

DAFTAR PUSTAKA

- Abdel-Shafy, S., Alanazi, A. D., Gabr, H. S. M., Allam, A. M., Abou-Zeina, H. A. A., Masoud, R. A., Soliman, D. E., & Alshahrani, M. Y. (2020). Efficacy and Safety of Ethanolic *Curcuma longa* Extract as a Treatment for Sand Tampan Ticks in a Rabbit Model. *Veterinary World*, 13(4), 812. <https://doi.org/10.14202/VETWORLD.2020.812-820>.
- Agatonovic-Kustrin, S., Kustrin, E., Gegechkori, V., & Morton, D. W. (2019). High-Performance Thin-Layer Chromatography Hyphenated with Microchemical and Biochemical Derivatizations in Bioactivity Profiling of Marine Species. *Marine Drugs*, 17(3). <https://doi.org/10.3390/MD17030148>.
- Agustian, N., Pratama, L., Meilani, A., & Fakhri, T. M. (2021). Studi In Silico Senyawa Turunan Kurkuminoid terhadap Reseptor Androgen sebagai Kandidat Terapi Kanker Prostat. *Jurnal Ilmiah Farmasi Farmasyifa*, 4(2), 29–38. <https://doi.org/10.29313/JIFF.V4I2.7783>.
- Alamri, A. H., Debnath, S., Alqahtani, T., Alqahtani, A., Alshehri, S. A., & Ghosh, A. (2023). Enhancing Plant-Derived Smart Nano Inhibitor in Targeting Mammalian Target of Rapamycin (Mtor) in Breast Cancer Using Curcuma Longa-Derived Compound Curcumin. *Environmental Science and Pollution Research*, 1, 1–8. <https://doi.org/10.1007/S11356-023-25375-0/FIGURES/7>.
- Almatroudi, A., Allemailem, K. S., Alwanian, W. M., Alharbi, B. F., Alrumaihi, F., Khan, A. A., Almatroodi, S. A., & Rahmani, A. H. (2023). Effects and Mechanisms of Kaempferol in the Management of Cancers through Modulation of Inflammation and Signal Transduction Pathways. *International Journal of Molecular Sciences* 2023, Vol. 24, Page 8630, 24(10), 8630. <https://doi.org/10.3390/IJMS24108630>.
- Altun, İ., & Sonkaya, A. (2018). The Most Common Side Effects Experienced by Patients Were Receiving First Cycle of Chemotherapy. *Iranian Journal of Public Health*, 47(8), 1218. <https://pmc/articles/PMC6123577/>.
- Amalia Riyadi, S., Fauzi Abdullah, F., Fadhilah, F., Assidiqiah, N. (2022). Aktivitas Antikanker Kurkuminoid terhadap Sel Melanoma B16-F10. *Jurnal Ilmiah Farmako Bahari*, 13(2), 152–163. <https://doi.org/10.52434/JFB.V13I2.1458>.
- Ammerman, N. C., Beier-Sexton, M., & Azad, A. F. (2008). Growth and Maintenance of Vero Cell Lines. *Current Protocols in Microbiology*, Appendix 4 (SUPPL. 11). <https://doi.org/10.1002/9780471729259.MCA04ES11>.
- Andriani, Y., Kristina, S. A., & Wiedyaningsih, C. (2021). Estimasi Biaya Pengobatan Langsung Penyakit Kanker di Indonesia: Estimasi Direct Medical Cost (DMC). *Majalah Farmaseutik*, 17(3), 251–255. <https://doi.org/10.22146/FARMASEUTIK.V1I1.49823>.

- Antony, P., & Vijayan, R. (2016). Acetogenins from *Annona muricata* as Potential Inhibitors of Antiapoptotic Proteins: A Molecular Modeling Study. *Drug Design, Development and Therapy*, 10, 1399. <https://doi.org/10.2147/DDDT.S103216>.
- Anzai, A., & Nishiura, H. (2022). Doubling Time of Infectious Diseases. *Journal of Theoretical Biology*, 554, 111278. <https://doi.org/10.1016/J.JTBI.2022.111278>.
- Arianingrum, R., Arty, I. S., & Atun, S. (2011). Sitotoxic Tests of Some Mono Components of Cocon Hydroxes on Cancer Cell Line T47D. *Jurnal Penelitian Saintek*, 16(2). <https://journal.uny.ac.id/index.php/saintek/article/view/3387>.
- Ashraf, K., Mujeeb, M., Ahmad, A., Ahmad, N., & Amir, M. (n.d.). *Determination of Curcuminoids in Curcuma longa Linn. by UPLC/Q-TOF-MS: An Application in Turmeric Cultivation*. <https://doi.org/10.1093/chromsci/bmv023>.
- Astuti, P., D Utami, E., Nugrahani, A. W., & Sudjadi, S. (2012). Genistein Abrogates G2 Arrest Induced by Curcumin in p53 Deficient T47D cells. *DARU, Journal of Pharmaceutical Sciences*, 20(1), 1–7. <https://doi.org/10.1186/2008-2231-20-82/FIGURES/3>.
- Azizi, E., Fouladdel, S., Movahhed, T. K., Modaresi, F., Barzegar, E., Ghahremani, M. H., Ostad, S. N., & Atashpour, S. (2022). Quercetin Effects on Cell Cycle Arrest and Apoptosis and Doxorubicin Activity in T47D Cancer Stem Cells. *Asian Pacific Journal of Cancer Prevention: APJCP*, 23(12), 4145. <https://doi.org/10.31557/APJCP.2022.23.12.4145>.
- Balasuriya, N., McKenna, M., Liu, X., Li, S. S. C., & O'Donoghue, P. (2018). Phosphorylation-Dependent Inhibition of Akt1. *Genes* 2018, Vol. 9, Page 450, 9(9), 450. <https://doi.org/10.3390/GENES9090450>.
- Balduyck, M., Zerimech, F., Gouyer, V., Lemaire, R., Hemon, B., Grard, G., Thiebaut, C., Lemaire, V., Dacquembronne, E., Duhem, T., Lebrun, A., Dejonghe, M. J., & Huet, G. (2000). Specific Expression of Matrix Metalloproteinases 1, 3, 9 and 13 Associated with Invasiveness of Breast Cancer Cells In Vitro. *Clinical and Experimental Metastasis*, 18(2), 171–178. <https://doi.org/10.1023/A:1006762425323>.
- Barcelos, K. A., Mendonça, C. R., Noll, M., Botelho, A. F., Francischini, C. R. D., & Silva, M. A. M. (2022). Antitumor Properties of Curcumin in Breast Cancer Based on Preclinical Studies: A Systematic Review. *Cancers*, 14(9). <https://doi.org/10.3390/CANCERS14092165>.
- Bartsch, J. E., Staren, E. D., & Appert, H. E. (2003). Matrix Metalloproteinase Expression in Breast Cancer. *Journal of Surgical Research*, 110(2), 383–392. [https://doi.org/10.1016/S0022-4804\(03\)00007-6](https://doi.org/10.1016/S0022-4804(03)00007-6).

- Bogdanović, G., Kojić, V., Dordević, A., Čanadanović-Brunet, J., Vojinović-Miloradov, M., & Baltić, V. V. (2004). Modulating Activity of Fullerol C 60 (OH) 22 on Doxorubicin-Induced Cytotoxicity. *Toxicology in Vitro*, 18(5), 629–637. <https://doi.org/10.1016/J.TIV.2004.02.010>.
- Burapan, S., Kim, M., Paisooksantivatana, Y., Eser, B. E., & Han, J. (2020). Thai Curcuma Species: Antioxidant and Bioactive Compounds. *Foods*, 9(9). <https://doi.org/10.3390/FOODS9091219>.
- Burman, V., Lehari, K., Pratap Singh, N., Singh, B., Chand, P., Singh, J., & Sengar, R. S. (2020). Quantification of Total Phenolics and Curcumin Content in Different Turmeric Germplasm. *Int. J. Curr. Microbiol. App. Sci*, 9(11), 1753–1758. <https://doi.org/10.20546/ijcmas.2020.911.207>.
- Campos, L. M., Lemos, A. S. O., Diniz, I. O. M., Carvalho, L. A., Silva, T. P., Dib, P. R. B., Hottz, E. D., Chedier, L. M., Melo, R. C. N., & Fabri, R. L. (2023). Antifungal *Annona muricata* L. (Soursop) Extract Targets the Cell Envelope of Multi-Drug Resistant *Candida albicans*. *Journal of Ethnopharmacology*, 301, 115856. <https://doi.org/10.1016/J.JEP.2022.115856>.
- Cao, W., Chen, X., Xiao, C., Lin, D., Li, Y., Luo, S., Zeng, Z., Sun, B., & Lei, S. (2023). Ar-Turmerone Inhibits the Proliferation and Mobility of Glioma by Downregulating Cathepsin B. *Aging (Albany NY)*, 15(18), 9377. <https://doi.org/10.18632/AGING.204940>.
- Chimento, A., De Luca, A., Avena, P., De Amicis, F., Casaburi, I., Sirianni, R., & Pezzi, V. (2022). Estrogen Receptors-Mediated Apoptosis in Hormone-Dependent Cancers. *International Journal of Molecular Sciences*, 23(3). <https://doi.org/10.3390/IJMS23031242>.
- Coker-Gurkan, A., Bulut, D., Genc, R., Arisan, E. D., Obakan-Yerlikaya, P., & Palavan-Unsal, N. (2019). Curcumin Prevented Human Autocrine Growth Hormone (GH) Signaling Mediated NF-Kb Activation and Mir-183-96-182 Cluster Stimulated Epithelial Mesenchymal Transition in T47D Breast Cancer Cells. *Molecular Biology Reports*, 46(1), 355–369. <https://doi.org/10.1007/S11033-018-4479-Y>.
- Coria-Téllez, A. V., Montalvo-Gonzalez, E., Yahia, E. M., & Obledo-Vázquez, E. N. (2018). *Annona Muricata*: A Comprehensive Review on Its Traditional Medicinal Uses, Phytochemicals, Pharmacological Activities, Mechanisms of Action and Toxicity. *Arabian Journal of Chemistry*, 11(5), 662–691. <https://doi.org/10.1016/J.ARABJC.2016.01.004>.
- Da'i, M., Jenie, U. A., AM, S., Kawaichi, M., & Meiyanto, E. (2007). T47D cells arrested at G2M and Hyperploidy Formation Induced by a Curcumin's Analogue PGV-1. *Indonesian Journal of Biotechnology*, 12(2). <https://doi.org/10.22146/IJBIOTECH.7776>.

- Dalimi-Asl, S., Babaahmadi-Rezaei, H., & Mohammadzadeh, G. (2020). Combination of Silibinin and Curcumin Reduced Leptin Receptor Expression in MCF-7 Human Breast Cancer Cell Line. *Iranian Journal of Medical Sciences*, 45(6), 477. <https://doi.org/10.30476/IJMS.2019.81934>.
- Dang, C., Gilewski, T. A., Surbone, A., & Norton, L. (2003). *Cell Proliferation*. <https://www.ncbi.nlm.nih.gov/books/NBK12640/>.
- D'Aniello, C., Patriarca, E. J., Phang, J. M., & Minchiotti, G. (2020). Proline Metabolism in Tumor Growth and Metastatic Progression. *Frontiers in Oncology*, 10. <https://doi.org/10.3389/FONC.2020.00776>.
- Dosoky, N. S., & Setzer, W. N. (2018). Chemical Composition and Biological Activities of Essential Oils of Curcuma Species. *Nutrients*, 10(9). <https://doi.org/10.3390/NU10091196>.
- Drescher, H., Weiskirchen, S., & Weiskirchen, R. (2021). Flow Cytometry: A Blessing and a Curse. *Biomedicines*, 9(11). <https://doi.org/10.3390/BIMEDICINES9111613>.
- El-Hussein, A., Manoto, S. L., Ombinda-Lemboumba, S., Alrowaili, Z. A., & Mthunzi-Kufa, P. (2021). A Review of Chemotherapy and Photodynamic Therapy for Lung Cancer Treatment. *Anti-Cancer Agents in Medicinal Chemistry*, 21(2), 149–161. <https://doi.org/10.2174/1871520620666200403144945>.
- Elmore, S. (2007). Apoptosis: A Review of Programmed Cell Death. *Toxicologic Pathology*, 35(4), 495. <https://doi.org/10.1080/01926230701320337>.
- Erdoğan, Ü., & Erbaş, S. (2021). Phytochemical Profile and Antioxidant Activities of *Zingiber officinale* (Ginger) and *Curcuma longa* L. (Turmeric) Rhizomes. *Bilge International Journal of Science and Technology Research*, 5(Özel Sayı), 1–6. <https://doi.org/10.30516/BILGESCI.991202>.
- Fan, Y., Mao, R., & Yang, J. (2013). NF-κB and STAT3 Signaling Pathways Collaboratively Link Inflammation to Cancer. *Protein & Cell*, 4(3), 176. <https://doi.org/10.1007/S13238-013-2084-3>.
- Farghadani, R., & Naidu, R. (2021). Curcumin: Modulator of Key Molecular Signaling Pathways in Hormone-Independent Breast Cancer. *Cancers*, 13(14). <https://doi.org/10.3390/CANCERS13143427>.
- Fasya, A. G., Amalia, S., Megawati, D. S., Salima, F., Kusuma, V. A., & Purwantoro, B. (2020). Isolation, Identification, and Bioactivity of Steroids Isolates from *Hydrilla verticillata* Petroleum Ether Fraction. *IOP Conference Series: Earth and Environmental Science*, 456(1), 012009. <https://doi.org/10.1088/1755-1315/456/1/012009>.

- Febriani, A., Furqon Departemen Pulmonologi dan Ilmu Kedokteran Respirasi, A., Kedokteran, F., Airlangga, U., & Soetomo, R. (2018). Metastasis Kanker Paru. *Jurnal Respirasi*, 4(3), 94–101. <https://doi.org/10.20473/JR.V4-I.3.2018.94-101>.
- Fedr, R., Kahounová, Z., Remšík, J., Reiterová, M., Kalina, T., & Souček, K. (2023). Variability of Fluorescence Intensity Distribution Measured by Flow Cytometry Is Influenced by Cell Size and Cell Cycle Progression. *Scientific Reports* 2023 13:1, 13(1), 1–13. <https://doi.org/10.1038/s41598-023-31990-1>.
- Fertilita, S., Sandhika, W., & Suprabawati, D. G. A. (2020). The Cytotoxic Activity of *Annona muricata* Linn Leaves Ethanolic Extract (AMEE) on T47D Breast Cancer Cell Line. *Medical Laboratory Technology Journal*, 1(1). <https://doi.org/10.31964/MLTJ.V1I1.291>.
- Fischer, M., Schade, A. E., Branigan, T. B., Müller, G. A., & DeCaprio, J. A. (2022). Coordinating Gene Expression During the Cell Cycle. *Trends in Biochemical Sciences*, 47(12), 1009–1022. <https://doi.org/10.1016/J.TIBS.2022.06.007>.
- Flanigen, E. M., Khatami, H., & Szymanski, H. A. (2016). Uji aktivitas Antikanker Payudara (T47D) ekstrak etanol Daun Sirsak (*Annona muricata* Linn) yang diembankan pada zeolit NaX. 201–229. <https://doi.org/10.1021/BA-1971-0101.CH016>.
- Fuloria, S., Mehta, J., Chandel, A., Sekar, M., Rani, N. N. I. M., Begum, M. Y., Subramaniyan, V., Chidambaram, K., Thangavelu, L., Nordin, R., Wu, Y. S., Sathasivam, K. V., Lum, P. T., Meenakshi, D. U., Kumarasamy, V., Azad, A. K., & Fuloria, N. K. (2022). A Comprehensive Review on the Therapeutic Potential of *Curcuma longa* Linn. in Relation to its Major Active Constituent Curcumin. *Frontiers in Pharmacology*, 13. <https://doi.org/10.3389/FPHAR.2022.820806>.
- Gaffar, S., Apriani, R., & Herlina, T. (2018). Aktivitas Sitotoksik Ekstrak Etanol, Fraksi Etil Asetat dan n-heksana Daun Kelor (*Moringa oleifera*) terhadap Sel Kanker Payudara T47D. *ALCHEMY Jurnal Penelitian Kimia*, 14(2), 302–312. <https://doi.org/10.20961/ALCHEMY.14.2.17298.303-313>.
- Gao, J., Yu, H., Guo, W., Kong, Y., Gu, lina, Li, Q., Yang, S., Zhang, Y., & Wang, Y. (2018). The Anticancer Effects of Ferulic Acid is Associated with Induction of Cell Cycle Arrest and Autophagy in Cervical Cancer Cells. *Cancer Cell International*, 18(1), 102. <https://doi.org/10.1186/S12935-018-0595-Y>.
- Gavamukulya, Y., Wamunyokoli, F., & El-Shemy, H. A. (2017). *Annona muricata*: Is the Natural Therapy to Most Disease Conditions Including Cancer Growing in Our Backyard? A Systematic Review of Its Research History and Future Prospects. *Asian Pacific Journal of Tropical Medicine*, 10(9), 835–848. <https://doi.org/10.1016/J.APJTM.2017.08.009>.

- Geran, R., Greenberg, N., & Donald, M. (1972). Protocols for Screening Chemical Agents and Natural Products Against Animal Tumors and Other Biological Systems. *Cancer Chemotherapy Reports*.
- Ghasemi, M., Turnbull, T., Sebastian, S., & Kempson, I. (2021). The Mtt Assay: Utility, Limitations, Pitfalls, and Interpretation in Bulk and Single-Cell Analysis. *International Journal of Molecular Sciences*, 22(23). <https://doi.org/10.3390/IJMS222312827/S1>.
- Gonçalves, E. M., Ventura, C. Â., Yano, T., Rodrigues Macedo, M. L., & Genari, S. C. (2006). Morphological And Growth Alterations In Vero Cells Transformed By Cisplatin. *Cell Biology International*, 30(6), 485–494. <https://doi.org/10.1016/J.CELLBI.2005.12.007>.
- Hadisaputri, Y. E., Habibah, U., Abdullah, F. F., Halimah, E., Mutakin, M., Megantara, S., Abdulah, R., & Diantini, A. (2021). Antiproliferation Activity and Apoptotic Mechanism of Soursop (*Annona muricata* L.) Leaves Extract and Fractions on MCF7 Breast Cancer Cells. *Breast Cancer: Targets and Therapy*, 13, 447. <https://doi.org/10.2147/BCTT.S317682>.
- Hallman, K., Aleck, K., Dwyer, B., Lloyd, V., Quigley, M., Sitto, N., Siebert, A. E., & Dinda, S. (2017). The Effects Of Turmeric (Curcumin) On Tumor Suppressor Protein (p53) and Estrogen Receptor (ER α) in Breast Cancer Cells. *Breast Cancer: Targets and Therapy*, 9, 153–161. <https://doi.org/10.2147/BCTT.S125783>.
- Harborne, J. B. (1984). *Phytochemical Methods*. <https://doi.org/10.1007/978-94-009-5570-7>.
- Haron, N. H., Toha, Z. M., Abas, R., Hamdan, M. R., Azman, N., Khairuddean, M., & Arsad, H. (2019). In Vitro Cytotoxic Activity of Clinacanthus nutans Leaf Extracts Against HeLa Cells. *Asian Pacific Journal of Cancer Prevention: APJCP*, 20(2), 601–609. <https://doi.org/10.31557/APJCP.2019.20.2.601>.
- Haryani, F., Hakim, A., & Hanifa, N. I. (2021). Perbandingan Pelarut Etanol 96% dan Aseton pada Ekstraksi dan Isolasi Kurkuminoid dari Rimpang Kunyit. *Lambung Farmasi: Jurnal Ilmu Kefarmasian*, 2(2), 112–117. <https://doi.org/10.31764/LF.V2I2.5493>.
- Hasmila, I., Natsir, H., & Soekamto, N. H. (2019). Phytochemical Analysis And Antioxidant Activity Of Soursop Leaf Extract (*Annona muricata* Linn.). *Journal of Physics: Conference Series*, 1341(3), 032027. <https://doi.org/10.1088/1742-6596/1341/3/032027>.
- Heinsvig, P. J., Noble, C., Dalsgaard, P. W., & Mardal, M. (2023). Forensic Drug Screening By Liquid Chromatography Hyphenated With High-Resolution Mass Spectrometry (LC-HRMS). *TrAC Trends in Analytical Chemistry*, 162, 117023. <https://doi.org/10.1016/J.TRAC.2023.117023>.

- Hu, S., Xu, Y., Meng, L., Huang, L., & Sun, H. (2018). Curcumin Inhibits Proliferation and Promotes Apoptosis of Breast Cancer Cells. *Experimental and Therapeutic Medicine*, 16(2), 1266. <https://doi.org/10.3892/ETM.2018.6345>.
- Ifandari, Widyarini, S., Hartanto Nugroho, L., & Pratiwi, R. (2020). Phytochemical Analysis and Cytotoxic Activities of Two Distinct Cultivars of Ganyong Rhizomes (*Canna Indica*) Against the Widr Colon Cancer Cell Line. *Biodiversitas Journal of Biological Diversity*, 21(4), 1660–1669. <https://doi.org/10.13057/BIODIV/D210447>.
- Ilango, S., Sahoo, D. K., Paital, B., Kathirvel, K., Gabriel, J. I., Subramaniam, K., Jayachandran, P., Dash, R. K., Hati, A. K., Behera, T. R., Mishra, P., & Nirmaladevi, R. (2022). A Review on *Annona muricata* and Its Anticancer Activity. *Cancers*, 14(18), 4539. <https://doi.org/10.3390/CANCERS14184539>.
- Imran, A., Qamar, H. Y., Ali, Q., Naeem, H., Riaz, M., Amin, S., Kanwal, N., Ali, F., Sabar, M. F., & Nasir, I. A. (2017). Role of Molecular Biology in Cancer Treatment: A Review Article. *Iranian Journal of Public Health*, 46(11), 1475. [/pmc/articles/PMC5696686/](https://pmc/articles/PMC5696686/).
- Jha, A. K., & Sit, N. (2022). *Trends in Food Science & Technology*, 119, 579–591. <https://doi.org/10.1016/J.TIFS.2021.11.019>.
- Joseph, S. M., & Amala Dev, A. R. (2023). Annonaceae: Tropical Medicinal Plants with Potential Anticancer Acetogenins and Alkaloids. *Bioprospecting of Tropical Medicinal Plants*, 565–587. https://doi.org/10.1007/978-3-031-28780-0_22.
- Junedi, S., Hermawan, A., Fitriarsi, A., Setiawati, A., Susidarti, R. A., & Meiyanto, E. (2021). The Doxorubicin-Induced G2/M Arrest in Breast Cancer Cells Modulated by Natural Compounds Naringenin and Hesperidin. *Indonesian Journal of Cancer Chemoprevention*, 12(2), 83–89. <https://doi.org/10.14499/INDONESIANJCANCHEMOPREV12ISS2PP83-89>.
- Karthika, K., & Paulsamy, S. (2015). TLC and HPTLC Fingerprints of Various Secondary Metabolites in the Stem of the Traditional Medicinal Climber, *Solena amplexicaulis*. *Indian Journal of Pharmaceutical Sciences*, 77(1), 111. <https://doi.org/10.4103/0250-474X.151591>.
- Kaya, B., Menemen, Y., & Saltan, F. Z. (2012). Flavonoid Compounds Identified in *Alchemilla* L. Species Collected in the North-Eastern Black Sea Region of Turkey. *African Journal of Traditional, Complementary, and Alternative Medicines*, 9(3), 418. <https://doi.org/10.4314/AJTCAM.V9I3.18>.
- Kesehatan, P., Kanker, P. P., Menjaga, D., Kesehatan, K., Rahayuwati, L., Rizal, I. A., Pahria, T., Lukman, M., & Juniarti, N. (2020). Pendidikan Kesehatan tentang Pencegahan Penyakit Kanker dan Menjaga Kualitas Kesehatan. *Media Karya Kesehatan*, 3(1). <https://doi.org/10.24198/MKK.V3I1.26629>.

- Khan, F., Pandey, P., Jha, N. K., Khalid, M., & Ojha, S. (2021). Rutin Mediated Apoptotic Cell Death in Caski Cervical Cancer Cells via Notch-1 and Hes-1 Downregulation. *Life* 2021, Vol. 11, Page 761, 11(8), 761. <https://doi.org/10.3390/LIFE11080761>.
- Kim, G. T., Tran, N. K. S., Choi, E. H., Song, Y. J., Song, J. H., Shim, S. M., & Park, T. S. (2016). Immunomodulatory Efficacy Of Standardized *Annona muricata* (Graviola) Leaf Extract Via Activation Of Mitogen-Activated Protein Kinase Pathways In RAW 264.7 Macrophages. *Evidence-Based Complementary and Alternative Medicine*, 2016. <https://doi.org/10.1155/2016/2905127>.
- Kim, S. R., Park, H. J., Bae, Y. H., Ahn, S. C., Wee, H. J., Yun, I., Jang, H. O., Bae, M. K., & Bae, S. K. (2012). Curcumin Down-Regulates Visfatin Expression And Inhibits Breast Cancer Cell Invasion. *Endocrinology*, 153(2), 554–563. <https://doi.org/10.1210/EN.2011-1413>.
- Klimek, K., Tyśkiewicz, K., Miazga-Karska, M., Dębczak, A., Rój, E., & Ginalska, G. (2021). Bioactive Compounds Obtained from Polish “Marynka” Hop Variety Using Efficient Two-Step Supercritical Fluid Extraction and Comparison of Their Antibacterial, Cytotoxic, and Anti-Proliferative Activities In Vitro. *Molecules* 2021, Vol. 26, Page 2366, 26(8), 2366. <https://doi.org/10.3390/MOLECULES26082366>.
- Ko, Y. M., Wu, T. Y., Wu, Y. C., Chang, F. R., Guh, J. Y., & Chuang, L. Y. (2011). Annonacin Induces Cell Cycle-Dependent Growth Arrest And Apoptosis In Estrogen Receptor-A-Related Pathways In MCF-7 Cells. *Journal of Ethnopharmacology*, 137(3), 1283–1290. <https://doi.org/10.1016/J.JEP.2011.07.056>.
- Kongkiatpaiboon, S., Keeratinijakal, V., & Gritsanapan, W. (2013). TLC-Image Analysis of Non-Chromophoric Tuberostemonine Alkaloid Derivatives in Stemona Species. <https://doi.org/10.1177/1934578X1300800807>, 8(8), 1065–1068. <https://doi.org/10.1177/1934578X1300800807>.
- Kritsanawong, S., Innajak, S., Imoto, M., & Watanapokasin, R. (2016). Antiproliferative And Apoptosis Induction Of A-Mangostin In T47D Breast Cancer Cells. *International Journal of Oncology*, 48(5), 2155–2165. <https://doi.org/10.3892/IJO.2016.3399>.
- Lakshmanan, M. (2022). Plant Extraction Methods. *Introduction to Basics of Pharmacology and Toxicology: Volume 3: Experimental Pharmacology: Research Methodology and Biostatistics*, 3, 773–783. https://doi.org/10.1007/978-981-19-5343-9_54.
- Lenci, E., Angeli, A., Calugi, L., Innocenti, R., Carta, F., Supuran, C. T., & Trabocchi, A. (2021). Multitargeting Application Of Proline-Derived Peptidomimetics

- Addressing Cancer-Related Human Matrix Metalloproteinase 9 And Carbonic Anhydrase II. *European Journal of Medicinal Chemistry*, 214, 113260. <https://doi.org/10.1016/J.EJMECH.2021.113260>.
- Li, Y. W., Zhu, G. Y., Shen, X. L., Chu, J. H., Yu, Z. L., & Fong, W. F. (2011). Furanodienone Inhibits Cell Proliferation And Survival By Suppressing Era Signaling In Human Breast Cancer MCF-7 Cells. *Journal of Cellular Biochemistry*, 112(1), 217–224. <https://doi.org/10.1002/JCB.22922>.
- Liu, C., Qi, M., Li, L., Yuan, Y., Wu, X., & Fu, J. (2020). Natural Cordycepin Induces Apoptosis And Suppresses Metastasis In Breast Cancer Cells By Inhibiting The Hedgehog Pathway. *Food & Function*, 11(3), 2107–2116. <https://doi.org/10.1039/C9FO02879J>.
- Liu, Y. Q., Wang, X. L., He, D. H., & Cheng, Y. X. (2021). Protection Against Chemotherapy- and Radiotherapy-Induced Side Effects: A Review Based on the Mechanisms and Therapeutic Opportunities of Phytochemicals. *Phytomedicine*, 80, 153402. <https://doi.org/10.1016/J.PHYMED.2020.153402>.
- Łukasiewicz, S., Czezelewski, M., Forma, A., Baj, J., Sitarz, R., & Stanisławek, A. (2021). Breast Cancer—Epidemiology, Risk Factors, Classification, Prognostic Markers, and Current Treatment Strategies—An Updated Review. *Cancers* 2021, Vol. 13, Page 4287, 13(17), 4287. <https://doi.org/10.3390/CANCERS13174287>.
- Machado, A. R. T., Lage, G. A., da Silva Medeiros, F., de Souza Filho, J. D., & Pimenta, L. P. S. (2015). Total α,β -Unsaturated- γ -Lactone Acetogenins in *Annona muricata* by Proton NMR Spectroscopy. *Applied Magnetic Resonance*, 46(2), 153–160. <https://doi.org/10.1007/S00723-014-0620-9>.
- Mahendika, D., & Darnez, L. (2023). Pengaruh Pemberian Ekstrak Daun Sirsak (*Annona muricata* Linn) Terhadap Gen Anti Apoptosis Bcl-2 Continous Cell T47D Pada Kanker Payudara. *Essential: Essence of Scientific Medical Journal*, 20(2), 1–11. <https://doi.org/10.24843/ESSENTIAL.V20I2.85245>.
- Mardal, M., Dalsgaard, P. W., Rasmussen, B. S., Linnet, K., & Mollerup, C. B. (2023). Scalable Analysis of Untargeted LC-HRMS Data by Means of SQL Database Archiving. *Analytical Chemistry*, 95(10), 4592–4596. https://doi.org/10.1021/ACS.ANALCHEM.2C03769/ASSET/IMAGES/LARGE/AC2C03769_0006.JPEG.
- Marinov, L., Georgieva, A., Toshkova, R., Kostadinova, I., Mangarov, I., & Toshkova-Yotova, T. (2024). The Effects Of Meloxicam, Lornoxicam, Ketoprofen, And Dexketoprofen On Human Cervical, Colorectal, And Mammary Carcinoma Cell Lines. *Pharmacia* 71: 1-12, 71, 1–12. <https://doi.org/10.3897/PHARMACIA.71.E113677>.

- Martinotti, S., & Ranzato, E. (2020). Scratch Wound Healing Assay. *Methods in Molecular Biology (Clifton, N.J.)*, 2109, 225–229. https://doi.org/10.1007/7651_2019_259.
- Matthews, H. K., Bertoli, C., & de Bruin, R. A. M. (2021). Cell Cycle Control in Cancer. *Nature Reviews Molecular Cell Biology* 2021 23:1, 23(1), 74–88. <https://doi.org/10.1038/s41580-021-00404-3>.
- McKinnon, K. M. (2018). Flow Cytometry: An Overview. *Current Protocols in Immunology*, 120, 5.1.1. <https://doi.org/10.1002/CPIM.40>.
- Mehrara, E., Forssell-Aronsson, E., Ahlman, H., & Bernhardt, P. (2007). Specific Growth Rate Versus Doubling Time For Quantitative Characterization Of Tumor Growth Rate. *Cancer Research*, 67(8), 3970–3975. <https://doi.org/10.1158/0008-5472.CAN-06-3822>.
- Meiyanto, E., Husnaa, U., Kastian, R. F., Putri, H., Larasati, Y. A., Khumaira, A., Pamungkas, D. D. P., Jenie, R. I., Kawaichi, M., Lestari, B., Yokoyama, T., & Kato, J. Y. (2021). The Target Differences of Anti-Tumorigenesis Potential of Curcumin and its Analogues Against HER-2 Positive and Triple-Negative Breast Cancer Cells. *Advanced Pharmaceutical Bulletin*, 11(1), 188. <https://doi.org/10.34172/APB.2021.020>.
- Moghadamtousi, S. Z., Fadaeinasab, M., Nikzad, S., Mohan, G., Ali, H. M., & Kadir, H. A. (2015). *Annona muricata* (Annonaceae): A Review of Its Traditional Uses, Isolated Acetogenins and Biological Activities. *International Journal of Molecular Sciences*, 16(7), 15625. <https://doi.org/10.3390/IJMS160715625>.
- Moghadamtousi, S. Z., Kadir, H. A., Paydar, M., Rouhollahi, E., & Karimian, H. (2014). *Annona muricata* Leaves Induced Apoptosis In A549 Cells Through Mitochondrial-Mediated Pathway And Involvement Of NF-κB. *BMC Complementary and Alternative Medicine*, 14(1). <https://doi.org/10.1186/1472-6882-14-299>.
- Mondello, C., & Scovassi, A. I. (2004). Telomeres, Telomerase, And Apoptosis. *Biochemistry and Cell Biology = Biochimie et Biologie Cellulaire*, 82(4), 498–507. <https://doi.org/10.1139/O04-048>.
- Mulia, K., Krisanti, E., Maulana, T., & Dianursanti. (2015). Selective Polarity-Guided Extraction And Purification Of Acetogenins In *Annona muricata* L. leaves. *International Journal of Technology*, 6(7), 1221–1227. <https://doi.org/10.14716/IJTECH.V6I7.1983>.
- Nair, A., Amalraj, A., Jacob, J., Kunnumakkara, A. B., & Gopi, S. (2019). Non-Curcuminoids from Turmeric and Their Potential in Cancer Therapy and Anticancer Drug Delivery Formulations. *Biomolecules*, 9(1). <https://doi.org/10.3390/BIOM9010013>.

- Nejati-Koshki, K., Akbarzadeh, A., & Pourhassan-Moghaddam, M. (2014). Curcumin Inhibits Leptin Gene Expression And Secretion In Breast Cancer Cells By Estrogen Receptors. *Cancer Cell International*, 14(1). <https://doi.org/10.1186/1475-2867-14-66>.
- Nur, R. M., & Nugroho, L. H. (2017). Cytotoxic Activities of Fractions from *Dioscorea bulbifera* L. Chloroform and Methanol Extracts on T47D Breast Cancer Cells. *Polymer Journal*, 10(1), 33–38. <https://doi.org/10.5530/PJ.2018.1.7>.
- Nurani, L. H. (2012). Uji Sitotoksitas Dan Antiproliferatif Sel Kanker Payudara T47d Dan Sel Vero Biji *Nigella sativa*, L. *Pharmaciana*, 2(1). <https://doi.org/10.12928/PHARMACIANA.V2I1.637>.
- Nwozol, S. O., & Effiong, M. E. (2019). Phytochemical Composition, Mineral Content And Antioxidant Activities Of The Methanol Extract Of *Curcuma longa* and *Viscum album*. *Journal of Food and Pharmaceutical Sciences*, 45–54. <https://doi.org/10.22146/JFPS.708>.
- Obeng, E. (2020). Apoptosis (programmed cell death) and its signals - A review. *Brazilian Journal of Biology*, 81(4), 1133–1143. <https://doi.org/10.1590/1519-6984.228437>.
- Pandey, Y., Mehdi, S. H., Khan, Md. A., Bhatt, P., & Pant, C. K. (2019). TRAIL (Tumor Necrosis Factor-Related Apoptosis-Inducing Ligand) mediated Apoptosis of human breast cancer cells sensitized by dietary flavonoid Kaempferol. *International Journal of Scientific Research in Biological Sciences*, 5(6), 8–14. <https://doi.org/10.26438/IJSRBS/V5I6.814>.
- Paul, M., Brüning, G., Bergmann, J., & Jauch, J. (2012). A Thin-Layer Chromatography Method For The Identification Of Three Different Olibanum Resins (*Boswellia serrata*, *Boswellia papyrifera* and *Boswellia carterii*, respectively, *Boswellia sacra*). *Phytochemical Analysis : PCA*, 23(2), 184–189. <https://doi.org/10.1002/PCA.1341>.
- Pieme, A. A., Kumar, G. G., Dongmo, S. S., Moukette, M. M., Boyoum, F. F., Ngogang, Y. Y., & Saxena, K. K. (2014). Antiproliferative Activity And Induction Of Apoptosis By *Annona muricata* (Annonaceae) Extract On Human Cancer Cells. *BMC Complementary and Alternative Medicine*, 14(1). <https://doi.org/10.1186/1472-6882-14-516>.
- Pratama, F. E., & Nuwarda, R. F. (2018). Senyawa Aktif Antikanker Dari Bahan Alam dan Aktivitasnya. *Farmaka*, 16(1), 149–158. <https://doi.org/10.24198/JF.V16I1.17429>.
- Pratiwi, E. D., & Dewi, N. P. (2022). Screening of Phytochemical Secondary Metabolites of *Muntingia Calabura*: a Potential as Hepatoprotector. *Journal of*

- Fundamental and Applied Pharmaceutical Science*, 2(2), 59–65.
<https://doi.org/10.18196/JFAPS.V2I2.12364>.
- Pratiwi, R., Amalia, A. R., Anindito Sri Tunjung, W., & Rumiya. (2019). Active Fractions of Black Rice Bran cv Cempo Ireng Inducing Apoptosis and S-phase Cell Cycle Arrest in T47D Breast Cancer Cells. *Journal of Mathematical and Fundamental Sciences*, 51(1), 47–59.
<https://doi.org/10.5614/J.MATH.FUND.SCI.2019.51.1.4>.
- Pumiputavon, K., Chaowasku, T., Saenjum, C., Osathanunkul, M., Wungsintaweekul, B., Chawansuntati, K., Wipasa, J., & Lithanadom, P. (2017). Cell Cycle Arrest And Apoptosis Induction By Methanolic Leaves Extracts Of Four Annonaceae Plants. *BMC Complementary and Alternative Medicine*, 17(1).
<https://doi.org/10.1186/S12906-017-1811-3>.
- Puspitaningtyas, H., Espresso, A., Hutajulu, S. H., Fuad, A., & Allsop, M. J. (2021). Mapping and Visualization of Cancer Research in Indonesia: A Scientometric Analysis. *Cancer Control: Journal of the Moffitt Cancer Center*, 28.
<https://doi.org/10.1177/10732748211053464>.
- Rahma Ebnudesita, F., Butsainah Dienanta, S., Jannah, A. R., & I'tishom, R. (2022). Potency Of Soursop Leaf Extract And Curcumin With Magnetic And Mucus-Penetrating Nanoparticle As Colorectal Cancer Alternative Therapy. 05, 186–191.
<https://doi.org/10.20473/jvhs.V5.I3.2022.186-191>.
- Rahmi Puspita Sari, author. (2015). *Pengaruh Enkapsulasi Ekstrak Etanol Daun Sirsak (Annona muricata L.) Dengan Liposom Terhadap Aktivitas Antiproliferasi Sel Kanker Payudara T47D = The Effect Of Encapsulation Soursop Leaves (Annona muricata L.) Ethanolic Extract In Liposome Against Antiproliferative Activity In T47D Breast Cancer Cell*. Fakultas Farmasi Universitas Indonesia.
<https://lib.ui.ac.id>.
- Rangkuti, A. G., Arisanty, D., & Lestari, Y. (2023). Pengaruh Ekstrak Daun Sirsak terhadap Ekpresi Gen P53 Sel Kanker Payudara T47D. *Jurnal Ilmu Kesehatan Indonesia*, 4(2), 102–108. <https://doi.org/10.25077/JIKESI.V4I2.561>.
- Ranjbari, J., Alibakhshi, A., Arezumand, R., Pourhassan-Moghaddam, M., Rahmati, M., Zarghami, N., & Namvaran, M. M. (2013). Effects of *Curcuma longa* Extract on Telomerase Activity in Lung and Breast Cancer Cells. *Zahedan Journal of Research in Medical Sciences Journal*. www.zjrms.ir.
- Rashidi, M., Seghatoleslam, A., Namavari, M., Amiri, A., Fahmidehkar, M. A., Ramezani, A., Eftekhari, 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* 2017 10:5, 10(5), 8633. <https://doi.org/10.5812/IJCM.8633>.

- Rollando, R., & Prilianti, K. R. (2017). Fraksi Etil Asetat Kulit Batang Faloak (*Sterculia quadrifida* R.Br) Menginduksi Apoptosis Dan Siklus Sel Pada Sel Kanker Payudara T47d. *Jurnal Farmasi Sains Dan Komunitas (Journal of Pharmaceutical Sciences and Community)*, 14(1), 1–14. <https://doi.org/10.24071/JPSC.00557>.
- Rukmana, R. M., Soesilo, N. P., Rumiati, & Pratiwi, R. (2017). Chemopreventive Activities of ‘Woja Laka’ Black Rice Bran Fractions on Liver Carcinoma Hepg2 Cells. *Biomedical and Pharmacology Journal*, 10(4), 1677–1684. <https://doi.org/10.13005/BPJ/1279>.
- Rukmana, R. M., Soesilo, N. P., Rumiati, R., & Pratiwi, R. (2016). The Effect of Ethanolic Extract of Black and White Rice Bran (*Oryza Sativa* L.) on Cancer Cells. *Indonesian Journal of Biotechnology*, 21(1), 63–69. <https://doi.org/10.22146/IJBIOTECH.26814>.
- Sabaria Aritonang, N., Chiuman, L., Studi Farmasi Klinis, P., Kedokteran, F., Gigi, K., & Ilmu Kesehatan, dan. (2022). Identificationtest Of Andaliman Methanol Extract Steroid Compounds (*Zanthoxylum acanthopodium* Dc) By Thin Layer Chromatography. *Journal Health & Science: Gorontalo Journal Health and Science Community*, 6(2), 90–98. <https://doi.org/10.35971/GOJHES.V5I3.13626>.
- Safrina, U., Wardiyah, & Cartika, H. (2022). Evaluation of Total Flavonoid, Total Phenolic, and Antioxidant Activity of Etlingera elatior (Jack) R.M.Sm Flower, Fruit, and Leaf. *Majalah Obat Tradisional*, 27(1), 51–59. <https://doi.org/10.22146/MOT.72210>.
- Santos, R. K. da S., da Silva Junior, R. A., Ferreira, M. R. A., Soares, L. A. L., Stragevitch, L., & Danielski, L. (2022). *Annona muricata* Leaf Extracts Obtained With Subcritical Water And Conventional Methods: Evaluation Of Antioxidant Activities, Total Polyphenol And Rutin Contents. *Acta Scientiarum. Technology*, 45(1), e61153. <https://doi.org/10.4025/actascitechnol.v45i1.61153>.
- Segeritz, C. P., & Vallier, L. (2017). Cell Culture: Growing Cells as Model Systems In Vitro. *Basic Science Methods for Clinical Researchers*, 151. <https://doi.org/10.1016/B978-0-12-803077-6.00009-6>.
- Septaningsih, D. A., Yunita, A., Putra, C. A., Suparto, I. H., Achmadi, S. S., Heryanto, R., & Rafi, M. (2021). Phenolics Profiling and Free Radical Scavenging Activity of *Annona muricata* , *Gynura procumbens* , and *Typhonium flagelliforme* Leaves Extract. *Indonesian Journal of Chemistry*, 21(5), 1140–1147. <https://doi.org/10.22146/IJC.62124>.
- Singletary, K. (2020). Turmeric: Potential Health Benefits. *Nutrition Today*, 55(1), 45–56. <https://doi.org/10.1097/NT.0000000000000392>.

- Smolarz, B., Zadrożna Nowak, A., & Romanowicz, H. (2022). Breast Cancer-Epidemiology, Classification, Pathogenesis and Treatment (Review of Literature). *Cancers*, 14(10). <https://doi.org/10.3390/CANCERS14102569>.
- Suharsanti, R., Astutiningsih, C., Susilowati, N. D., Tinggi, S., Farmasi, I., & Semarang, Y. P. (2020). Kadar Kurkumin Ekstrak Rimpang Kunyit (*Curcuma Domestica*) Secara Klt Densitometri dengan Perbedaan Metode. *Jurnal Wiyata: Penelitian Sains Dan Kesehatan*, 7(2), 86–93. <https://doi.org/10.56710/WIYATA.V7I2.387>.
- Sun, J., Fu, X., Wang, Y., Liu, Y., Zhang, Y., Hao, T., & Hu, X. (2016). Erianin Inhibits the Proliferation Of T47D Cells by Inhibiting Cell Cycles, Inducing Apoptosis and Suppressing Migration. *American Journal of Translational Research*, 8(7), 3077. [/pmc/articles/PMC4969444/](https://pmc/articles/PMC4969444/).
- Sunarpi, H., Sunarwidhi, E., Ariyana, M., Nikmatulla, A., Zulkifli, L., Yoshie, S., Miyake, M., Kobayashi, D., & Hazama, A. (2018). Cytotoxicity and Antiproliferative Activity of Indonesian Red Algae *Acanthophora muscoides* Crude Ethanol Extracts. *Journal of Biological Sciences*, 18(8), 425–433. <https://doi.org/10.3923/JBS.2018.425.433>.
- susanty, A., Dachriyanus, D., Yanwirasti, Y., Wahyuni, F. S., Fadhli, H., & Aswan, P. A. (2018). Aktivitas Sitotoksik Ekstrak Etil Asetat Daun Tampa Badak (*Voacanga foetida* (Bl.)K.Schum) pada Kanker Kolon HTB-38. *Jurnal Sains Farmasi & Klinis*, 5(2), 142–146. <https://doi.org/10.25077/JSFK.5.2.142-146.2018>.
- Suwito, H., Hardiyanti, H. D., Haq, K. U., Kristanti, A. N., Furghoniyyah, U., Rahmawati, A. N., & Ayuningtyas, D. R. (2020). Synthesis, Anticancer Activity, And Apoptosis Mechanism Of Some Chalcone Derivatives. *AIP Conference Proceedings*, 2237. <https://doi.org/10.1063/5.0005376>.
- Syarifah, A. L., Retnowati, R., & Soebiantoro, S. (2019). Characterization of Secondary Metabolites Profile of Flavonoid from Salam Leaves (*Eugenia polyantha*) Using TLC and UV Spectrophotometry. *Pharmaceutical Sciences and Research*, 6(3), 4. <https://doi.org/10.7454/psr.v6i3.4219>.
- Syed Najmuddin, S. U. F., Romli, M. F., Hamid, M., Alitheen, N. B., & Abd Rahman, N. M. A. N. (2016). Anti-Cancer Effect Of *Annona muricata* Linn Leaves Crude Extract (AMCE) On Breast Cancer Cell Line. *BMC Complementary and Alternative Medicine*, 16(1), 1–20. <https://doi.org/10.1186/S12906-016-1290-Y/FIGURES/18>.
- Tamaddoni, A., Mohammadi, E., Sedaghat, F., Qujeq, D., & As’Habi, A. (2020). The anticancer effects of curcumin via targeting the mammalian target of rapamycin complex 1 (mTORC1) signaling pathway. *Pharmacological Research*, 156, 104798. <https://doi.org/10.1016/J.PHRS.2020.104798>.

- Tambun, R., Alexander, V., & Ginting, Y. (2021). Performance Comparison Of Maceration Method, Soxhletation Method, And Microwave-Assisted Extraction In Extracting Active Compounds From Soursop Leaves (*Annona Muricata*): A Review. *IOP Conference Series: Materials Science and Engineering*, 1122(1), 012095. <https://doi.org/10.1088/1757-899X/1122/1/012095>.
- Tando, E., Pengkajian, B., Pertanian, T., & Tenggara, S. (2018). Review: Potency of Secondary Metabolite Componds from Soursop (*Annona muricata*) and Sugar Apple (*Annona squamosa*) as Plant-Based Pesticides for Controlling Pests and Diseases of Plants. *Biotropika: Journal of Tropical Biology*, 6(1), 21–27. <https://doi.org/10.21776/UB.BIOTROPIKA.2018.006.01.5>.
- To'bungan, N., Pratiwi, R., Widyarini, S., & Nugroho, L. H. (2022). Cytotoxicity Extract and Fraction of Knobweed (*Hyptis Capitata*) and Its Effect on Migration and Apoptosis of T47D Cells. *Biodiversitas Journal of Biological Diversity*, 23(1), 572–580. <https://doi.org/10.13057/BIODIV/D230162>.
- Tyagi, A. K., Prasad, S., Yuan, W., Li, S., & Aggarwal, B. B. (2015). Identification Of A Novel Compound (B-Sesquiphellandrene) From Turmeric (*Curcuma Longa*) With Anticancer Potential: Comparison With Curcumin. *Investigational New Drugs*, 33(6), 1175–1186. <https://doi.org/10.1007/S10637-015-0296-5/FIGURES/6>.
- Upadhyay, A. (2021). Cancer: An Unknown Territory; Rethinking Before Going Ahead. *Genes & Diseases*, 8(5), 655. <https://doi.org/10.1016/J.GENDIS.2020.09.002>.
- Vajrabhaya, L. onghthong, & Korsuwannawong, S. (2018). Cytotoxicity Evaluation of a Thai Herb Using Tetrazolium (MTT) and Sulforhodamine B (SRB) Assays. *Journal of Analytical Science and Technology*, 9(1), 1–6. <https://doi.org/10.1186/S40543-018-0146-0/FIGURES/5>.
- van den Boogaard, W. M. C., Komninos, D. S. J., & Vermeij, W. P. (2022). Chemotherapy Side-Effects: Not All DNA Damage Is Equal. *Cancers*, 14(3). <https://doi.org/10.3390/CANCERS14030627>.
- van Meerloo, J., Kaspers, G. J. L., & Cloos, J. (2011). Cell Sensitivity Assays: The MTT Assay. *Methods in Molecular Biology (Clifton, N.J.)*, 731, 237–245. https://doi.org/10.1007/978-1-61779-080-5_20.
- Wahyuni, D. S. C., Artanti, A. N., & Rinanto, Y. (2018). Quantitative Analysis of Curcuminoid Collected From Different Location In Indonesia By TLC-Densitometry And Its Antioxidant Capacity. *IOP Conference Series: Materials Science and Engineering*, 349(1), 012015. <https://doi.org/10.1088/1757-899X/349/1/012015>.
- Wahyuono, S., Fadhillah, K., & Astuti, P. (2020). A Bioactive Compound Isolated from Duku (*Lansium domesticum* Corr) Fruit Peels Exhibits Cytotoxicity Against T47D

- Cell Line. *F1000Research*, 9.
<https://doi.org/10.12688/F1000RESEARCH.21072.2>.
- Walsh, L. A., Cepeda, M. A., & Damjanovski, S. (2012). Analysis of the MMP-Dependent and Independent Functions of Tissue Inhibitor of Metalloproteinase-2 On The Invasiveness Of Breast Cancer Cells. *Journal of Cell Communication and Signaling*, 6(2), 87. <https://doi.org/10.1007/S12079-011-0157-8>.
- Wang, A., Liu, J., Yang, Y., Chen, Z., Gao, C., Wang, Z., Fu, C., Zou, L., & Wang, S. (2021). Shikonin Promotes Ubiquitination and Degradation Of cIAP1/2-mediated Apoptosis and Necrosis in Triple Negative Breast Cancer Cells. *Chinese Medicine*, 16(1). <https://doi.org/10.1186/S13020-021-00426-1>.
- Wang, Z. (2021). Regulation of Cell Cycle Progression by Growth Factor-Induced Cell Signaling. *Cells* 2021, Vol. 10, Page 3327, 10(12), 3327. <https://doi.org/10.3390/CELLS10123327>.
- Widiyastuti, Y., Pratiwi, R., Riyanto, S., & Wahyuono, S. (2018). Cytotoxic Activity and Apoptosis Induction of Avocado Persea Americana Mill. Seed Extract on MCF-7 Cancer Cell Line. *Indonesian Journal of Biotechnology*, 23(2), 61–67. <https://doi.org/10.22146/IJBIOTECH.32141>.
- Widiyastuti, Y., Yanti Marfuatush Sholikhah, I., Haryanti, S., Raya Lawu No, J., & Karanganyar, T. (2019). Phytochemical and Cytotoxic Evaluation of Kragean Fruits Extracts Against HeLa, MCF-7, and HepG2 Cancer Cell Line. *Biosaintifika: Journal of Biology & Biology Education*, 11(3), 304–310. <https://doi.org/10.15294/biosaintifika.v11i3.18073>.
- Widyananda, M. H., Puspitarini, S., Rohim, A., Khairunnisa, F. A., Jatmiko, Y. D., Masruri, M., & Widodo, N. (2022). Anticancer Potential Of Turmeric (*Curcuma longa*) Ethanol Extract And Prediction Of Its Mechanism Through The Akt1 Pathway. *F1000Research* 2022 11:1000, 11, 1000. <https://doi.org/10.12688/f1000research.75735.1>.
- Wilson, G. D. (2014). Probing the Cell Cycle with Flow Cytometry. *Journal of Biomedical Science and Engineering*, 2014(09), 698–711. <https://doi.org/10.4236/JBISE.2014.79069>.
- Windarsih, A., Suratno, Warmiko, H. D., Indrianingsih, A. W., Rohman, A., & Ulumuddin, Y. I. (2022). Untargeted Metabolomics And Proteomics Approach Using Liquid Chromatography-Orbitrap High Resolution Mass Spectrometry To Detect Pork Adulteration In Pangasius hypophthalmus. *Food Chemistry*, 386, 132856. <https://doi.org/10.1016/J.FOODCHEM.2022.132856>.
- Wirasuta, I. M. A. G., Dewi, C. I. T. R., Laksmini, N. P. L., Srinadi, I. G. A. M., & Putra, D. P. (2018). The Prediction of Curcumin Content in the Turmeric Rhizome

- with Raman Handheld Spectroscopy. *Indonesian Journal of Pharmaceutical Science and Technology*, 5(3), 88. <https://doi.org/10.24198/IJPST.V5I3.16315>.
- Yang, C., Gundala, S. R., Mukkavilli, R., Vangala, S., Reid, M. D., & Aneja, R. (2015). Synergistic Interactions Among Flavonoids And Acetogenins In Graviola (*Annona muricata*) Leaves Confer Protection Against Prostate Cancer. *Carcinogenesis*, 36(6), 656. <https://doi.org/10.1093/CARCIN/BGV046>.
- Yap, C., Subramaniam, K., Khor, S., & Chung, I. (2017). Annonacin Exerts Antitumor Activity through Induction of Apoptosis and Extracellular Signal-regulated Kinase Inhibition. *Pharmacognosy Research*, 9(4), 378. https://doi.org/10.4103/PR.PR_19_17.
- Yolci Omeroglu, P., Acoglu, B., Özdal, T., Tamer, C. E., & Çopur, Ö. U. (2019). Extraction Techniques for Plant-Based Bio-active Compounds. *Natural Bio-Active Compounds, Vol 2: Chemistry, Pharmacology And Health Care Practices*, 2, 465–492. https://doi.org/10.1007/978-981-13-7205-6_18.
- Yu, S., Kim, T., Yoo, K. H., & Kang, K. (2017). The T47D Cell Line Is an Ideal Experimental Model to Elucidate the Progesterone-Specific Effects of a Luminal A Subtype of Breast Cancer. *Biochemical and Biophysical Research Communications*, 486(3), 752–758. <https://doi.org/10.1016/J.BBRC.2017.03.114>.
- Yuan, L., Cai, Y., Zhang, L., Liu, S., Li, P., & Li, X. (2021). Promoting Apoptosis, a Promising Way to Treat Breast Cancer With Natural Products: A Comprehensive Review. *Frontiers in Pharmacology*, 12. <https://doi.org/10.3389/FPHAR.2021.801662>.
- Yusuf, H., Fahriani, M., Murzalina, C., & Mawaddah, R. D. (2022). Inhibitory Effects On HepG2 Cell Proliferation And Induction Of Cell Cycle Arrest By Chromolaena odorata Leaf Extract And Fractions. *Pharmacia* 69(2): 377-384, 69(2), 377–384. <https://doi.org/10.3897/PHARMACIA.69.E80498>.
- Zeng, K., Geerlof-Vidavisky, I., Gucinski, A., Jiang, X., & Boyne, M. T. (2015). Liquid Chromatography-High Resolution Mass Spectrometry for Peptide Drug Quality Control. *The AAPS Journal*, 17(3), 643. <https://doi.org/10.1208/S12248-015-9730-Z>.
- Zhu, L., & Xue, L. (2019). Kaempferol Suppresses Proliferation and Induces Cell Cycle Arrest, Apoptosis, and DNA Damage in Breast Cancer Cells. *Oncology Research*, 27(6), 629. <https://doi.org/10.3727/096504018X15228018559434>.
- Zhu, Y., & Bu, S. (2017). Curcumin Induces Autophagy, Apoptosis, and Cell Cycle Arrest in Human Pancreatic Cancer Cells. *Evidence-Based Complementary and Alternative Medicine: ECAM*, 2017. <https://doi.org/10.1155/2017/5787218>.

Zorofchian Moghadamtousi, S., Karimian, H., Rouhollahi, E., Paydar, M., Fadaeinasab, M., & Abdul Kadir, H. (2014). *Annona muricata* Leaves Induce G₁ Cell Cycle Arrest and Apoptosis Through Mitochondria-Mediated Pathway in Human HCT-116 and HT-29 Colon Cancer Cells. *Journal of Ethnopharmacology*, 156, 277–289. <https://doi.org/10.1016/J.JEP.2014.08.011>.