DAFTAR PUSTAKA

Aggarwal, V. *et al.* (2019) "Role of reactive oxygen species in cancer progression: Molecular mechanisms and recent advancements," *Biomolecules*, 9(11), p. 735. Available at: https://doi.org/10.3390/biom9110735.

Alberts, B., *et al.* (2002) 'The Structure and Function of DNA', in *Molecular Biology of the Cell*. 4th edn. New York: Garland Science.

Albrengues, J. *et al.* (2018) "Neutrophil extracellular traps produced during inflammation awaken dormant cancer cells in mice," *Science*, 361(6409). Available at: https://doi.org/10.1126/science.aao4227.

Al-Eitan, L.N. *et al.* (2019) 'Association of GSTM1, GSTT1 and GSTP1 polymorphisms with breast cancer among Jordanian Women', *OncoTargets and Therapy*, 12, pp. 7757–7765. Available at: https://doi.org/10.2147/OTT.S207255.

Ambrosone, C. B. *et al.* (1995) Cytochrome P4501A1 and glutathione S-transferase (M1) genetic polymorphisms and postmenopausal breast cancer risk. *Cancer Research*, 55.

Amils, R. (2011) 'Taq Polymerase', in M. Gargaud et al. (eds) *Encyclopedia of Astrobiology*. Berlin, Heidelberg: Springer Berlin Heidelberg, p. 1648. Available at: https://doi.org/10.1007/978-3-642-11274-4_1561

Analytical Methods Committee, A.N. 59 (2014) 'PCR – the polymerase chain reaction', *Analytical Methods*, 6(2), pp. 333–336. Available at: https://doi.org/10.1039/C3AY90101G.

Andriani, G.A. *et al.* (2016) "Whole chromosome instability induces senescence and promotes SASP," *Scientific Reports*, 6(1). Available at: https://doi.org/10.1038/srep35218.

Arnold, K.M., Flynn, N.J. *and* Sims-Mourtada, J. (2015) "Activation of inflammatory responses correlate with hedgehog activation and precede expansion of cancer stem-like cells in an animal model of residual triple negative breast cancer after Neoadjuvant chemotherapy," *Cancer Studies and Molecular Medicine - Open Journal*, 2(2). Available at: https://doi.org/10.17140/csmmoj-2-112.

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," *UGM Repository*.

Aslakson, C. J., & Miller, F. R. (1992). "Selective events in the metastatic process defined by analysis of the sequential dissemination of subpopulations of a mouse mammary tumor". *Cancer research*, *52*(6).

Azad, N., Rojanasakul, Y. *and* Vallyathan, V. (2008) "Inflammation and lung cancer: Roles of reactive oxygen/nitrogen species," *Journal of Toxicology and Environmental Health, Part B*, 11(1), pp. 1–15. Available at: https://doi.org/10.1080/10937400701436460.

Bacich, D.J. *et al.* (2011) 'False negative results from using common PCR reagents', *BMC Research Notes*, 4(1), p. 457. Available at: https://doi.org/10.1186/1756-0500-4-457.

Bai, Y.-L. *et al.* (2012) "Predictive role of gsts on the prognosis of breast cancer patients with Neoadjuvant chemotherapy," *Asian Pacific Journal of Cancer Prevention*, 13(10). Available at: https://doi.org/10.7314/apjcp.2012.13.10.5019.

Balkwill, F. (2006) "TNF-α in promotion and progression of cancer," *Cancer and Metastasis Reviews*, 25(3), pp. 409–416. Available at: https://doi.org/10.1007/s10555-006-9005-3.

Balkwill, F. (2009) "Tumour necrosis factor and cancer," *Nature Reviews Cancer*, 9(5). Available at: https://doi.org/10.1038/nrc2628.

Bargou, R.C. *et al.* (1996) "Overexpression of the death-promoting Gene Bax-alpha which is downregulated in breast cancer restores sensitivity to different apoptotic stimuli and reduces tumor growth in SCID mice.," *Journal of Clinical Investigation*, 97(11). Available at: https://doi.org/10.1172/jci118715.

Bates, R.C. *and* Mercurio, A.M. (2003) 'Tumor Necrosis Factor-Stimulates the Epithelial-to-Mesenchymal Transition of Human Colonic Organoids', *Molecular Biology of the Cell*, 14, pp. 1790–1800. Available at: https://doi.org/10.1091/mbc.E02-09.

Bauer, K.R. *et al.* (2007) 'Descriptive analysis of estrogen receptor (ER)-negative, progesterone receptor (PR)-negative, and HER2-negative invasive breast cancer, the so-called triple-negative phenotype: A population-based study from the California Cancer Registry', *Cancer*, 109(9), pp. 1721–1728. Available at: https://doi.org/10.1002/cncr.22618.

Board', P.G. (1981a) *Biochemical Genetics of Glutathione-S-Transferase in Man, Am JHum Genet*.

Board, P.G. (1981b) 'Gene deletion and partial deficiency of the glutathione S-transferase (ligandin) system in man', *FEBS Letters*, 135(1), pp. 12–14. Available at: https://doi.org/10.1016/0014-5793(81)80933-7.

Boehm, J.S. *et al.* (2007) 'Integrative Genomic Approaches Identify IKBKE as a Breast Cancer Oncogene', *Cell*, 129(6), pp. 1065–1079. Available at: https://doi.org/10.1016/j.cell.2007.03.052.

Boettler, U. *et al.* (2012) "Induction of antioxidative NRF2 gene transcription by coffee in humans: Depending on genotype?," *Molecular Biology Reports*, 39(6). Available at: https://doi.org/10.1007/s11033-012-1547-6.

Bradley, J.R. (2008) "TNF-mediated inflammatory disease," *The Journal of Pathology*, 214(2), pp. 149–160. Available at: https://doi.org/10.1002/path.2287.

Brenner, D., Blaser, H. and Mak, T.W. (2015) "Regulation of tumour necrosis factor signalling: Live or let die," *Nature Reviews Immunology*, 15(6), pp. 362–374. Available at: https://doi.org/10.1038/nri3834.

Cancer Today (2020) *Global Cancer Observatory*. Available at: https://gco.iarc.fr/today/fact-sheets-cancers (Accessed: November 30, 2022).

Capecchi, M.R. (1994) "Targeted gene replacement," *Scientific American*, 270(3). Available at: https://doi.org/10.1038/scientificamerican0394-52.

Carswell, E.A. *et al.* (1975) "An endotoxin-induced serum factor that causes necrosis of tumors.," *Proceedings of the National Academy of Sciences*, 72(9), pp. 3666–3670. Available at: https://doi.org/10.1073/pnas.72.9.3666.

Chandrasekaran, A.P. *et al.* (2018) "Different methods of delivering CRISPR/Cas9 into cells," *Progress in Molecular Biology and Translational Science*. Available at: https://doi.org/10.1016/bs.pmbts.2018.05.001.

Chatterjee, A. *and* Gupta, S. (2018) "The multifaceted role of glutathione S-transferases in cancer," *Cancer Letters*, 433, pp. 33–42. Available at: https://doi.org/10.1016/j.canlet.2018.06.028.

Cho, H.J. *et al.* (2012) 'Bone marrow-derived, alternatively activated macrophages enhance solid tumor growth and lung metastasis of mammary carcinoma cells in a Balb/C mouse orthotopic model', *Breast Cancer Research*, 14(3). Available at: https://doi.org/10.1186/bcr3195.

Clark, I.A., Alleva, L.M. and Vissel, B. (2010) 'The roles of TNF in brain dysfunction and disease', *Pharmacology and Therapeutics*. Elsevier Inc., pp. 519–548. Available at: https://doi.org/10.1016/j.pharmthera.2010.08.007.

Combeau C. *et al*. (1994) Predominant labeling of [3- over c~-tubulin from porcine brain by a photoactivatable taxoid derivative. Biochemistry 33.

Cramer, S.L. *et al.* (2016) "Systemic depletion of L-cyst(e)ine with cyst(e)inase increases reactive oxygen species and suppresses tumor growth," *Nature Medicine*, 23(1). Available at: https://doi.org/10.1038/nm.4232.

Cruceriu, D. *et al.* (2020) 'The dual role of tumor necrosis factor-alpha (TNF-α) in breast cancer: molecular insights and therapeutic approaches', *Cellular Oncology*. Springer. Available at: https://doi.org/10.1007/s13402-019-00489-1.

Cui, H. *et al.* (2016) 'Pleurotus nebrodensis polysaccharide(PN50G) evokes A549 cell apoptosis by the ROS/AMPK/PI3K/AKT/mTOR pathway to suppress tumor growth', *Food and Function*, 7(3), pp. 1616–1627. Available at: https://doi.org/10.1039/c6fo00027d.

Danial, N.N. *and* Korsmeyer, S.J. (2004) 'Cell Death: Critical Control Points', *Cell*, 116(2), pp. 205–219. Available at: https://doi.org/10.1016/S0092-8674(04)00046-7.

Daniel, D. *and* Wilson, N. (2008) "Tumor necrosis factor: Renaissance as a cancer therapeutic?," *Current Cancer Drug Targets*, 8(2). Available at: https://doi.org/10.2174/156800908783769346. Das, S., Mohapatra, S.C. and Hsu, J.T. (1999) 'Studies on primer-dimer formation in polymerase chain reaction (PCR)', *Biotechnology Techniques*, 13(10), pp. 643–646. Available at: https://doi.org/10.1023/A:1008924615839.

Das, S., Mohapatra, S.C. *and* Hsu, J.T. (1999) 'Studies on primer-dimer formation in polymerase chain reaction (PCR)', *Biotechnology Techniques*, 13(10), pp. 643–646. Available at: https://doi.org/10.1023/A:1008924615839.

Delaloge, S. *et al.* (2016) "Paclitaxel plus bevacizumab or paclitaxel as first-line treatment for HER2-negative metastatic breast cancer in a Multicenter National Observational Study," *Annals of Oncology*, 27(9). Available at: https://doi.org/10.1093/annonc/mdw260.

Delfino, R.J., Staimer, N. *and* Vaziri, N.D. (2011) 'Air pollution and circulating biomarkers of oxidative stress', *Air Quality, Atmosphere and Health*, 4(1), pp. 37–52. Available at: https://doi.org/10.1007/s11869-010-0095-2.

Deponte, M. (2013) "Glutathione catalysis and the reaction mechanisms of glutathione-dependent enzymes," *Biochimica et Biophysica Acta (BBA) - General Subjects*, 1830(5), pp. 3217–3266. Available at: https://doi.org/10.1016/j.bbagen.2012.09.018.

Dexter, D. L. *et al*. (1978). Heterogeneity of tumor cells from a single mouse mammary tumor. *Cancer research, 38*(10), 3174–3181.

Eba, S. *et al.* (2013) "The nuclear factor erythroid 2–related factor 2 activator Oltipraz attenuates chronic hypoxia–induced cardiopulmonary alterations in mice," *American Journal of Respiratory Cell and Molecular Biology*, 49(2), pp. 324–333. Available at: https://doi.org/10.1165/rcmb.2011-0396oc.

Egberts, J.-H. *et al.* (2008) "Anti–tumor necrosis factor therapy inhibits pancreatic tumor growth and metastasis," *Cancer Research*, 68(5). Available at: https://doi.org/10.1158/0008-5472.can-07-5704.

Elyada, E. *et al.* (2011) "CKIα ablation highlights a critical role for p53 in invasiveness control," *Nature*, 470(7334). Available at: https://doi.org/10.1038/nature09673.

Epstein Shochet, G. *et al.* (2017) 'Fibroblast paracrine TNF-α signaling elevates integrin A5 expression in idiopathic pulmonary fibrosis (IPF)', *Respiratory Research*, 18(1). Available at: https://doi.org/10.1186/s12931-017-0606-x.

Esposito, R. *et al.* (2019) "Hacking the cancer genome: Profiling therapeutically actionable long non-coding RNAS using CRISPR-Cas9 screening," *Cancer Cell*, 35(4), pp. 545–557. Available at: https://doi.org/10.1016/j.ccell.2019.01.019.

Fan, T.-P.D., Jaggar, R. *and* Bicknell, R. (1995) *Controlling the vasculature: angiogenesis, anti-angiogenesis and vascular targeting of gene therapy*.

Ferrari-Amorotti, G. *et al.* (2014) 'Suppression of Invasion and Metastasis of Triple-Negative Breast Cancer Lines by Pharmacological or Genetic Inhibition of Slug Activity', *Neoplasia (United States)*, 16(12), pp. 1047–1058. Available at: https://doi.org/10.1016/j.neo.2014.10.006.

Forrester, S.J. *et al.* (2018) 'Reactive oxygen species in metabolic and inflammatory signaling', *Circulation Research*. Lippincott Williams and Wilkins, pp. 877–902. Available at: https://doi.org/10.1161/CIRCRESAHA.117.311401.

Freitas, M. *et al.* (2013) "Polycyclic aromatic hydrocarbons may contribute for prostate cancer progression," *Journal of Cancer Therapy*, 04(04), pp. 37–46. Available at: https://doi.org/10.4236/jct.2013.44a005.

Fridman, W.H. *et al.* (2012) "The immune contexture in human tumours: Impact on clinical outcome," *Nature Reviews Cancer*, 12(4). Available at: https://doi.org/10.1038/nrc3245.

Galluzzi, L. *et al.* (2018) 'Molecular mechanisms of cell death: Recommendations of the Nomenclature Committee on Cell Death 2018', *Cell Death and Differentiation*. Nature Publishing Group, pp. 486–541. Available at: https://doi.org/10.1038/s41418-017-0012-4.

Ghosh, D. *et al.* (2019) "CRISPR–cas9 a boon or Bane: The bumpy road ahead to cancer therapeutics," *Cancer Cell International*, 19(1). Available at: https://doi.org/10.1186/s12935-019-0726-0.

Giannakakou, P. *et al.* (1997) "Paclitaxel-resistant human ovarian cancer cells have mutant β-tubulins that exhibit impaired paclitaxel-driven polymerization," *Journal of Biological Chemistry*, 272(27). Available at: https://doi.org/10.1074/jbc.272.27.17118.

Gingrich, J., Rubio, T. *and* Karlak, C. (2006) *Effect of RNA Degradation on Data Quality in Quantitative PCR and Microarray Experiments*. Available at: www.expressionproteomics.com/posters/.

Giorgio, M. *et al.* (2005) 'Electron transfer between cytochrome c and p66shc generates reactive oxygen species that trigger mitochondrial apoptosis', *Cell*, 122(2), pp. 221–233. Available at: https://doi.org/10.1016/j.cell.2005.05.011.

Greten, F.R. *and* Grivennikov, S.I. (2019) 'Inflammation and cancer: Triggers, mechanisms, and consequences', *Immunity*, 51(1). Available at: https://doi.org/10.1016/j.immuni.2019.06.025.

Garcia, C.M.S. *et al.* (2014) 'Morphological and Immunophenotipical Characterization of Murine Mammary Carcinoma 4t1', *Brazilian Journal of Veterinary Pathology*, 7(3), pp. 158 – 165.

Gravekamp, C. et al. (2007) 'In vivo responses to vaccination with mage-B, GM-CSF and thioglycollate in a highly metastatic mouse breast tumor model, 4T1', Cancer Immunology, Immunotherapy, 57(7), pp. 1067–1077. doi:10.1007/s00262-007-0438-5.

Guan, X. (2023) 'Glutathione and glutathione disulfide – their biomedical and pharmaceutical applications', *Medicinal Chemistry Research*. Springer, pp. 1972–1994. Available at: https://doi.org/10.1007/s00044-023-03116-9.

Guénin, S. *et al.* (2009) 'Normalization of qRT-PCR data: The necessity of adopting a systematic, experimental conditions-specific, validation of references', *Journal of Experimental Botany*, 60(2), pp. 487–493. Available at: https://doi.org/10.1093/jxb/ern305.

Gupta, S.K. *et al.* (2016) 'Canine parvovirus NS1 protein exhibits anti-tumor activity in a mouse mammary tumor model', *Virus Research*, 213, pp. 289–298. doi:10.1016/j.virusres.2015.12.017.

Hagemann, T. *et al.* (2005) 'Macrophages induce invasiveness of epithelial cancer cells via NF-KB and JNK', *The Journal of Immunology*, 175(2). doi:10.4049/jimmunol.175.2.1197.

Hagemann, T. *et al.* (2008) '"re-educating" tumor-associated macrophages by targeting NF-KB', *The Journal of Experimental Medicine*, 205(6). doi:10.1084/jem.20080108.

Harris, I.S. *et al.* (2015) "Glutathione and thioredoxin antioxidant pathways synergize to drive cancer initiation and progression," *Cancer Cell*, 27(2). Available at: https://doi.org/10.1016/j.ccell.2014.11.019.

Hartikainen, J.M. *et al.* (2012) "Genetic polymorphisms and protein expression of NRF2 and sulfiredoxin predict survival outcomes in breast cancer," *Cancer Research*, 72(21). Available at: https://doi.org/10.1158/0008-5472.can-12-1474.

Hayes, J.D., Flanagan, J.U. *and* Jowsey, I.R. (2005) "Glutathione transferases," *Annual Review of Pharmacology and Toxicology*, 45(1). Available at: https://doi.org/10.1146/annurev.pharmtox.45.120403.095857.

Heckmann, L.-H. *et al.* (2011) 'NORMA-Gene: A simple and robust method for qPCR normalization based on target gene data', *BMC Bioinformatics*, 12(1). Available at: https://doi.org/10.1186/1471-2105-12-250.

Hidayati, Z. (2022). "Efek Paclitaxel pada Lini Sel Kanker Payudara 4T1 dengan *Knockout* GSTM1 Menggunakan *Single* maupun *Double* CRISPR gRNA: Kajian pada Ekson Berbeda," *UGM Repository*.

Honore, S., Pasquier, E., *and* Braguer, D. (2005). "Understanding microtubule dynamics for improved cancer therapy," *Cellular and molecular life sciences : CMLS*, *62*(24). https://doi.org/10.1007/s00018-005-5330-x.

van Horssen, R., Ten Hagen, T.L.M. *and* Eggermont, A.M.M. (2006) *TNF-α in Cancer Treatment: Molecular Insights, Antitumor Effects, and Clinical Utility Learning Objectives*, *The Oncologist*. Available at: www.TheOncologist.com.

Hossain, S.T., Malhotra, A. *and* Deutscher, M.P. (2016) 'How RNase R Degrades Structured RNA: ROLE OF THE HELICASE ACTIVITY AND THE S1 DOMAIN *', *Journal of Biological Chemistry*, 291(15), pp. 7877–7887. Available at: https://doi.org/10.1074/jbc.M116.717991.

Housden, B.E. *et al.* (2016) "Loss-of-function genetic tools for animal models: Cross-species and cross-platform differences," *Nature Reviews Genetics*, 18(1). Available at: https://doi.org/10.1038/nrg.2016.118.

Hua, J.T., Chen, S. *and* He, H.H. (2019) "Landscape of noncoding RNA in prostate cancer," *Trends in Genetics*, 35(11). Available at: https://doi.org/10.1016/j.tig.2019.08.004.

Huth, H.W. *et al.* (2017) 'Upregulation of p38 pathway accelerates proliferation and migration of MDA-MB-231 breast cancer cells', *Oncology Reports*, 37(4), pp. 2497–2505. Available at: https://doi.org/10.3892/or.2017.5452.

Jayson, G.C. *et al.* (2016) 'Antiangiogenic therapy in oncology: current status and future directions', *The Lancet*. Lancet Publishing Group, pp. 518–529. Available at: https://doi.org/10.1016/S0140-6736(15)01088-0.

Jiang, X. *et al.* (2020) 'The role of microenvironment in tumor angiogenesis', *Journal of Experimental and Clinical Cancer Research*. BioMed Central Ltd. Available at: https://doi.org/10.1186/s13046-020-01709-5.

Jones, D.P. *et al.* (1998) "Glutathione measurement in human plasma," *Clinica Chimica Acta*, 275(2). Available at: https://doi.org/10.1016/s0009-8981(98)00089-8.

Josephs, S.F. *et al.* (2018) 'Unleashing endogenous TNF-alpha as a cancer immunotherapeutic', *Journal of Translational Medicine*. BioMed Central Ltd. Available at: https://doi.org/10.1186/s12967-018-1611-7.

Jupp, O.J. *et al.* (2001) *Type II tumour necrosis factor-α receptor (TNFR2) activates c-Jun N-terminal kinase (JNK) but not mitogen-activated protein kinase (MAPK) or p38 MAPK pathways, Biochem. J.*

Kalliolias, G.D. *and* Ivashkiv, L.B. (2015) "TNF biology, pathogenic mechanisms and emerging therapeutic strategies," *Nature Reviews Rheumatology*, 12(1). Available at: https://doi.org/10.1038/nrrheum.2015.169.

Kantari, C. *and* Walczak, H. (2011) "Caspase-8 and bid: Caught in the act between death receptors and mitochondria," *Biochimica et Biophysica Acta (BBA) - Molecular Cell Research*, 1813(4). Available at: https://doi.org/10.1016/j.bbamcr.2011.01.026.

Kashyap, D. *et al.* (2019) "Role of reactive oxygen species in cancer progression," *Current Pharmacology Reports*, 5(2). Available at: https://doi.org/10.1007/s40495-019-00171-y.

Kaushik, I., Ramachandran, S., & Srivastava, S. K. (2019). CRISPR-Cas9: A multifaceted therapeutic strategy for cancer treatment. *Seminars in cell & developmental biology*, *96*, 4–12. https://doi.org/10.1016/j.semcdb.2019.04.018.

Kitamura, T., Qian, B.-Z. and Pollard, J.W. (2015) 'Immune cell promotion of metastasis', *Nature Reviews Immunology*, 15(2). doi:10.1038/nri3789.

Kolkova, Z. *et al.* (2013) 'Normalizing to GADPH jeopardises correct quantification of gene expression in ovarian tumours - IPO8 and RPL4 are reliable reference genes', *Journal of Ovarian Research*, 6(1). Available at: https://doi.org/10.1186/1757-2215-6-60.

Komarova, Y. *et al.* (2005) "EB1 and EB3 control clip dissociation from the ends of growing microtubules," *Molecular Biology of the Cell*, 16(11). Available at: https://doi.org/10.1091/mbc.e05-07-0614.

Kural, C. *et al.* (2019) "Glutathione S-transferases and cytochrome P450 enzyme expression in patients with intracranial tumors: Preliminary report of 55 patients," Medical Principles and Practice, 28(1), pp. 56–62. Available at: https://doi.org/10.1159/000494496.

Kwon, J. *et al.* (2017) 'A prognostic model for patients with triple-negative breast cancer: Importance of the modified Nottingham Prognostic index and age', *Journal of Breast Cancer*, 20(1), p. 65. doi:10.4048/jbc.2017.20.1.65.

Lee, H.S., Ha, A.W. and Kim, W.K. (2012) 'Effect of resveratrol on the metastasis of 4t1 mouse breast cancer cells*in vitro*and*in vivo*', *Nutrition Research and Practice*, 6(4). doi:10.4162/nrp.2012.6.4.294.

Lehmann, B.D. *et al.* (2011) 'Identification of human triple-negative breast cancer subtypes and preclinical models for selection of targeted therapies', *Journal of Clinical Investigation*, 121(7). doi:10.1172/jci45014.

Li, C.-W. *et al.* (2012) "Epithelial–mesenchymal transition induced by TNF-α requires NF-KB–mediated transcriptional upregulation of TWIST1," *Cancer Research*, 72(5). Available at: https://doi.org/10.1158/0008-5472.can-11-3123.

Li, X. *et al.* (2016) 'Lyn Delivers Bacteria to Lysosomes for Eradication through TLR2-Initiated Autophagy Related Phagocytosis', *PLoS Pathogens*, 12(1). Available at: https://doi.org/10.1371/journal.ppat.1005363.

Li, Y. *et al.* (2020) "Is nab-paclitaxel better than conventional taxanes as neoadjuvant therapy for breast cancer? A meta-analysis," *Journal of International Medical Research*, 48(8). Available at: https://doi.org/10.1177/0300060520943473.

Lin, A., Patel, S. *and* Latterich, M. (2001) "Regulation of organelle membrane fusion by PKC1P," *Traffic*, 2(10). Available at: https://doi.org/10.1034/j.1600-0854.2001.21004.x.

Lv, J. *et al.* (2018) “Hypoxic preconditioning reduces propofol-induced neuroapoptosis via regulation of BCL-2 and Bax and downregulation of activated caspase-3 in the hippocampus of neonatal rats,” *Neurological Research*, 40(9). Available at: https://doi.org/10.1080/01616412.2018.1477545.

Madera, L. *et al.* (2015) ‘4T1 murine mammary carcinoma cells enhance macrophage-mediated innate inflammatory responses’, *PLoS ONE*, 10(7). Available at: https://doi.org/10.1371/journal.pone.0133385.

Mahmoud, Y.K. *and* Abdelrazek, H.M.A. (2019) “Cancer: Thymoquinone antioxidant/pro-oxidant effect as potential anticancer remedy,” *Biomedicine & Pharmacotherapy*, 115, p. 108783. Available at: https://doi.org/10.1016/j.biopha.2019.108783.

Majzoub, J.A. *and* Muglia, L.J. (1996) “Knockout mice,” *New England Journal of Medicine*, 334(14). Available at: https://doi.org/10.1056/nejm199604043341407.

Mantovani, A. *et al.* (2008) “Cancer-related inflammation,” *Nature*, 454(7203). Available at: https://doi.org/10.1038/nature07205.

Marino, N.D. *et al.* (2020) “Anti-CRISPR protein applications: Natural brakes for CRISPR-Cas Technologies,” *Nature Methods*, 17(5). Available at: https://doi.org/10.1038/s41592-020-0771-6.

Masuda, H. *et al.* (2013) ‘Differential response to neoadjuvant chemotherapy among 7 triple-negative breast cancer molecular subtypes’, *Clinical Cancer Research*, 19(19). doi:10.1158/1078-0432.ccr-13-0799.

Meshkini, A. *and* Yazdanparast, R. (2012) “Involvement of oxidative stress in taxol-induced apoptosis in chronic myelogenous leukemia K562 cells,” *Experimental and Toxicologic Pathology*, 64(4). Available at: https://doi.org/10.1016/j.etp.2010.09.010.

Messeha, S.S. *et al.* (2020) ‘Rosmarinic acid-induced apoptosis and cell cycle arrest in triple-negative breast cancer cells’, *European Journal of Pharmacology*, 885. Available at: https://doi.org/10.1016/j.ejphar.2020.173419.

Messeha, S.S. *et al.* (2022) ‘Sanguinarine Inhibition of TNF-α-Induced CCL2, IKBKE/NF-κB/ERK1/2 Signaling Pathway, and Cell Migration in Human

Triple-Negative Breast Cancer Cells', *International Journal of Molecular Sciences*, 23(15). Available at: https://doi.org/10.3390/ijms23158329.

Miao, L.F., Ye, X.H. and 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(3). Available at: https://doi.org/10.1371/journal.pone.0216147.

Mitrunen, K. (2001) "Association between manganese superoxide dismutase (mnsod) gene polymorphism and breast cancer risk," *Carcinogenesis*, 22(5). Available at: https://doi.org/10.1093/carcin/22.5.827.

Mohammed, S. *et al.* (2015) 'Review on Polymerase Chain Reaction and its Diagnostic Merit Over Conventional Techniques in Animal Disease', *African Journal of Basic & Applied Sciences*, 7(5), pp. 262–281. Available at: https://doi.org/10.5829/idosi.ajbas.2015.7.5.95294.

Moon, D.O. *et al.* (2010) 'Butein induces G2/M phase arrest and apoptosis in human hepatoma cancer cells through ROS generation', *Cancer Letters*, 288(2), pp. 204–213. Available at: https://doi.org/10.1016/j.canlet.2009.07.002.

Morgan, M.J. and Liu, Z.G. (2011) 'Crosstalk of reactive oxygen species and NF-κB signaling', *Cell Research*, pp. 103–115. Available at: https://doi.org/10.1038/cr.2010.178.

Morris, S.A. (2022) *Knockout*, *Genome.gov*. Available at: https://www.genome.gov/genetics-glossary/Knockout (Accessed: November 26, 2022).

Murray, P.J. *et al.* (2014) 'Macrophage Activation and Polarization: Nomenclature and Experimental Guidelines', *Immunity*. Cell Press, pp. 14–20. Available at: https://doi.org/10.1016/j.immuni.2014.06.008.

Nelson, D.R. *et al.* (2022) "Breast cancer-specific mortality in early breast cancer as defined by high-risk clinical and pathologic characteristics," *PLOS ONE*, 17(2). Available at: https://doi.org/10.1371/journal.pone.0264637.

Nishimasu, H. *et al.* (2014) "Crystal structure of Cas9 in complex with guide RNA and Target DNA," *Cell*, 156(5). Available at: https://doi.org/10.1016/j.cell.2014.02.001.

Nourazarian, A.R., Kangari, P. *and* Salmaninejad, A. (2014) 'Roles of oxidative stress in the development and progression of breast cancer', *Asian Pacific Journal of Cancer Prevention*. Asian Pacific Organization for Cancer Prevention, pp. 4745–4751. Available at: https://doi.org/10.7314/APJCP.2014.15.12.4745.

Pacholak, L.M. *et al.* (2020) 'Polymorphisms in GSTT1 and GSTM1 genes as possible risk factors for susceptibility to breast cancer development and their influence in chemotherapy response: a systematic review', *Molecular Biology Reports*. Springer, pp. 5495–5501. Available at: https://doi.org/10.1007/s11033-020-05555-8.

Pandey, P. *et al.* (2017) "The see-saw of keap1-nrf2 pathway in cancer," *Critical Reviews in Oncology/Hematology*, 116. Available at: https://doi.org/10.1016/j.critrevonc.2017.02.006.

Park, S.-J. *et al.* (2004) "Taxol induces caspase-10-dependent apoptosis," *Journal of Biological Chemistry*, 279(49). Available at: https://doi.org/10.1074/jbc.m406543200.

Peng, X. *et al.* (2015) "Aflatoxin B1 affects apoptosis and expression of Bax, bcl-2, and caspase-3 in thymus and bursa of fabricius in broiler chickens," *Environmental Toxicology*, 31(9). Available at: https://doi.org/10.1002/tox.22120.

van Pelt-Verkuil, E., van Belkum, A. *and* Hays, J.P. (eds) (2008) 'Deoxynucleotide Triphosphates and Buffer Components', in *Principles and Technical Aspects of PCR Amplification*. Dordrecht: Springer Netherlands, pp. 91–101. Available at: https://doi.org/10.1007/978-1-4020-6241-4_6.

Philip, M., Rowley, D.A. *and* Schreiber, H. (2004) "Inflammation as a tumor promoter in cancer induction," *Seminars in Cancer Biology*, 14(6). Available at: https://doi.org/10.1016/j.semcancer.2004.06.006.

Piton, A. *et al.* (2010) "Involvement of pregnane X receptor in the regulation of CYP2B6 gene expression by Oltipraz in human hepatocytes," *Toxicology in Vitro*, 24(2). Available at: https://doi.org/10.1016/j.tiv.2009.09.025.

Pollo, G.A. *et al.* (2019) "Universal primers for amplification of TNF-α -308 promoter region," *Pakistan Journal of Biological Sciences*, 22(12). Available at: https://doi.org/10.3923/pjbs.2019.585.589. f

Pribluda, A. *et al.* (2013) "A senescence-inflammatory switch from cancer-inhibitory to cancer-promoting mechanism," *Cancer Cell*, 24(2). Available at: https://doi.org/10.1016/j.ccr.2013.06.005.

Primer-Blast Results (no date) *National Center for Biotechnology Information*. Available at: https://www.ncbi.nlm.nih.gov/tools/primer-blast/primertool.cgi?ctg_time=1705605726&job_key=Mjjscugd5bXCi-CO7e7EvJf11Y665s6Tuw (Accessed: 26 October 2023).

Pulaski, B.A. *and* Ostrand-Rosenberg, S. (2001) 'Mouse 4T1 breast tumor model', *Current Protocols in Immunology*, 39(1). doi:10.1002/0471142735.im2002s39.

Radosa, J.C. *et al.* (2017) "Evaluation of local and distant recurrence patterns in patients with triple-negative breast cancer according to age," *Annals of Surgical Oncology*, 24(3), pp. 698–704. Available at: https://doi.org/10.1245/s10434-016-5631-3.

Ramanathan, B., *et al*. (2005) "Resistance to paclitaxel is proportional to cellular total antioxidant capacity," *Cancer research*, *65*(18). https://doi.org/10.1158/0008-5472.CAN-05-1162.

Ranta, V. *et al.* (1999) 'Human vascular endothelial cells produce tumor necrosis factor-α in response to proinflammatory cytokine stimulation', *Critical Care Medicine*, 27(10). Available at: https://journals.lww.com/ccmjournal/fulltext/1999/10000/human_vascular_endothelial_cells_produce_tumor.19.aspx.

Rao, D.D. *et al.* (2009) "Sirna vs. Shrna: Similarities and differences," *Advanced Drug Delivery Reviews*, 61(9). Available at: https://doi.org/10.1016/j.addr.2009.04.004.

Rayson, D. *et al.* (2018) "Impact of detection method and age on survival outcomes in triple-negative breast cancer: A population-based cohort analysis," *Clinical Breast Cancer*, 18(5). Available at: https://doi.org/10.1016/j.clbc.2018.04.013.

Reddy, G.M., Suresh, P.K. and Pai, R.R. (2017) 'Clinicopathological features of triple negative breast carcinoma', *JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH* [Preprint]. doi:10.7860/jcdr/2017/21452.9187.

Redza-Dutordoir, M. *and* Averill-Bates, D.A. (2016) ‘Activation of apoptosis signalling pathways by reactive oxygen species’, *Biochimica et Biophysica Acta - Molecular Cell Research*. Elsevier B.V., pp. 2977–2992. Available at: https://doi.org/10.1016/j.bbamcr.2016.09.012.

Rego, S.L., Helms, R.S. *and* Dréau, D. (2014) ‘Breast tumor cell TACE-shed MCSF promotes pro-angiogenic macrophages through NF-κB signaling’, *Angiogenesis*, 17(3), pp. 573–585. Available at: https://doi.org/10.1007/s10456-013-9405-2.

Ren, X. *et al.* (2018) “Paclitaxel suppresses proliferation and induces apoptosis through regulation of ROS and the AKT/MAPK signaling pathway in canine mammary gland tumor cells,” *Molecular Medicine Reports* [Preprint]. Available at: https://doi.org/10.3892/mmr.2018.8868.

Reuter, S. *et al.* (2010) “Oxidative stress, inflammation, and cancer: How are they linked?,” *Free Radical Biology and Medicine*, 49(11). Available at: https://doi.org/10.1016/j.freeradbiomed.2010.09.006.

Rowinsky, E. K., Cazenave, L. A., & Donehower, R. C. (1990) “Taxol: a novel investigational antimicrotubule agent” *Journal of the National Cancer Institute*, *82*(15). https://doi.org/10.1093/jnci/82.15.1247.

Sánchez-Rivera, F.J. *et al.* (2014) “Rapid modelling of cooperating genetic events in cancer through somatic genome editing,” *Nature*, 516(7531). Available at: https://doi.org/10.1038/nature13906.

Schwitalla, S. *et al.* (2013) “Intestinal tumorigenesis initiated by Dedifferentiation and acquisition of stem-cell-like properties,” *Cell*, 152(1-2), pp. 25–38. Available at: https://doi.org/10.1016/j.cell.2012.12.012.

SEER*Explorer: An interactive website for SEER cancer statistics [Internet]. Surveillance Research Program, National Cancer Institute; 2023 Apr 19. [updated: 2023 Nov 16; cited 2023 Nov 20]. Available from: https://seer.cancer.gov/statistics-network/explorer/.

Sethi, G. (2008) “TNF: A master switch for inflammation to cancer,” *Frontiers in Bioscience*, Volume (13), p. 5094. Available at: https://doi.org/10.2741/3066.

Setiati, N., Partaya *and* Hidayah, N. (2020) ‘The use of two pairs primer for CO1 gene amplification on traded stingray at fish auction Tasik Agung Rembang’, in *Journal of Physics: Conference Series*. Institute of Physics Publishing. Available at: https://doi.org/10.1088/1742-6596/1567/3/032056.

Shibabaw, T., Teferi, B. *and* Ayelign, B. (2023) 'The role of Th-17 cells and IL-17 in the metastatic spread of breast cancer: As a means of prognosis and therapeutic target', *Frontiers in Immunology*. Frontiers Media S.A. Available at: https://doi.org/10.3389/fimmu.2023.1094823.

Sibley, C.R., Seow, Y. *and* Wood, M.J.A. (2010) "Novel RNA-based strategies for therapeutic gene silencing," *Molecular Therapy*, 18(3). Available at: https://doi.org/10.1038/mt.2009.306.

Sies, H. (1997) 'Oxidative stress: Oxidants and antioxidants', *Experimental Physiology*. Blackwell Publishing Ltd, pp. 291–295. Available at: https://doi.org/10.1113/expphysiol.1997.sp004024.

Snyder, J.P. *et al.* (2001) "The binding conformation of taxol in β-tubulin: A model based on electron crystallographic density," *Proceedings of the National Academy of Sciences*, 98(9), pp. 5312–5316. Available at: https://doi.org/10.1073/pnas.051309398.

Srivas, S. (2017) 'Primer', in J. Vonk and T. Shackelford (eds) *Encyclopedia of Animal Cognition and Behavior*. Cham: Springer International Publishing, pp. 1–5. Available at: https://doi.org/10.1007/978-3-319-47829-6_184-1.

Stathopoulos, G.T. *et al.* (2007) "Tumor necrosis factor-α promotes malignant pleural effusion," *Cancer Research*, 67(20), pp. 9825–9834. Available at: https://doi.org/10.1158/0008-5472.can-07-1064.

Storr, S.J. *et al.* (2013) "Redox environment, free radical, and oxidative DNA damage," *Antioxidants & Redox Signaling*, 18(18). Available at: https://doi.org/10.1089/ars.2012.4920.

Strange, R.C. *et al.* (2001) "Glutathione-S-transferase family of enzymes," *Mutation Research/Fundamental and Molecular Mechanisms of Mutagenesis*, 482(1-2). Available at: https://doi.org/10.1016/s0027-5107(01)00206-8.

Stuelten, C.H. *et al.* (2005) 'Breast cancer cells induce stromal fibroblasts to express MMP-9 via secretion of TNF-α and TGF-β', *Journal of Cell Science*, 118(10). doi:10.1242/jcs.02334.

Su, S. *et al.* (2016) "CRISPR-Cas9 mediated efficient PD-1 disruption on human primary T cells from cancer patients," *Scientific Reports*, 6(1). Available at: https://doi.org/10.1038/srep20070.

Sugarman, B.J. *et al.* (1985) "Recombinant human tumor necrosis factor-α: Effects on proliferation of normal and transformed cells in vitro," *Science*, 230(4728). Available at: https://doi.org/10.1126/science.3933111.

Tan, S.-H. *et al.* (2008) "Pharmacogenetics in breast cancer therapy," *Clinical Cancer Research*, 14(24). Available at: https://doi.org/10.1158/1078-0432.ccr-08-0993.

Tang, F. *et al.* (2002) 'The Absence of NF-κB-Mediated Inhibition of c-Jun N-Terminal Kinase Activation Contributes to Tumor Necrosis Factor Alpha-Induced Apoptosis', *Molecular and Cellular Biology*, 22(24), pp. 8571–8579. Available at: https://doi.org/10.1128/mcb.22.24.8571-8579.2002.

Tew, K.D. *and* Townsend, D.M. (2011) "Redox platforms in Cancer Drug Discovery and Development," *Current Opinion in Chemical Biology*, 15(1). Available at: https://doi.org/10.1016/j.cbpa.2010.10.016.

Tian, X. *et al.* (2019) "CRISPR/Cas9 – an evolving biological tool kit for cancer biology and oncology," *npj Precision Oncology*, 3(1). Available at: https://doi.org/10.1038/s41698-019-0080-7.

Tiash, S., Chua, M.J., & Chowdhury, E.H. (2016). Knockdown of ROS1 gene sensitizes breast tumor growth to doxorubicin in a syngeneic mouse model. *International Journal of Oncology*, 48. Available at: https://doi.org/10.3892/ijo.2016.3452.

Vaidya, F.U. *et al.* (2020) 'Oxidative stress and inflammation can fuel cancer', in *Role of Oxidative Stress in Pathophysiology of Diseases*. Springer Singapore, pp. 229–258. Available at: https://doi.org/10.1007/978-981-15-1568-2_14.

Wang, J. *et al.* (2021) 'Targeting Reactive Oxygen Species Capacity of Tumor Cells with Repurposed Drug as an Anticancer Therapy', *Oxidative Medicine and Cellular Longevity*. Hindawi Limited. Available at: https://doi.org/10.1155/2021/8532940.

Wang, L., Du, F. *and* Wang, X. (2008) "TNF-α induces two distinct caspase-8 activation pathways," *Cell*, 133(4). Available at: https://doi.org/10.1016/j.cell.2008.03.036.

Wang, Y. *et al.* (2019) 'M1 and M2 macrophage polarization and potentially therapeutic naturally occurring compounds', *International Immunopharmacology*, 70, pp. 459–466. Available at: https://doi.org/https://doi.org/10.1016/j.intimp.2019.02.050.

Wen, S. *et al.* (2019) 'Cancer-associated fibroblast (CAF)-derived IL32 promotes breast cancer cell invasion and metastasis via integrin β3–p38 MAPK signalling', *Cancer Letters*, 442, pp. 320–332. Available at: https://doi.org/10.1016/j.canlet.2018.10.015.

Widersten, M. *et al.* (1991) *Heterologous expression of the allelic variant Mu-class glutathione transferases u and V, Biochem. J.*

Wieczorek, D., Delauriere, L. and Schagat, T. (2012) Methods of RNA Quality Assessment.
http://www.promega.co.uk/resources/pubhub/methods-of-rna-quality-assessment/

Wilson, N.S., Dixit, V. and Ashkenazi, A. (2009) 'Death receptor signal transducers: Nodes of coordination in immune signaling networks', *Nature Immunology*, 10(4), pp. 348–355. doi:10.1038/ni.1714.

Wolff, A.C. *et al.* (2013) "Recommendations for human epidermal growth factor receptor 2 testing in breast cancer: American Society of Clinical Oncology/College of American Pathologists Clinical Practice Guideline update," *Journal of Clinical Oncology*, 31(31), pp. 3997–4013. Available at: https://doi.org/10.1200/jco.2013.50.9984.

Wong, R.S.Y. (2011) 'Apoptosis in cancer: From pathogenesis to treatment', *Journal of Experimental and Clinical Cancer Research*. Available at: https://doi.org/10.1186/1756-9966-30-87.

Wu, Y. *and* Zhou, B.P. (2010) 'TNF-α/NFκ-B/Snail pathway in cancer cell migration and invasion', *British Journal of Cancer*, pp. 639–644. Available at: https://doi.org/10.1038/sj.bjc.6605530.

Yang, J. *et al.* (1997) "Prevention of apoptosis by bcl-2: Release of cytochrome c from mitochondria blocked," *Science*, 275(5303). Available at: https://doi.org/10.1126/science.275.5303.1129.

Yu, K.-D. *et al.* (2009) ‘ A functional polymorphism in the promoter region of GSTM1 implies a complex role for GSTM1 in breast cancer ’, *The FASEB Journal*, 23(7), pp. 2274–2287. Available at: https://doi.org/10.1096/fj.08-124073.

Yu, K.-D. *et al.* (2012) “Genetic variants in oxidative stress–related genes predict chemoresistance in primary breast cancer: A prospective observational study and validation,” *Cancer Research*, 72(2). Available at: https://doi.org/10.1158/0008-5472.can-11-2998.

Zhang, J. *et al.* (2014) ‘Pleiotropic functions of glutathione S-transferase P’, in *Advances in Cancer Research*. Academic Press Inc., pp. 143–175. Available at: https://doi.org/10.1016/B978-0-12-420117-0.00004-9.

Zhang, X. *et al.* (2014) “Molecular cloning, characterization and positively selected sites of the glutathione S-transferase family from Locusta Migratoria,” *PLoS ONE*, 9(12). Available at: https://doi.org/10.1371/journal.pone.0114776.

Zhou, B.P. *et al.* (2000) “Her-2/neu blocks tumor necrosis factor-induced apoptosis via the AKT/NF-KB pathway,” *Journal of Biological Chemistry*, 275(11), pp. 8027–8031. Available at: https://doi.org/10.1074/jbc.275.11.8027.