DAFTAR PUSTAKA

Ali, arshad, 2021. Alterations of Glutathione and GSTM1 Mutation Induce Tumor Metastasis and Invasion Via EMT Pathway in Breast Cancer Patients. Eurasian J. Med. Oncol. https://doi.org/10.14744/ejmo.2021.25927

Alkabban, F.M., Ferguson, T., 2022. Breast Cancer, in: StatPearls. StatPearls Publishing, Treasure Island (FL).

Arsita, E.V., 2022. Efek Delesi GSTM1 Menggunakan CRISPR Single Guide RNA Tunggal dan Ganda pada Viabilitas Sel 4T1 yang Diterapi Paclitaxel, Kajian pada Exon yang Sama. Universitas Gadjah Mada, Yogyakarta.

Aysola, K., Desai, A., Welch, C., Xu, J., Qin, Y., Reddy, V., Matthews, R., Owens, C., Okoli, J., Beech, D.J., Piyathilake, C.J., Reddy, S.P., Rao, V.N., 2013. Triple Negative Breast Cancer - An Overview. Hered. Genet. Curr. Res. 2013, 001. https://doi.org/10.4172/2161-1041.S2-001

Banerjee, A., Malonia, S.K., Dutta, S., 2021. Frontiers of CRISPR-Cas9 for Cancer Research and Therapy. J. Explor. Res. Pharmacol. 000, 000–000. https://doi.org/10.14218/JERP.2020.00033

Bhattacharjee, P., Paul, S., Banerjee, M., Patra, D., Banerjee, P., Ghoshal, N., Bandyopadhyay, A., Giri, A.K., 2013. Functional compensation of glutathione S-transferase M1 (GSTM1) null by another GST superfamily member, GSTM2. Sci Rep 3, 2704. https://doi.org/10.1038/srep02704

Board, P.G., Menon, D., 2013. Glutathione transferases, regulators of cellular metabolism and physiology. Biochim. Biophys. Acta BBA - Gen. Subj. 1830, 3267–3288. https://doi.org/10.1016/j.bbagen.2012.11.019

Borah P., 2011. Primer Designing for PCR. Science Vision 11(3): P. 134 -136.

Caramujo-Balseiro, S., Faro, C., Carvalho, L., 2021. Metabolic pathways in sporadic colorectal carcinogenesis: A new proposal. Med. Hypotheses 148, 110512. https://doi.org/10.1016/j.mehy.2021.110512

Cortes, J., Cescon, D.W., Rugo, H.S., Nowecki, Z., Im, S.-A., Yusof, M.M., Gallardo, C., Lipatov, O., Barrios, C.H., Holgado, E., Iwata, H., Masuda, N., Otero, M.T., Gokmen, E., Loi, S., Guo, Z., Zhao, J., Aktan, G., Karantza,

V., Schmid, P., Luis, F., Gonzalo, G.A., Diego, K., Ruben, K., Matias, M., Mirta, V., Sally, B.-H., Stephen, B., Philip, C., Sherene, L., Dhanusha, S., Andrea, G., Donatienne, T., Carlos, B., Leandro, B., Fabiano, C., Ruffo, de F.J., Roberto, H., Domicio Carvalho, L., Fernando Cezar Toniazzi, L., Roberto Odebrecht, R., Antonio Orlando, S.N., Felipe, S., David, C., Danielle, C., Cristiano, F., Xinni, S., Joanne, Y., Alejandro, A., Carlos, G., Claudio, S., Cesar, S., Eduardo, Y., Alvaro, G.D., Jesus, S., Petra, H., Zdenek, K., Bohuslav, M., Katarina, P., Jana, P., Vesna, G., Erik, J., Jeanette, J., Soren, L., Tamas, L., Herve, B., Isabelle, D., Anthony, G., Anne-Claire, H.-B., Luis, T., Jens-Uwe, B., Peter, F., Dirk, F., Nadia, H., Jens, H., Anna, K.F. de S., Christian, K., Sibylle, L., Diana, L., Tjoung-Won, P.-S., Raquel Von, S., Pauline, W., Louis, C., Ava, K., Kai Cheong Roger, N., Peter, A., Tibor, C., Zsuzsanna, K., Laszlo, L., Karoly, M., Gabor, R., John, C., Catherine, K., Seamus, O., Saverio, C., Antonietta, Da., Enrico, R., Tomoyuki, A., Takaaki, F., Kenichi, I., Takashi, I., Yoshinori, I., Tsutomu, I., Hiroji, I., Yoshimasa, K., Koji, M., Yasuo, M., Hirofumi, M., Seigo, N., Naoki, N., Shoichiro, O., Akihiko, O., Yasuaki, S., Eiji, S., Masato, T., Yuko, T., Kenji, T., Koichiro, T., Junichiro, W., Naohito, Y., Yutaka, Y., Teruo, Y., Anita, B., Mastura, M.Y., Angel, G.V., Alejandro, J.R., Jorge, M.R., Flavia, M.-V., Jessica, R.C., Karin, B., Vivianne, T.-H., David, P., Ewa, C., Ewa, N.-Z., Zbigniew, N., Barbara, R., Joanna, S., Cezary, S., Rafal, T., Bogdan, Z., Alexander, A., Natalia, F., Oleg, L., Andrey, M., Vladimir, M., Guzel, M., Jin Hee, A., Seock-Ah, I., Keun Seok, L., Kwong Hwa, P., Yeon Hee, P., Begona, B. de las H., Javier, C., Josefina, C.J., Luis, de la C.M., Jose, G.S., Maria, G., Esther, H., Esther, Z.A., Chien-Ting, L., Mei-Ching, L., Chiun-Sheng, H., Chao-Jung, T., Ling-Ming, T., Cagatay, A., Gul, B., Irfan, C., Erhan, G., Seyda, G., Nil, M.M., Mustafa, O., Ozgur, O., Sinan, Y., Steve, C., Janine, G., Iain, M., Peter, S., Nicholas, T., Mark, T., Christopher, T., Duncan, W., Hryhoriy, A., Oleksandr, B., Igor, B., Oleksii, K., Olena, K., Hanna, K., Anna, K., Iurii, L., Alla, N., Natalya, O., Olga, P., Andrii, R., Sergii, S., Yaroslav, S., Dmytro, T., Grygorii, U., Ihor, V., Sibel, B., Madhu, C., Michael, C., Patrick, C., Scott, C., Jennifer, D., Keerthi, G., Jeffrey, H., Kent, H., William, I., Randa, L., Janice, L., Raul, M., Susan, M., Rita, N., Ira, O., Coral, O., Timothy, P., Amit, P., Brian, P., Hope, R., Irina, R., Michael, Schleider, Robert, S., Michael, Simon, Laura, S., Bradley, S., Michaela, T., Frances, V.-A., 2020. Pembrolizumab plus chemotherapy versus placebo plus chemotherapy for previously untreated locally recurrent inoperable or metastatic triple-negative breast cancer (KEYNOTE-355): a randomised, placebo-controlled, double-blind, phase 3 clinical trial. The Lancet 396, 1817–1828. https://doi.org/10.1016/S0140-6736(20)32531-9

Derakhshan, F., Reis-Filho, J.S., 2022. Pathogenesis of Triple-Negative Breast Cancer. Annu. Rev. Pathol. Mech. Dis. 17, 181–204. https://doi.org/10.1146/annurev-pathol-042420-093238

Dhanasekaran, D.N., Reddy, E.P., 2008. JNK signaling in apoptosis. Oncogene 27, 6245–6251. https://doi.org/10.1038/onc.2008.301

Doetschman, T., Georgieva, T., 2017. Gene Editing With CRISPR/Cas9 RNA-Directed Nuclease. Circ. Res. 120, 876–894. https://doi.org/10.1161/CIRCRESAHA.116.309727

Erlich, H.A. 1989. Polymerase Chain Reaction. Journal of Clinical Immunology 9: 437−447

Garte, S., Gaspari, L., Alexandrie, A. K., Ambrosone, C., Autrup, H., Autrup, J. L., Baranova, H., Bathum, L., Benhamou, S., Boffetta, P., Bouchardy, C., Breskvar, K., Brockmoller, J., Cascorbi, I., Clapper, M. L., Coutelle, C., Daly, A., Dell'Omo, M., Dolzan, V., … Taioli, E. (2001). Metabolic gene polymorphism frequencies in control populations. Cancer Epidemiology, Biomarkers & Prevention : A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology, 10(12), 1239–1248

Handoyo, D., dan Rudiretna, A., 2000. Prinsip Umum dan Pelaksanaan Polimerase Chain Reaction (PCR). Unitas. Unitas, 9(1), 17-29

Hazafa, A., Mumtaz, M., Farooq, M.F., Bilal, S., Chaudhry, S.N., Firdous, M., Naeem, H., Ullah, M.O., Yameen, M., Mukhtiar, M.S., Zafar, F., 2020. CRISPR/Cas9: A powerful genome editing technique for the treatment of cancer cells with present challenges and future directions. Life Sci. 263, 118525. https://doi.org/10.1016/j.lfs.2020.118525

Hidayati, Z., 2022. Efek Paclitaxel pada Lini Sel Kanker Payudara 4T1 dengan Knockout GSTM1 Menggunakan Single Maupun Double CRISPR gRNA: Kajian pada Exon Berbeda. Universitas Gadjah Mada, Yogyakarta.

Hollman, A.L., Tchounwou, P.B. and Huang, H.C. (2016) 'The association between gene-environment interactions and diseases involving the human GST superfamily with SNP variants', International Journal of Environmental Research and Public Health. MDPI. Available at: https://doi.org/10.3390/ijerph13040379.

Hu, S., Vincenz, C., Ni, J., Gentz, R., Dixit, V.M., 1997. I-FLICE, a Novel Inhibitor of Tumor Necrosis Factor Receptor-1- and CD-95-induced Apoptosis. J. Biol. Chem. 272, 17255–17257. https://doi.org/10.1074/jbc.272.28.17255

Hwang, S.-H., Yeom, H., Lee, M., 2020. *ATG5* knockout promotes paclitaxel sensitivity in drug-resistant cells *via* induction of necrotic cell death. Korean J. Physiol. Pharmacol. 24, 233–240. https://doi.org/10.4196/kjpp.2020.24.3.233

Kaplan, H.G., Malmgren, J.A., Atwood, M., 2009. T1N0 Triple Negative Breast Cancer: Risk of Recurrence and Adjuvant Chemotherapy. Breast J. 15, 454–460. https://doi.org/10.1111/j.1524-4741.2009.00789.x

Kuntz, S., Wenzel, U., Daniel, H., 1999. Comparative analysis of the effects of flavonoids on proliferation, cytotoxicity, and apoptosis in human colon cancer cell lines. Eur. J. Nutr. 38, 133–142. https://doi.org/10.1007/s003940050054

Lee, J., Ko, P., You, E., Jeong, J., Keum, S., Kim, J., Rahman, M., Lee, D.H., Rhee, S., 2019. Shwachman-Bodian-Diamond syndrome protein desensitizes breast cancer cells to apoptosis in stiff matrices by repressing the caspase 8-mediated pathway. Anim. Cells Syst. 23, 414–421. https://doi.org/10.1080/19768354.2019.1666030

Lin, J., Redies, C., 2012. Histological evidence: housekeeping genes beta-actin and GAPDH are of limited value for normalization of gene expression. Dev. Genes Evol. 222, 369–376. https://doi.org/10.1007/s00427-012-0420-x

Liu, Z., Ren, Z., Zhang, J., Chuang, C.-C., Kandaswamy, E., Zhou, T., Zuo, L., 2018. Role of ROS and Nutritional Antioxidants in Human Diseases. Front. Physiol. 9, 477. c

Mehrgou, A., Akouchekian, M., 2016. The importance of BRCA1 and BRCA2 genes mutations in breast cancer development. Med. J. Islam. Repub. Iran 30, 369.

Miao, L.-F., Ye, X.-H., He, X.-F., 2020. Individual and combined effects of GSTM1, GSTT1, and GSTP1 polymorphisms on breast cancer risk: A meta-analysis and re-analysis of systematic meta-analyses. PLOS ONE 15, e0216147. https://doi.org/10.1371/journal.pone.0216147

Narasimhan, V.M., Xue, Y., Tyler-Smith, C., 2016. Human Knockout Carriers: Dead, Diseased, Healthy, or Improved? Trends Mol. Med. 22, 341–351. https://doi.org/10.1016/j.molmed.2016.02.006

Nteeba, J., Ross, J.W., Perfield II, J.W., Keating, A.F., 2013. High fat diet induced obesity alters ovarian phosphatidylinositol-3 kinase signaling gene expression. Reprod. Toxicol. 42, 68–77. https://doi.org/10.1016/j.reprotox.2013.07.026

Orning, P., Lien, E., 2021. Multiple roles of caspase-8 in cell death, inflammation, and innate immunity. J. Leukoc. Biol. 109, 121–141. https://doi.org/10.1002/JLB.3MR0420-305R

Pediconi, F., Marzocca, F., Cavallo Marincola, B., Napoli, A., 2018. MRI-guided treatment in the breast: MRI-Guided Treatment in the Breast. J. Magn. Reson. Imaging 48, 1479–1488. https://doi.org/10.1002/jmri.26282

Peng, L., Zhuang, L., Lin, K., Yao, Y., Zhang, Y., Arumugam, T., Fujii, T., Jiang, H., Sun, L., Jin, Z., Li, Z., Logsdon, C., Ji, B., Huang, H., 2021. Downregulation of GSTM2 enhances gemcitabine chemosensitivity of pancreatic cancer in vitro and in vivo. Pancreatology 21, 115–123. https://doi.org/10.1016/j.pan.2020.12.008

Prakoso, S.P., Wirajana, I.N., Suarsa, I.W., 2017. AMPLIFIKASI FRAGMEN GEN 18S rRNA PADA DNA METAGENOMIK MADU DENGAN TEKNIK PCR (POLYMERASE CHAIN REACTION). Indones. J. Leg. Forensic Sci. IJLFS 7, 1. https://doi.org/10.24843/IJLFS.2017.v07.i01.p03

Pulaski, Beth A., Clements, V.K., Pipeling, M.R., Ostrand-Rosenberg, S., 2000. Immunotherapy with vaccines combining MHC class II/CD80+ tumor cells with interleukin-12 reduces established metastatic disease and stimulates immune effectors and monokine induced by interferon γ. Cancer Immunol. Immunother. 49, 34–45. https://doi.org/10.1007/s002620050024

Pulaski, B.A., Ostrand-Rosenberg, S., 2000. Mouse 4T1 Breast Tumor Model. Curr. Protoc. Immunol. 39. https://doi.org/10.1002/0471142735.im2002s39

Pulaski, B. A., Terman, D.S., Khan, S., Muller, E., Ostrand-Rosenberg, S., 2000. Cooperativity of Staphylococcal aureus enterotoxin B superantigen, major histocompatibility complex class II, and CD80 for immunotherapy of advanced spontaneous metastases in a clinically relevant postoperative mouse breast cancer model. Cancer Res. 60, 2710–2715.

Radovic, N., Ivanac, G., Divjak, E., Biondic, I., Bulum, A., Brkljacic, B., 2019. Evaluation of Breast Cancer Morphology Using Diffusion-Weighted and Dynamic Contrast-Enhanced MRI: Intermethod and Interobserver

Agreement: Breast Cancer Morphology: DWI vs. DCE MRI. J. Magn. Reson. Imaging 49, 1381–1390. https://doi.org/10.1002/jmri.26332

Rakha, E.A., Reis-Filho, J.S., Ellis, I.O., 2008. Basal-Like Breast Cancer: A Critical Review. J. Clin. Oncol. 26, 2568–2581. https://doi.org/10.1200/JCO.2007.13.1748

Rebouças, E.D.L., Costa, J.J.D.N., Passos, M.J., Passos, J.R.D.S., Hurk, R.V.D., Silva, J.R.V., 2013. Real time PCR and importance of housekeepings genes for normalization and quantification of mRNA expression in different tissues. Braz. Arch. Biol. Technol. 56, 143–154. https://doi.org/10.1590/S1516-89132013000100019

Rocque, G.B., Williams, C.P., Kenzik, K.M., Jackson, B.E., Azuero, A., Halilova, K.I., Ingram, S.A., Pisu, M., Forero, A., Bhatia, S., 2018. Concordance with NCCN treatment guidelines: Relations with health care utilization, cost, and mortality in breast cancer patients with secondary metastasis: Effect of Treatment Nonconcordance. Cancer 124, 4231–4240. https://doi.org/10.1002/cncr.31694

Savas, P., Loi, S., 2020. Metastatic Breast Cancer: TIL it is Too Late. Clin. Cancer Res. 26, 526–528. https://doi.org/10.1158/1078-0432.CCR-19-3490

Schmid, P., Rugo, H.S., Adams, S., Schneeweiss, A., Barrios, C.H., Iwata, H., Diéras, V., Henschel, V., Molinero, L., Chui, S.Y., Maiya, V., Husain, A., Winer, E.P., Loi, S., Emens, L.A., 2020. Atezolizumab plus nab-paclitaxel as first-line treatment for unresectable, locally advanced or metastatic triple-negative breast cancer (IMpassion130): updated efficacy results from a randomised, double-blind, placebo-controlled, phase 3 trial. Lancet Oncol. 21, 44–59. https://doi.org/10.1016/S1470-2045(19)30689-8

Schrörs, B., Boegel, S., Albrecht, C., Bukur, T., Bukur, V., Holtsträter, C., Ritzel, C., Manninen, K., Tadmor, A.D., Vormehr, M., Sahin, U., Löwer, M., 2020. Multi-Omics Characterization of the 4T1 Murine Mammary Gland Tumor Model. Front. Oncol. 10, 1195. https://doi.org/10.3389/fonc.2020.01195

Ściskalska, M., Milnerowicz, H., 2020. The role of GSTπ isoform in the cells signalling and anticancer therapy. Eur. Rev. Med. Pharmacol. Sci. 24, 8537–8550. https://doi.org/10.26355/eurrev_202008_22650

Seroussi, B., Lamy, J.-B., Muro, N., Larburu, N., Sekar, B.D., Guézennec, G., Bouaud, J., 2018. Implementing Guideline-Based, Experience-Based, and

Case-Based Approaches to Enrich Decision Support for the Management of Breast Cancer Patients in the DESIREE Project. Stud. Health Technol. Inform. 255, 190–194.

Setyawati, R., Zubaidah, S., 2021. Optimasi Konsentrasi Primer dan Suhu Annealing dalam Mendeteksi Gen Leptin pada Sapi Peranakan Ongole (PO) Menggunakan Polymerase Chain Reaction (PCR). Indones. J. Lab. 4, 36. https://doi.org/10.22146/ijl.v4i1.65550

Siegel, R.L., Miller, K.D., Fuchs, H.E., Jemal, A., 2021. Cancer Statistics, 2021. CA. Cancer J. Clin. 71, 7–33. https://doi.org/10.3322/caac.21654

Song, Z., Shao, C., Feng, C., Lu, Y., Gao, Y., Dong, C., 2016. Association of glutathione S-transferase T1, M1, and P1 polymorphisms in the breast cancer risk: a meta-analysis. Ther. Clin. Risk Manag. 12, 763–769. https://doi.org/10.2147/TCRM.S104339

Sulistyaningsih, E., 2007. Polymerase Chain Reaction (PCR): Era Baru Diagnosis dan Manajemen Penyakit Infeksi. Biomedis. 1(1): P. 17-25.

Takahashi, K., Nagahori, K., Qu, N., Kuramasu, M., Hirayanagi, Y., Hayashi, S., Ogawa, Y., Hatayama, N., Terayama, H., Suyama, K., Hirai, S., Sakabe, K., Itoh, M., 2019. The effectiveness of traditional Japanese medicine Goshajinkigan in irradiation-induced aspermatogenesis in mice. BMC Complement. Altern. Med. 19, 362. https://doi.org/10.1186/s12906-019-2786-z

Tao, K., Fang, M., Alroy, J., Sahagian, G.G., 2008. Imagable 4T1 model for the study of late stage breast cancer. BMC Cancer 8, 228. https://doi.org/10.1186/1471-2407-8-228

Valenti, M.T., Bertoldo, F., Dalle Carbonare, L., Azzarello, G., Zenari, S., Zanatta, M., Balducci, E., Vinante, O., Cascio, V.L., 2006. The effect of bisphosphonates on gene expression: GAPDH as a housekeeping or a new target gene? BMC Cancer 6, 49. https://doi.org/10.1186/1471-2407-6-49

Vande Perre, P., Toledano, D., Corsini, C., Escriba, E., Laporte, M., Bertet, H., Yauy, K., Toledano, A., Galibert, V., Baudry, K., Clotet, L., Million, E., Picot, M.-C., Geneviève, D., Pujol, P., 2018. Role of the general practitioner in the care of *BRCA1* and *BRCA2* mutation carriers: General practitioner and patient perspectives. Mol. Genet. Genomic Med. 6, 957–965. https://doi.org/10.1002/mgg3.464

Watanabe, Y., Anan, K., 2019. The decision to perform or omit sentinel lymph node biopsy during mastectomy for ductal carcinoma in situ should be tailored in accordance with preoperative findings. Breast Cancer 26, 261–262. https://doi.org/10.1007/s12282-018-0917-x

Yang, M., Zeng, C., Li, P., Qian, L., Ding, B., Huang, L., Li, G., Jiang, H., Gong, N., Wu, W., 2019. Impact of CXCR4 and CXCR7 knockout by CRISPR/Cas9 on the function of triple-negative breast cancer cells. OncoTargets Ther. Volume 12, 3849–3858. https://doi.org/10.2147/OTT.S195661

Yanumula, A., Cusick, J.K., 2023. Biochemistry, Extrinsic Pathway of Apoptosis, in: StatPearls. StatPearls Publishing, Treasure Island (FL).

Yeo, S.K., Guan, J.-L., 2017. Breast Cancer: Multiple Subtypes within a Tumor? Trends Cancer 3, 753–760. https://doi.org/10.1016/j.trecan.2017.09.001

Zainuddin, A., Chua, K.H., Rahim, N.A., Makpol, S., 2010. Effect of experimental treatment on GAPDH mRNA expression as a housekeeping gene in human diploid fibroblasts. BMC Mol. Biol. 11, 59. https://doi.org/10.1186/1471-2199-11-59

Zhang, W.-P., He, X.-F., Ye, X.-H., 2020. Association between the combined effects of GSTM1 present/null and CYP1A1 MspI polymorphisms with lung cancer risk: an updated meta-analysis. Biosci. Rep. 40, BSR20202275. https://doi.org/10.1042/BSR20202275