Scientific Reports*, 7(13856), pp. 1-15.
- Lin, X. Y., He, C. D., Xiao, T., Jin, X., Chen, J., Wang, Y. K., Chen, H. D., 2009. Acitretin induces apoptosis through CD95 signalling pathway in human cutaneous squamous cell carcinoma cell line SCL-1. *Journal of cellular and molecular medicine*, 13(9a), pp. 2888-2898.
- Liu, J., and Wang, Z., 2015. Increased Oxidative Stress as a Selective Anticancer Therapy. *Oxidative Medicine and Cellular Longevity*, volume 2015, pp. 1-12.
- Lobba, A.R.M., Forni, M.F., Carreira, A.C.O., Sogayar, M,C., 2012. Differential Expression of CD90 and CD14 stem cell markers in malignant breast cancer cell lines. *Cytometry*, 81A, pp. 1084-1091.
- Ma'at, S., 2011. *Teknik Dasar Kultur Sel.* Surabaya: Airlangga University Press, hal. 3-19, 27, 55-61, 64-65.
- Ma, J.H., Qin, L., Li, X., 2020. Role of STAT3 signaling pathway in breast cancer. *Cell Communication and Signaling*, 18(33), pp. 1-13.
- Madaan, K., Kaushik, D., Verma, T., 2012. Hydroxyurea: a key player in cancer chemotherapy. *Journal Expert Review of Anticancer Therapy*, 12(1), pp. 19-29.
- McMurry, J.M., 2011. *Fundamental of Organic Chemistry*. 7th Ed. France: Brooks/Cole, pp. 349.

- Mulyani, N. S., dan Nuryani, 2013. *Kanker payudara dan PMS pada kehamilan.* Yogyakarta: Nuha Medika.
- Nami B, Maadi H, Wang Z., 2018. Mechanisms underlying the action and synergism of trastuzumab and pertuzumab in targeting HER2-positive breast cancer. *Cancers*, 10 (342), pp. 1-21.
- Nikhil, K., Sharan, S., Chakraborty, A., Bodipati, N., Peddinti, R.K., Roy, P., 2014. Role of isothiocyanate conjugate of pterostilbene on the inhibition of MCF-7 cell proliferation and tumor growth in Ehrlich ascitic cell induced tumor bearing mice. *Experimental Cell Research*, 320, pp. 311-328.
- Nushtaeva, A.A., Stepanov, G.A., Semenov, D.V., Juravlev, E.S., Balahonova, E.A., Gerasimov, A.V., Sidorov, S. V., Savelyev, E.I., Kuligina, E.V., Richter, V.A., Koval, O.A., 2018. Characterization of primary normal and malignant breast cancer cell and their response to chemotherapy and immunostimulatory agents. *BMC Cancer*, 18(728), pp. 1-11.
- Panieri, E., and Santoro, MM., 2016. ROS homeostasis and metabolism : a dangerous liaison in cancer cells. *Cell Death and Disease*, 7, pp. 1-12.
- Pavia, D.L, Lampman, G.M., Kriz, G.S., James, R., Vyvyan, J.R., 2015. *Introduction of Spectroscopy*. 5th Ed. Boston: Cengage Learning.
- Phuc, P.V., Khuong, T.T.T., Dong, L.V., Kiet, T.D., Giang, T.T., Ngoc, P.K., 2010. Isolation and characterization of breast cancer stem cells from malignant tumours in vietnamese women. *Journal of Cell and Animal Biology*, 4(12), pp. 163-169.
- Plavetic, N.D., Kulic, A., Vrbanec, D., 2012. Role of HER2 signaling pathway in breast cancer : biology, detection and therapeutical implications. *Periodicum Biologorum*, 114(4), pp. 505-510.
- Prabha, A. G. T., and Sekar, D., 2017. Deciphering the molecular signaling pathways in breast cancer pathogenesis and their role in diagnostic and treatment modalities. *Gene Reports*, doi: <http://dx.doi.org/10.1016/j.genrep.2017.01.003>.
- Prenzel, N., Fisher., O.M., Streit, S., Ullrich, H., 2001. The epidermal growth factor receptor family as a central element for cellular signal transduction and diversification. *Endocrine-Related Cancer*, 8, pp. 11-31.
- Qian, Q., Chen, W., Cao, Y., Cao, Q., Cui, Y., Li, Y., Wu, J., 2019. Targeting reactive oxygen species in cancer via chinese herbal medicine. *Oxidative Medicine and Cellular Longevity*, 2019, pp. 1-23.
- Ragab, H.M., Samy, N., Afify, M., Maksoud, N.A.E., Shaaban, H.M., 2018. Assessment of Ki-67 as a potential biomarker in patients with breast cancer. *Journal of Genetic Engineering and Biotechnology*, 16, pp. 479-484.

- Rai, Y., Pathak, R., Kumari, N., Sah, D.K., Pandey, S., Kalra, N., Soni, R., Dwarakanath, B.S., BHATT, A.N., 2018. Mitochondrial biogenesis and metabolic hyperactivation limits the application of MTT assay in the estimation of radiation induced growth inhibition. *Scientific Reports*, 8(1531), pp. 1-15.
- Rang, H. P., Dale M. M., & Ritter J. M., 2016. *Pharmacology*. 8th Ed, Churchill Livingstone, USA.
- Rashidi, M., Seghatoleslam, A., Namavari, M., Amiri, A., Fahmidehkar, M.A., Ramezani, A., Eftekhar, E., Hosseini, A., Erfani, N., Fakher, S., 2017. Selective cytotoxicity and apoptosis-induction of Cyrtopodium scabrum extract against digestive cancer cell lines. *International Journal of Cancer Management*, 10(5):e8633, pp. 1-7.
- Riesco, A., Santos-Buitrago, B., Rivas, J.D.L., Knapp, M., Santos-Garcia, G., Talcott, C., 2017. Epidermal Growth Factor Signaling towards Proliferation: Modeling and Logic Inference Using Forward and Backward Search. *Biomed Research International*, 2017, pp. 1-11.
- Scaltriti, M., and Baselga, J., 2006. The epidermal growth factor receptor pathway: a model for targeted therapy. *Clinical Cancer Research*, 12(18), pp. 5268-5272.
- Schroeder, R.L., Steven, C.L., Sridhar, J., 2014. Small Molecule Tyrosine Kinase Inhibitor of ErbB2/HER2/Neu in the Treatment of Aggressive Breast Cancer. *Molecules*, 19, pp. 15196-15212.
- Segovia-Mendoza, M., Gonzalez-Gonzalez, M.E., Barrera, D., Diaz, L., Garcia-Becerra, R., 2015. Efficacy and mechanism of action of the tyrosine kinase inhibitors gefitinib, lapatinib and neratinib in the treatment of HER2-positive breast cancer: preclinical and clinical evidence. *American Journal of Cancer Research*, 5(9), pp. 2531-2561.
- Shah, D., and Osipo, C., 2016. Cancer stem cells and HER2 positive breast cancer: The story so far. *Genes & Diseases*, 3 (2016), pp. 114-123.
- Simanshu, D. K., Nissley, D. V and McCormick, F., 2017. RAS Proteins and Their Regulators in Human Disease. *Cell*, 170(1), pp. 17–33.
- Simper, N. B., Jones, C. L., MacLennan, G. T., Montironi, R., Williamson, S. R., Osunkoya, A. O., Wang, M., Zhang, S., Grignon, D. J., Eble, J. N., Tran, T., Wang, L., Ann, L., Ba, B., Ajcp, H. T., and Cheng, L., 2015. Basal cell carcinoma of the prostate is an aggressive tumor with frequent loss of PTEN expression and overexpression of EGFR. *Human Pathology*, 2015, pp. 1-8.
- Singh, M., and Jadhav, H. R., 2017. Targeting non-small cell lung cancer with small-molecule EGFR tyrosine kinase inhibitors. *Drug Discovery Today*, 2017, pp.1-12.

- Silverstein, R. M., Webster F. X., Kiemle D. J., 2015, *Spectrometric Identification of Organic Compounds*. 8th Ed, John Wiley and Sons. Inc.
- Siswandono, 2016. *Kimia Medisinal*. Edisi ke-2. Surabaya: Airlangga University Press.
- Siswandono, 2003. The Synthesis of Benzoylurea and the Activity Test of Central Nervous System Depressant in Mus Musculus. *Jurnal Biosains Pascasarjana*, 5(1), pp. 10–16.
- Sirkisoon, S.R., Carpenter, R.L., Rimkus, T., Miller, L., Barlow, L.M., Lo, H.W., 2016. EGFR and HER2 signaling in breast cancer brain metastasis. *Frontiers in Bioscience (Elite Ed)*, 8, pp. 245-263.
- Smith, S.M., and Cai, L., 2012. Cell specific CD44 expression in breast cancer requires the interaction of AP-1 and NFkB with a Novel *cis*-element. *Plos One*, 7(11), e50867, pp. 1- 12.
- Sogabe, S., Kawakita, Y., Igaki, S., Iwata, H., Miki, H., Cary, D.R., Takagi, T., Takagi, S., Ohta, Y., Ishikawa, T., 2012. Structure-Based Approach for the Discovery of Pyrrolo[3,2-d]pyrimidine-Based EGFR T790M/L858R Mutant Inhibitors. *ACS Medicinal Chemistry Letters*, 2013(4), pp. 201-2015.
- Sonnenblick, A., Brohee, S., Fumagalli, D., Vincent, D., Venet, D., Ignatiadis, M., Salgado, R., Eynden, G.V.D., Rothe, F., Desmedt, C., et al., 2015. Constitutive phosphorylated STAT3-associated gene signature is predictive for trastuzumab resistance in primary HER2-positive breast cancer. *BMC Medicine*, 13 (177), pp. 1-10.
- Sudiana, I. K., 2011. *Patobiologi Molekuler Kanker*. Jakarta: Salemba Medika.
- Suhud, F., Siswandono, Budiati, T., 2015. Synthesis and activity evaluation of a novel lead compound *1-benzyl-3-benzoylurea* as antiproliferative agent. *World Journal of Pharmaceutical Sciences*, 3(2), pp. 192-195.
- Tobias, J. and Hochhauser, D., 2010. *Cancer and its management*. 10th ed. Oxford: John Wiley and Sons Ltd.
- Tsang, R.Y., Sadeghi, S., Finn, R.S., 2011. Lapatinib, a Dual-Targeted Small Molecule Inhibitor of EGFR and HER2, in HER2-Amplified Breast Cancer: From Bench to Bedside. *Clinical Medicine Insights: Therapeutics*, 3, pp. 1-13.
- Verhoeven, Y., Tilborghs, S., Jacobs, J., Waele, J.D., Quatannens, D., Deben, C., Prenen, H., Pauwels, P., Trinh, X.B., Wouters, A., Smits, E.L.J., Lardon, F., Dam, P.A.V., 2020. The potential and controversy of targeting STAT family members in cancer. *Seminars in Cancer Biology*, 60, pp. 41-56
- Wang, J., and Yi, J., 2008. Cancer cell killing via ROS. *Cancer Biology & Therapy*, 7(12), pp. 1875-1884.

- Watson, D.G., 2010. *Pharmaceutical Analysis: A Textbook of Pharmacy Student and Pharmaceutical Chemists*. 3rd Ed, London: Churchill Livingstone.
- Wee, P., and Wang, Z., 2017. Epidermal growth factor receptor cell proliferation signaling pathways. *Cancers*, 9(52), pp. 1-45.
- Whalen, K., Finkel, R., Panavelll, T. A., 2015. *Illustrated Reviews: Pharmacology*. 6th ed. Philadelphia: Wolters Kluwer.
- Wu, D., and Yotnda, P., 2011. Production and detection of reactive oxygen species (ROS) in cancers. *Journal of Visualized Experiments*, 57, e3357, pp. 1-4.
- Yellowitz, A., Garcia, L., Alexandrova, E.M., Marchenkon, N., 2018. Heat shock factor 1 confers resistance to lapatinib in ERBB2-positive breast cancer cells. *Cell Death and Disease*, 9, 621.
- Yamaguchi, H., Chang, S-S., Hsu, J.L., Hung, M-C., 2014. Signaling cross-talk in the resistance to HER family receptor targeted therapy. *Oncogene*, 33, pp. 1073-1081.
- Yamashita, N., Kondo, M., Zhao, S., Li, W., Koike, K., and Nemoto, K., 2017. Picrasidine G decreases viability of MDA-MB 468 EGFR-overexpressing triple-negative breast cancer cells through inhibition of EGFR / STAT3 signaling pathway. *Bioorganic & Medicinal Chemistry Letters*, 231, pp. 3-7.
- Zulkifli, A. A., Tan, F. H., Putoczki, T. L., Stylli, S. S., and Luwor, R. B., 2017. STAT3 signaling mediates tumour resistance to EGFR targeted therapeutics. *Molecular and Cellular Endocrinology*, 451, pp 15-23.