

DAFTAR PUSTAKA

- Adams, J. M., & Cory, S. (2017). The BCL-2 arbiters of apoptosis and their growing role as cancer targets. *Cell Death and Differentiation*, 25(1), 27–36. <https://doi.org/10.1038/cdd.2017.161>
- Akwarini, F., Fadjar, T. H., & Hernowo, B. S. (2019). Triple negative breast cancer characteristics based on Basal-like and Non-Basal-like subtypes. *DOAJ (DOAJ: Directory of Open Access Journals)*. <https://doi.org/10.15850/ijih.v7n1.1570>
- Alghamian, Y., Soukkaie, C., Abbady, A. Q., & Murad, H. (2022). Investigation of role of CpG methylation in some epithelial mesenchymal transition gene in a chemoresistant ovarian cancer cell line. *Scientific Reports*, 12(1). <https://doi.org/10.1038/s41598-022-11634-6>
- Alshehade, S. A., Almoustafa, H. A., Alshawsh, M. A., & Chik, Z. (2024). Flow cytometry-based quantitative analysis of cellular protein expression in apoptosis subpopulations: A protocol. *Heliyon*, 10(13), e33665. <https://doi.org/10.1016/j.heliyon.2024.e33665>
- Amaro, A., Angelini, G., Mirisola, V., Esposito, A. I., Reverberi, D., Matis, S., Maffei, M., Giaretti, W., Viale, M., Gangemi, R., Emionite, L., Astigiano, S., Cilli, M., Bachmeier, B. E., Killian, P. H., Albini, A., & Pfeffer, U. (2016). A highly invasive subpopulation of MDA-MB-231 breast cancer cells shows accelerated growth, differential chemoresistance, features of apocrine tumors and reduced tumorigenicity in vivo. *Oncotarget*, 7(42), 68803–68820. <https://doi.org/10.18632/oncotarget.11931>
- Andón, F. T., & Fadeel, B. (2012). Programmed cell death: Molecular mechanisms and implications for safety assessment of nanomaterials. *Accounts of Chemical Research*, 46(3), 733–742. <https://doi.org/10.1021/ar300020b>
- Andrés, C. M. C., De La Lastra, J. M. P., Munguira, E. B., Juan, C. A., & Pérez-Lebeña, E. (2024). Dual-Action therapeutics: DNA alkylation and antimicrobial peptides for cancer therapy. *Cancers*, 16(18), 3123. <https://doi.org/10.3390/cancers16183123>
- Annese, T., Tamma, R., De Giorgis, M., & Ribatti, D. (2020). MicroRNAs biogenesis, functions and role in tumor angiogenesis. *Frontiers in Oncology*, 10. <https://doi.org/10.3389/fonc.2020.581007>
- Ardiyani, Y. N., & Pratiwi, J. P. D. (2024). Biogenesis and function of miRNAs and their role in cancer. *Jurnal Impresi Indonesia*, 3(6), 404–410. <https://doi.org/10.58344/jii.v3i6.4974>
- Arya, S. B., Collie, S. P., & Parent, C. A. (2023). The ins-and-outs of exosome biogenesis, secretion, and internalization. *Trends in Cell Biology*, 34(2), 90–108. <https://doi.org/10.1016/j.tcb.2023.06.006>
- Asghariazar, V., Kadkhodayi, M., Sarailoo, M., Jolfayi, A. G., & Baradaran, B. (2023). MicroRNA-143 as a potential tumor suppressor in cancer: An insight into molecular targets and signaling pathways. *Pathology - Research and Practice*, 250, 154792. <https://doi.org/10.1016/j.prp.2023.154792>

- 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. (2012). Triple negative breast cancer – an overview. *Hereditary Genetics*. <https://doi.org/10.4172/2161-1041.s2-001>
- Balaraman, A. K., Babu, M. A., Afzal, M., Sanghvi, G., M, R. M., Gupta, S., Rana, M., Ali, H., Goyal, K., Subramaniyan, V., Wong, L. S., & Kumarasamy, V. (2025). Exosome-based miRNA delivery: Transforming cancer treatment with mesenchymal stem cells. *Regenerative Therapy*, 28, 558–572. <https://doi.org/10.1016/j.reth.2025.01.019>
- Barchiesi, G., Roberto, M., Verrico, M., Vici, P., Tomao, S., & Tomao, F. (2021). Emerging role of PARP inhibitors in metastatic triple negative breast cancer. Current scenario and future perspectives. *Frontiers in Oncology*, 11. <https://doi.org/10.3389/fonc.2021.769280>
- Bertheloot, D., Latz, E., & Franklin, B. S. (2021). Necroptosis, pyroptosis and apoptosis: an intricate game of cell death. *Cellular and Molecular Immunology*, 18(5), 1106–1121. <https://doi.org/10.1038/s41423-020-00630-3>
- Bhatavdekar, O., Godet, I., Gilkes, D., & Sofou, S. (2022). The rate of Cisplatin dosing affects the resistance and metastatic potential of triple negative breast cancer cells, independent of hypoxia. *Pharmaceutics*, 14(10), 2184. <https://doi.org/10.3390/pharmaceutics14102184>
- Birkelbach, M., Ferraiolo, N., Gheorghiu, L., Pfäffle, H. N., Daly, B., Ebright, M. I., Spencer, C., O’Hara, C., Whetstine, J. R., Benes, C. H., Sequist, L. V., Zou, L., Dahm-Daphi, J., Kachnic, L. A., & Willers, H. (2013). Detection of impaired homologous recombination repair in NSCLC cells and tissues. *Journal of Thoracic Oncology*, 8(3), 279–286. <https://doi.org/10.1097/jto.0b013e31827ecf83>
- Błaszczak, E., Miziak, P., Odrzywolski, A., Baran, M., Gumbarewicz, E., & Stepulak, A. (2025). Triple-Negative breast cancer progression and drug resistance in the context of Epithelial–Mesenchymal Transition. *Cancers*, 17(2), 228. <https://doi.org/10.3390/cancers17020228>
- Bonnefoi, H., Grellety, T., Tredan, O., Saghatchian, M., Dalenc, F., Mailliez, A., L’Haridon, T., Cottu, P., Abadie-Lacourtoisie, S., You, B., Mousseau, M., Dauba, J., Del Piano, F., Desmoulins, I., Coussy, F., Madranges, N., Grenier, J., Bidard, F., Proudhon, C., . . . Gonçalves, A. (2016). A phase II trial of abiraterone acetate plus prednisone in patients with triple-negative androgen receptor positive locally advanced or metastatic breast cancer (UCBG 12-1). *Annals of Oncology*, 27(5), 812–818. <https://doi.org/10.1093/annonc/mdw067>
- Brezgin, S., Danilik, O., Yudaeva, A., Kachanov, A., Kostyusheva, A., Karandashov, I., Ponomareva, N., Zamyatnin, A. A., Parodi, A., Chulanov, V., & Kostyushev, D. (2024). Basic Guide for Approaching Drug Delivery with Extracellular Vesicles. *International Journal of Molecular Sciences*, 25(19), 10401. <https://doi.org/10.3390/ijms251910401>
- Brooks, E. A., Galarza, S., Gencoglu, M. F., Cornelison, R. C., Munson, J. M., & Peyton, S. R. (2019). Applicability of drug response metrics for cancer

- studies using biomaterials. *Philosophical Transactions of the Royal Society B Biological Sciences*, 374(1779), 20180226. <https://doi.org/10.1098/rstb.2018.0226>
- Buranaamnuay, K. (2021). The MTT assay application to measure the viability of spermatozoa: a variety of the assay protocols. *Open Veterinary Journal*, 11(2), 251. <https://doi.org/10.5455/ovj.2021.v11.i2.9>
- Cai, Y., Tan, X., Liu, J., Shen, Y., Wu, D., Ren, M., Huang, P., & Yu, D. (2014). Inhibition of PI3K/Akt/mTOR signaling pathway enhances the sensitivity of the SKOV3/DDP ovarian cancer cell line to cisplatin in vitro. *pmc.ncbi.nlm.nih.gov*. <https://doi.org/10.3978/j.issn.1000-9604.2014.08.20>
- Chavda, V. P., Pandya, A., Kumar, L., Raval, N., Vora, L. K., Pulakkat, S., Patravale, V., Salwa, N., Duo, Y., & Tang, B. Z. (2023). Exosome nanovesicles: A potential carrier for therapeutic delivery. *Nano Today*, 49, 101771. <https://doi.org/10.1016/j.nantod.2023.101771>
- Chen, H. H. W., & Kuo, M. T. (2010). Role of glutathione in the regulation of cisplatin resistance in cancer chemotherapy. *Metal-Based Drugs*, 2010, 1–7. <https://doi.org/10.1155/2010/430939>
- Chen, T., Xu, M., Xu, J., Zhan, X., Zhang, Y., Ying, M., & Wu, M. (2024). The application of immunotherapy combined with taxanes in second-line treatment of advanced HER2 negative gastric cancer. *Molecular and Clinical Oncology*, 22(1). <https://doi.org/10.3892/mco.2024.2806>
- Chen, X., Qian, X., Xiao, M., & Zhang, P. (2023). Survival Outcomes and Efficacy of Platinum in Early Breast Cancer Patients with Germline BRCA1 or BRCA2 Mutation: A Multicenter Retrospective Cohort Study. *Breast Cancer Targets and Therapy*, Volume 15, 671–682. <https://doi.org/10.2147/bctt.s423330>
- Chen, Y., Li, X., Yang, M., & Liu, S. (2024). Research progress on morphology and mechanism of programmed cell death. *Cell Death and Disease*, 15(5). <https://doi.org/10.1038/s41419-024-06712-8>
- Cheng, T., Hu, C., Yang, H., Cao, L., & An, J. (2014). Transforming growth factor- β -induced miR-143 expression in regulation of non-small cell lung cancer cell viability and invasion capacity in vitro and in vivo. *International Journal of Oncology*, 45(5), 1977–1988. <https://doi.org/10.3892/ijo.2014.2623>
- Comfort, N., Cai, K., Bloomquist, T. R., Strait, M. D., Ferrante, A. W., Jr, & Baccarelli, A. A. (2021). Nanoparticle tracking analysis for the quantification and size determination of extracellular vesicles. *Journal of Visualized Experiments*, 169. <https://doi.org/10.3791/62447>
- Conara, F. C., Oktavya, G., Purwestri, Y. A., & Nuriliani, A. (2023). Effect of black rice bran ‘Sembada Hitam’ on T47D breast cancer cells. *Journal of Tropical Life Science*, 13(3), 589–598. <https://doi.org/10.11594/jtls.13.03.17>
- Cordonnier, M., Chanteloup, G., Isambert, N., Seigneuric, R., Fumoleau, P., Garrido, C., & Gobbo, J. (2017). Exosomes in cancer theranostic:

- Diamonds in the rough. *Cell Adhesion & Migration*, 11(2), 151–163.
<https://doi.org/10.1080/19336918.2016.1250999>
- Cossarizza, A., Chang, H., Radbruch, A., Abrignani, S., Addo, R., Akdis, M., Andrä, I., Andreato, F., Annunziato, F., Arranz, E., Bacher, P., Bari, S., Barnaba, V., Barros-Martins, J., Baumjohann, D., Beccaria, C. G., Bernardo, D., Boardman, D. A., Borger, J., . . . Yang, J. (2021). Guidelines for the use of flow cytometry and cell sorting in immunological studies (third edition). *European Journal of Immunology*, 51(12), 2708–3145.
<https://doi.org/10.1002/eji.202170126>
- Da Silvia Lima, R. Q., Vasconcelos, C. F. M., Gomes, J. P. A., Da Silva Bezerra De Menezes, E., De Oliveira Silva, B., Montenegro, C., De Sá Leitão Paiva Júnior, S., & Pereira, M. C. (2024). miRNA-21, an OncomiR that regulates cell proliferation, migration, invasion and therapy response in lung cancer. *Pathology - Research and Practice*, 263, 155601.
<https://doi.org/10.1016/j.prp.2024.155601>
- Damasuri, N. a. R., Sholikhah, N. E. N., & Mustofa, N. (2020). Cytotoxicity of ((E)-1-(4-aminophenyl)-3-phenylprop-2-en-1-one)) on HeLa cell line. *Indonesian Journal of Pharmacology and Therapy*, 1(2).
<https://doi.org/10.22146/ijpther.606>
- Darvishi, M., Esmaili, S., Dehghan-Nayeri, N., Mashati, P., & Gharehbaghian, A. (2017). Anticancer effect and enhancement of therapeutic potential of Vincristine by extract from aerial parts of *Juniperus excelsa* on pre-B acute lymphoblastic leukemia cell lines. *Journal of Applied Biomedicine*, 15(3), 219–226. <https://doi.org/10.1016/j.jab.2017.04.002>
- Dasari, S., & Tchounwou, P. B. (2014). Cisplatin in cancer therapy: Molecular mechanisms of action. *European Journal of Pharmacology*, 740, 364–378.
<https://doi.org/10.1016/j.ejphar.2014.07.025>
- De Abreu, R. C., Ramos, C. V., Becher, C., Lino, M., Jesus, C., Da Costa Martins, P. A., Martins, P. a. T., Moreno, M. J., Fernandes, H., & Ferreira, L. (2021). Exogenous loading of miRNAs into small extracellular vesicles. *Journal of Extracellular Vesicles*, 10(10).
<https://doi.org/10.1002/jev2.12111>
- De Faria Bessa, J., & Marta, G. N. (2022). Triple-negative breast cancer and radiation therapy. *Reports of Practical Oncology & Radiotherapy*.
<https://doi.org/10.5603/rpor.a2022.0025>
- Deng, Y. W., Hao, W. J., Li, Y. W., Li, Y. X., Zhao, B. C., & Lu, D. (2018). HSA-MiRNA-143-3P reverses multidrug resistance of Triple-Negative breast cancer by inhibiting the expression of its target protein Cytokine-Induced apoptosis inhibitor 1 In vivo. *Journal of Breast Cancer*, 21(3), 251.
<https://doi.org/10.4048/jbc.2018.21.e40>
- Dewi, C., Fristiohady, A., Amalia, R., Ikram, N. K. K., Ibrahim, S., & Muchtaridi, M. (2022). Signaling pathways and natural compounds in Triple-Negative Breast Cancer cell line. *Molecules*, 27(12), 3661.
<https://doi.org/10.3390/molecules27123661>

- Dilsiz, N. (2024). A comprehensive review on recent advances in exosome isolation and characterization: Toward clinical applications. *Translational Oncology*, 50, 102121. <https://doi.org/10.1016/j.tranon.2024.102121>
- Ding, L., Gu, H., Xiong, X., Ao, H., Cao, J., Lin, W., Yu, M., Lin, J., & Cui, Q. (2019). MicroRNAs involved in carcinogenesis, prognosis, therapeutic resistance, and applications in human Triple-Negative breast cancer. *Cells*, 8(12), 1492. <https://doi.org/10.3390/cells8121492>
- Duan, Z., Cai, G., Li, J., & Chen, X. (2020). Cisplatin-induced renal toxicity in elderly people. *Therapeutic Advances in Medical Oncology*, 12. <https://doi.org/10.1177/1758835920923430>
- Ellistasari, E. Y., Kariosentono, H., Purwanto, B., Wasita, B., Riswiyant, R. C. A., Pamungkasari, E. P., & Soetrisno, S. (2022). Exosomes Derived from Secretome Human Umbilical Vein Endothelial Cells (Exo-HUVEC) Ameliorate the Photo-Aging of Skin Fibroblast. *Clinical Cosmetic and Investigational Dermatology*, Volume 15, 1583–1591. <https://doi.org/10.2147/ccid.s371330>
- Elmorsy, E. A., Saber, S., Hamad, R. S., Abdel-Reheim, M. A., El-Kott, A. F., AlShehri, M. A., Morsy, K., Salama, S. A., & Youssef, M. E. (2024). Advances in Understanding Cisplatin-Induced Toxicity: Molecular mechanisms and protective strategies. *European Journal of Pharmaceutical Sciences*, 106939. <https://doi.org/10.1016/j.ejps.2024.106939>
- Ensenyat-Mendez, M., Llinàs-Arias, P., Orozco, J. I. J., Íñiguez-Muñoz, S., Salomon, M. P., Sesé, B., DiNome, M. L., & Marzese, D. M. (2021). Current Triple-Negative Breast Cancer subtypes: dissecting the most aggressive form of breast cancer. *Frontiers in Oncology*, 11. <https://doi.org/10.3389/fonc.2021.681476>
- Fasril, T., Hilbertina, N., & Elliyanti, A. (2023). Treatment problems in triple negative breast cancer. *International Islamic Medical Journal*, 4(2), 51–58. <https://doi.org/10.33086/iimj.v4i2.3951>
- Feng, Y., Spezia, M., Huang, S., Yuan, C., Zeng, Z., Zhang, L., Ji, X., Liu, W., Huang, B., Luo, W., Liu, B., Lei, Y., Du, S., Vuppalapati, A., Luu, H. H., Haydon, R. C., He, T., & Ren, G. (2018). Breast cancer development and progression: Risk factors, cancer stem cells, signaling pathways, genomics, and molecular pathogenesis. *Genes & Diseases*, 5(2), 77–106. <https://doi.org/10.1016/j.gendis.2018.05.001>
- Fernández-Lázaro, D., Sanz, B., & Seco-Calvo, J. (2024). The Mechanisms of Regulated cell death: Structural and functional proteomic pathways induced or inhibited by a specific Protein—A Narrative review. *Proteomes*, 12(1), 3. <https://doi.org/10.3390/proteomes12010003>
- 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*, 6(1). <https://doi.org/10.31964/mltj.v6i1.291>
- Fu, Y., Yang, Q., Yang, H., & Zhang, X. (2023). New progress in the role of microRNAs in the diagnosis and prognosis of triple negative breast cancer.

Frontiers in Molecular Biosciences, 10.

<https://doi.org/10.3389/fmolb.2023.1162463>

- Galletti, G., Zhang, C., Gjyrezi, A., Cleveland, K., Zhang, J., Powell, S., Thakkar, P. V., Betel, D., Shah, M. A., & Giannakakou, P. (2020). Microtubule Engagement with Taxane Is Altered in Taxane-Resistant Gastric Cancer. *Clinical Cancer Research*, 26(14), 3771–3783. <https://doi.org/10.1158/1078-0432.ccr-19-3018>
- Geisberg, C. A., & Sawyer, D. B. (2010). Mechanisms of anthracycline cardiotoxicity and strategies to decrease cardiac damage. *Current Hypertension Reports*, 12(6), 404–410. <https://doi.org/10.1007/s11906-010-0146-y>
- 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), 12827. <https://doi.org/10.3390/ijms222312827>
- Gibalová, L., Šereš, M., Rusnák, A., Ditte, P., Labudová, M., Uhrík, B., Pastorek, J., Sedlák, J., Breier, A., & Sulová, Z. (2012). P-glycoprotein depresses cisplatin sensitivity in L1210 cells by inhibiting cisplatin-induced caspase-3 activation. *Toxicology in Vitro*, 26(3), 435–444. <https://doi.org/10.1016/j.tiv.2012.01.014>
- González-González, A., García-Sánchez, D., Dotta, M., Rodríguez-Rey, J. C., & Pérez-Campo, F. M. (2020). Mesenchymal stem cells secretome: The cornerstone of cell-free regenerative medicine. *World Journal of Stem Cells*, 12(12), 1529–1552. <https://doi.org/10.4252/wjsc.v12.i12.1529>
- Grimm, L. J., Rahbar, H., Abdelmalak, M., Hall, A. H., & Ryser, M. D. (2021). Ductal carcinoma in situ: State-of-the-Art review. *Radiology*, 302(2), 246–255. <https://doi.org/10.1148/radiol.211839>
- Guillemette, S., Serra, R. W., Peng, M., Hayes, J. A., Konstantinopoulos, P. A., Green, M. R., & Cantor, S. B. (2015). Resistance to therapy in BRCA2 mutant cells due to loss of the nucleosome remodeling factor CHD4. *Genes & Development*, 29(5), 489–494. <https://doi.org/10.1101/gad.256214.114>
- Hanahan, D. (2022). Hallmarks of Cancer: New dimensions. *Cancer Discovery*, 12(1), 31–46. <https://doi.org/10.1158/2159-8290.cd-21-1059>
- Haryana, S. M., Oktriani, R., Faiha, D. K., Conara, F. C., Dafip, M., & Setiasari, D. W. (2025). miR-143-3p: A Critical Regulator of KRAS and HRAS with Potential for Targeted Therapies in Breast Cancer. *Trends in Sciences*, 22(7), 9630. <https://doi.org/10.48048/tis.2025.9630>
- Hedley, B. D., & Keeney, M. (2013). Technical issues: flow cytometry and rare event analysis. *International Journal of Laboratory Hematology*, 35(3), 344–350. <https://doi.org/10.1111/ijlh.12068>
- Hero, T., Bühler, H., Kouam, P. N., Priesch-Grzeszowiak, B., Lateit, T., & Adamietz, I. A. (2019). The triple-negative breast cancer cell line MDA-MB 231 is specifically inhibited by the ionophore salinomycin. *Anticancer Research*, 39(6), 2821–2827. <https://doi.org/10.21873/anticancer.13410>

- Hientz, K., Mohr, A., Bhakta-Guha, D., & Efferth, T. (2016). The role of p53 in cancer drug resistance and targeted chemotherapy. *Oncotarget*, 8(5), 8921–8946. <https://doi.org/10.18632/oncotarget.13475>
- Hoang, V. T., Sępniewski, G., Czarnecka, K. H., Kasztelanica, R., Long, V. C., Xuan, K. D., Shao, L., Śmietana, M., & Buczyński, R. (2019). Optical properties of buffers and cell culture media for optofluidic and sensing applications. *Applied Sciences*, 9(6), 1145. <https://doi.org/10.3390/app9061145>
- Hou, Y., Feng, H., Jiao, J., Qian, L., Sun, B., Chen, P., Li, Q., & Liang, Z. (2019). Mechanism of miR-143-3p inhibiting proliferation, migration and invasion of osteosarcoma cells by targeting MAPK7. *Artificial Cells Nanomedicine and Biotechnology*, 47(1), 2065–2071. <https://doi.org/10.1080/21691401.2019.1620252>
- Huang, Z., Yu, P., & Tang, J. (2020). Characterization of Triple-Negative Breast Cancer MDA-MB-231 Cell Spheroid Model. *OncoTargets and Therapy*, Volume 13, 5395–5405. <https://doi.org/10.2147/ott.s249756>
- Hunter, J. C., Manandhar, A., Carrasco, M. A., Gurbani, D., Gondi, S., & Westover, K. D. (2015). Biochemical and structural analysis of common Cancer-Associated KRAS mutations. *Molecular Cancer Research*, 13(9), 1325–1335. <https://doi.org/10.1158/1541-7786.mcr-15-0203>
- Huovinen, M., Loikkanen, J., Myllynen, P., & Vähäkangas, K. H. (2011). Characterization of human breast cancer cell lines for the studies on p53 in chemical carcinogenesis. *Toxicology in Vitro*, 25(5), 1007–1017. <https://doi.org/10.1016/j.tiv.2011.03.018>
- Isakoff, S. J. (2010). Triple-Negative breast cancer. *The Cancer Journal*, 16(1), 53–61. <https://doi.org/10.1097/ppo.0b013e3181d24ff7>
- Isert, L., Mehta, A., Loiudice, G., Oliva, A., Roidl, A., & Merkel, O. M. (2023). An in vitro approach to model EMT in breast cancer. *International Journal of Molecular Sciences*, 24(9), 7757. <https://doi.org/10.3390/ijms24097757>
- Janiczek-Polewska, M., Kolenda, T., Poter, P., Kozłowska-Masłoń, J., Jagiełło, I., Regulaska, K., Malicki, J., & Marszałek, A. (2024). Diagnostic potential of MIR-143-5p, MiR-143-3p, MIR-551b-5p, and MIR-574-3p in chemoresistance of locally advanced gastric cancer: a preliminary study. *International Journal of Molecular Sciences*, 25(15), 8057. <https://doi.org/10.3390/ijms25158057>
- Jenie, R., Handayani, S., Susidarti, R. A., & Meiyanto, E. (2020). The Effect of Brazilin from *Caesalpinia sappan* on Cell Cycle and Modulation and Cell Senescence in T47D cells. *INDONESIAN JOURNAL OF PHARMACY*, 31(2), 84. <https://doi.org/10.14499/indonesianjpharm31iss2pp84>
- Jiang, W., Kong, L., Ni, Q., Lu, Y., Ding, W., Liu, G., Pu, L., Tang, W., & Kong, L. (2023). Correction: MIR-146A ameliorates liver Ischemia/Reperfusion injury by suppressing IRAK1 and TRAF6. *PLoS ONE*, 18(7), e0288672. <https://doi.org/10.1371/journal.pone.0288672>
- Johannessen, C., Moi, L., Kiselev, Y., Pedersen, M. I., Dalen, S. M., Braaten, T., & Busund, L. (2017). Expression and function of the miR-143/145 cluster in

- vitro and in vivo in human breast cancer. *PLoS ONE*, *12*(10), e0186658. <https://doi.org/10.1371/journal.pone.0186658>
- Karim, A. M., Kwon, J. E., Ali, T., Jang, J., Ullah, I., Lee, Y., Park, D. W., Park, J., Jeang, J. W., & Kang, S. C. (2023). Triple-negative breast cancer: epidemiology, molecular mechanisms, and modern vaccine-based treatment strategies. *Biochemical Pharmacology*, *212*, 115545. <https://doi.org/10.1016/j.bcp.2023.115545>
- Kntayya, S. B., Ibrahim, M. D., Ain, N. M., Iori, R., Ioannides, C., & Razis, A. F. A. (2018). Induction of apoptosis and cytotoxicity by isothiocyanate sulforaphene in human hepatocarcinoma HEPG2 cells. *Nutrients*, *10*(6), 718. <https://doi.org/10.3390/nu10060718>
- Ko, H., Lee, M., Cha, E., Sul, J., Park, J., & Lee, J. (2022). Eribulin mesylate improves Cisplatin-Induced cytotoxicity of Triple-Negative breast cancer by extracellular Signal-Regulated kinase 1/2 activation. *Medicina*, *58*(4), 547. <https://doi.org/10.3390/medicina58040547>
- Koga, Y., Yasunaga, M., Moriya, Y., Akasu, T., Fujita, S., Yamamoto, S., & Matsumura, Y. (2011). Exosome can prevent RNase from degrading microRNA in feces. *PubMed*. <https://doi.org/10.3978/j.issn.2078-6891.2011.015>
- Koh, M. Z., Ho, W. Y., Yeap, S. K., Ali, N. M., Boo, L., & Alitheen, N. B. (2021). Regulation of cellular and cancer stem Cell-Related Putative gene expression of parental and CD44+CD24- sorted MDA-MB-231 cells by Cisplatin. *Pharmaceuticals*, *14*(5), 391. <https://doi.org/10.3390/ph14050391>
- Kučuk, N., Primožič, M., Knez, Ž., & Leitgeb, M. (2021). Exosomes engineering and their roles as therapy delivery tools, therapeutic targets, and biomarkers. *International Journal of Molecular Sciences*, *22*(17), 9543. <https://doi.org/10.3390/ijms22179543>
- Lagunes, M. L. R., & Pezo, R. C. (2021). A narrative review of chemotherapy in advanced triple negative breast cancer. *Precision Cancer Medicine*, *4*, 13. <https://doi.org/10.21037/pcm-20-69>
- Lai, X., & Friedman, A. (2016). Exosomal MIRs in Lung Cancer: a Mathematical Model. *PLoS ONE*, *11*(12), e0167706. <https://doi.org/10.1371/journal.pone.0167706>
- Lakshmanan, I., & Batra, S. K. (2013). Protocol for apoptosis assay by flow cytometry using Annexin V staining method. *BIO-PROTOCOL*, *3*(6). <https://doi.org/10.21769/bioprotoc.374>
- Lao, T. D., & Le, T. a. H. (2020). MicroRNAs: biogenesis, functions and potential biomarkers for early screening, prognosis and therapeutic molecular monitoring of nasopharyngeal carcinoma. *Processes*, *8*(8), 966. <https://doi.org/10.3390/pr8080966>
- Li, D., Hu, J., Song, H., Xu, H., Wu, C., Zhao, B., Xie, D., Wu, T., Zhao, J., & Fang, L. (2017, May 15). miR-143-3p targeting LIM domain kinase 1 suppresses the progression of triple-negative breast cancer cells. Retrieved July 18, 2025, from <https://pmc.ncbi.nlm.nih.gov/articles/PMC5446510/>

- Li, L. (2022). Editorial: Drug resistance in lung cancer chemotherapy and personalized chemotherapy. *Frontiers in Cell and Developmental Biology*, *10*. <https://doi.org/10.3389/fcell.2022.971477>
- Li, Y., Meng, L., Li, B., Li, Y., Shen, T., & Zhao, B. (2022). The Exosome Journey: From biogenesis to regulation and function in cancers. *Journal of Oncology*, *2022*, 1–13. <https://doi.org/10.1155/2022/9356807>
- Liberati, F. R., Di Russo, S., Barolo, L., Peruzzi, G., Farina, M. V., Spizzichino, S., Di Fonzo, F., Quaglio, D., Pisano, L., Botta, B., Giorgi, A., Boffi, A., Cutruzzolà, F., Paone, A., & Baiocco, P. (2024). Combined Delivery of miR-15/16 through Humanized Ferritin Nanocages for the Treatment of Chronic Lymphocytic Leukemia. *Pharmaceutics*, *16*(3), 402. <https://doi.org/10.3390/pharmaceutics16030402>
- 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*, *13*(17), 4287. <https://doi.org/10.3390/cancers13174287>
- MacFarlane, L., & Murphy, P. R. (2010). MicroRNA: biogenesis, function and role in cancer. *Current Genomics*, *11*(7), 537–561. <https://doi.org/10.2174/138920210793175895>
- Machowska, M., Galka-Marciniak, P., & Kozłowski, P. (2022). Consequences of genetic variants in miRNA genes. *Computational and Structural Biotechnology Journal*, *20*, 6443–6457. <https://doi.org/10.1016/j.csbj.2022.11.036>
- Mahmoud, R., Ordóñez-Morán, P., & Allegrucci, C. (2022). Challenges for triple negative breast cancer treatment: Defeating heterogeneity and cancer stemness. *Cancers*, *14*(17), 4280. <https://doi.org/10.3390/cancers14174280>
- Marsico, A., Huska, M. R., Lasserre, J., Hu, H., Vucicevic, D., Musahl, A., Orom, U. A., & Vingron, M. (2013). PROMiRNA: a new miRNA promoter recognition method uncovers the complex regulation of intronic miRNAs. *Genome Biology*, *14*(8). <https://doi.org/10.1186/gb-2013-14-8-r84>
- Martins, T. S., Catita, J., Rosa, I. M., Da Cruz E Silva, O. a. B., & Henriques, A. G. (2018). Exosome isolation from distinct biofluids using precipitation and column-based approaches. *PLoS ONE*, *13*(6), e0198820. <https://doi.org/10.1371/journal.pone.0198820>
- McCubrey, J. A., Steelman, L. S., Chappell, W. H., Abrams, S. L., Wong, E. W., Chang, F., Lehmann, B., Terrian, D. M., Milella, M., Tafuri, A., Stivala, F., Libra, M., Basecke, J., Evangelisti, C., Martelli, A. M., & Franklin, R. A. (2006). Roles of the Raf/MEK/ERK pathway in cell growth, malignant transformation and drug resistance. *Biochimica Et Biophysica Acta (BBA) - Molecular Cell Research*, *1773*(8), 1263–1284. <https://doi.org/10.1016/j.bbamcr.2006.10.001>
- Menon, A., Abd-Aziz, N., Khalid, K., Poh, C. L., & Naidu, R. (2022). MIRNA: a promising therapeutic target in cancer. *International Journal of Molecular Sciences*, *23*(19), 11502. <https://doi.org/10.3390/ijms231911502>

- Momenimovahed, Z., & Salehiniya, H. (2019). Epidemiological characteristics of and risk factors for breast cancer in the world. *Breast Cancer Targets and Therapy*, *Volume 11*, 151–164. <https://doi.org/10.2147/bctt.s176070>
- Morales-Kastresana, A., & Jones, J. C. (2016). Flow cytometric analysis of extracellular vesicles. *Methods in Molecular Biology*, 215–225. https://doi.org/10.1007/978-1-4939-6728-5_16
- Mustafa, M., Ahmad, R., Tantry, I. Q., Ahmad, W., Siddiqui, S., Alam, M., Abbas, K., Moinuddin, N., Hassan, M. I., Habib, S., & Islam, S. (2024). Apoptosis: a comprehensive overview of signaling pathways, morphological changes, and physiological significance and therapeutic implications. *Cells*, *13*(22), 1838. <https://doi.org/10.3390/cells13221838>
- Nalbantsoy, A., Karabay-Yavasoglu, N., Sayim, F., Deliloglu-Gurhan, I., Gocmen, B., Arikan, H., & Yildiz, M. (2012). Determination of in vivo toxicity and in vitro cytotoxicity of venom from the Cypriot blunt-nosed viper *Macrovipera lebetina lebetina* and antivenom production. *the Journal of Venomous Animals and Toxins Including Tropical Diseases*, *18*(2), 208–216. <https://doi.org/10.1590/s1678-91992012000200011>
- Nedeljković, M., & Damjanović, A. (2019). Mechanisms of Chemotherapy Resistance in Triple-Negative Breast Cancer—How we can rise to the challenge. *Cells*, *8*(9), 957. <https://doi.org/10.3390/cells8090957>
- Nilasari, F., Haryana, S. M., Nugrahaningsih, D. a. A., & Satriyo, P. B. (2024). Development of nanocomplex mimic-hsa-miR-143-3p loaded exosome (exo-miR) to inhibit viability, migration and proliferation of triple-negative breast cancer. *Indonesian Journal of Biotechnology*, *29*(4), 190. <https://doi.org/10.22146/ijbiotech.92817>
- Nogimori, T., Furutachi, K., Ogami, K., Hosoda, N., & Hoshino, S. (2019). A novel method for stabilizing microRNA mimics. *Biochemical and Biophysical Research Communications*, *511*(2), 422–426. <https://doi.org/10.1016/j.bbrc.2019.02.075>
- Noh, J., Mun, S., Lim, E. H., Kim, H., Chang, D., Hur, J., & Yee, S. (2021). Induction of Apoptosis in MDA-MB-231 Cells Treated with the Methanol Extract of Lichen *Physconia hokkaidensis*. *Journal of Fungi*, *7*(3), 188. <https://doi.org/10.3390/jof7030188>
- Nössing, C., & Ryan, K. M. (2022). 50 years on and still very much alive: ‘Apoptosis: a basic biological phenomenon with wide-ranging implications in tissue kinetics.’ *British Journal of Cancer*, *128*(3), 426–431. <https://doi.org/10.1038/s41416-022-02020-0>
- Nussinov, R., Jang, H., Tsai, C., Liao, T., Li, S., Fushman, D., & Zhang, J. (2017). Intrinsic protein disorder in oncogenic KRAS signaling. *Cellular and Molecular Life Sciences*, *74*(17), 3245–3261. <https://doi.org/10.1007/s00018-017-2564-3>
- 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>

- Obidiro, O., Battogtokh, G., & Akala, E. O. (2023). Triple negative breast cancer Treatment Options and Limitations: Future outlook. *Pharmaceutics*, *15*(7), 1796. <https://doi.org/10.3390/pharmaceutics15071796>
- O'Brien, J., Hayder, H., Zayed, Y., & Peng, C. (2018). Overview of MicroRNA biogenesis, mechanisms of actions, and circulation. *Frontiers in Endocrinology*, *9*. <https://doi.org/10.3389/fendo.2018.00402>
- O'Reilly, E. A., Gubbins, L., Sharma, S., Tully, R., Guang, M. H. Z., Weiner-Gorzal, K., McCaffrey, J., Harrison, M., Furlong, F., Kell, M., & McCann, A. (2015). The fate of chemoresistance in triple negative breast cancer (TNBC). *BBA Clinical*, *3*, 257–275. <https://doi.org/10.1016/j.bbacli.2015.03.003>
- Orrantia-Borunda, E., Anchondo-Nuñez, P., Acuña-Aguilar, L. E., Gómez-Valles, F. O., & Ramírez-Valdespino, C. A. (2022). Subtypes of breast cancer. In *Breast Cancer* (pp. 31–42). <https://doi.org/10.36255/exon-publications-breast-cancer-subtypes>
- Pan, W., Chai, B., Li, L., Lu, Z., & Ma, Z. (2023). p53/MicroRNA-34 axis in cancer and beyond. *Heliyon*, *9*(4), e15155. <https://doi.org/10.1016/j.heliyon.2023.e15155>
- Patel, S. A., Nilsson, M. B., Le, X., Cascone, T., Jain, R. K., & Heymach, J. V. (2022). Molecular mechanisms and future implications of VEGF/VEGFR in cancer therapy. *Clinical Cancer Research*, *29*(1), 30–39. <https://doi.org/10.1158/1078-0432.ccr-22-1366>
- Patra, S., Young, V., Llewellyn, L., Senapati, J. N., & Mathew, J. (2017). BRAF, KRAS and PIK3CA mutation and sensitivity to trastuzumab in breast cancer cell line model. *PubMed*, *18*(8), 2209–2213. <https://doi.org/10.22034/apjcp.2017.18.8.2209>
- Peng, W., Chen, J. Q., Liu, C., Malu, S., Creasy, C., Tetzlaff, M. T., Xu, C., McKenzie, J. A., Zhang, C., Liang, X., Williams, L. J., Deng, W., Chen, G., Mbofung, R., Lazar, A. J., Torres-Cabala, C. A., Cooper, Z. A., Chen, P., Tieu, T. N., . . . Hwu, P. (2015). Loss of PTEN promotes resistance to T Cell–Mediated immunotherapy. *Cancer Discovery*, *6*(2), 202–216. <https://doi.org/10.1158/2159-8290.cd-15-0283>
- Peng, Y., & Croce, C. M. (2016). The role of MicroRNAs in human cancer. *Signal Transduction and Targeted Therapy*, *1*(1). <https://doi.org/10.1038/sigtrans.2015.4>
- Pereira, A. a. R., Assis, R. J. F., Da Costa Pereira, E., Lima, V. C., Nogue, P. B., & Pereira, J. R. (2013). Cisplatin, gemcitabine, and vinorelbine (PGV) compared with cisplatin and etoposide (PE) in the first-line treatment of extensive-stage small-cell lung cancer: Two Brazilian institution experience. *Journal of Clinical Oncology*, *31*(15_suppl), e18548. https://doi.org/10.1200/jco.2013.31.15_suppl.e18548
- Piasecka, D., Braun, M., Kordek, R., Sadej, R., & Romanska, H. (2018). MicroRNAs in regulation of triple-negative breast cancer progression. *Journal of Cancer Research and Clinical Oncology*, *144*(8), 1401–1411. <https://doi.org/10.1007/s00432-018-2689-2>

- Pinweha, P., Phillips, C. A., Gregory, P. A., Li, X., Chuayboonya, P., Mongkolsiri, P., Goodall, G. J., & Jitrapakdee, S. (2019). MicroRNA-143-3p targets pyruvate carboxylase expression and controls proliferation and migration of MDA-MB-231 cells. *Archives of Biochemistry and Biophysics*, 677, 108169. <https://doi.org/10.1016/j.abb.2019.108169>
- Prabhu, K. S., Sadida, H. Q., Kuttikrishnan, S., Junejo, K., Bhat, A. A., & Uddin, S. (2024). Beyond genetics: Exploring the role of epigenetic alterations in breast cancer. *Pathology - Research and Practice*, 254, 155174. <https://doi.org/10.1016/j.prp.2024.155174>
- Qian, H., Tay, C. Y., Setyawati, M. I., Chia, S. L., Lee, D. S., & Leong, D. T. (2016). Protecting microRNAs from RNase degradation with steric DNA nanostructures. *Chemical Science*, 8(2), 1062–1067. <https://doi.org/10.1039/c6sc01829g>
- Qian, Y., Teng, Y., Li, Y., Lin, X., Guan, M., Li, Y., Cao, X., & Gao, Y. (2019). MiR-143-3p suppresses the progression of nasal squamous cell carcinoma by targeting Bcl-2 and IGF1R. *Biochemical and Biophysical Research Communications*, 518(3), 492–499. <https://doi.org/10.1016/j.bbrc.2019.08.075>
- Ren, Y., Han, X., Yu, K., Sun, S., Zhen, L., Li, Z., & Wang, S. (2014). microRNA-200c downregulates XIAP expression to suppress proliferation and promote apoptosis of triple-negative breast cancer cells. *Molecular Medicine Reports*, 10(1), 315–321. <https://doi.org/10.3892/mmr.2014.2222>
- Rieger, A. M., Nelson, K. L., Konowalchuk, J. D., & Barreda, D. R. (2011). Modified Annexin V/Propidium iodide apoptosis assay for accurate assessment of cell death. *Journal of Visualized Experiments*, 50. <https://doi.org/10.3791/2597>
- Riyanda, V. B., Rudiman, N. R., & Usman, N. N. (2021). Programmed Death-Ligand 1 Protein and Colorectal Cancer Patient Survival Rates n Hasan Sadikin Hospital Bandung. *Bioscientia Medicina Journal of Biomedicine and Translational Research*, 6(1), 1300–1306. <https://doi.org/10.37275/bsm.v6i1.437>
- Rocha, C. R. R., Silva, M. M., Quinet, A., Cabral-Neto, J. B., & Menck, C. F. M. (2018). DNA repair pathways and cisplatin resistance: an intimate relationship. *Clinics*, 73, e478s. <https://doi.org/10.6061/clinics/2018/e478s>
- Rusiecka, B., Piwocka, O., & Knopik-Skrocka, A. (n.d.). *Response of MDA-MB231 cells to cisplatin and paclitaxel — viability, migration and gene expression estimation in mono- and co-culture with macrophages*. Rusiecka | Reports of Practical Oncology and Radiotherapy. Retrieved July 17, 2025, from <https://journals.viamedica.pl/rpor/article/view/106149>
- Samaan, T. M. A., Samec, M., Liskova, A., Kubatka, P., & Büsselberg, D. (2019). Paclitaxel's mechanistic and clinical effects on breast cancer. *Biomolecules*, 9(12), 789. <https://doi.org/10.3390/biom9120789>
- Sánchez-Díez, M., Romero-Jiménez, P., Alegría-Aravena, N., Gavira-O'Neill, C. E., Vicente-García, E., Quiroz-Troncoso, J., González-Martos, R.,

- Ramírez-Castillejo, C., & Pastor, J. M. (2025). Assessment of cell viability in Drug therapy: IC50 and other new Time-Independent Indices for evaluating Chemotherapy efficacy. *Pharmaceutics*, *17*(2), 247. <https://doi.org/10.3390/pharmaceutics17020247>
- Sánchez-Rivera, F. J., Ryan, J., Soto-Feliciano, Y. M., Beytagh, M. C., Xuan, L., Feldser, D. M., Hemann, M. T., Zamudio, J., Dimitrova, N., Letai, A., & Jacks, T. (2021). Mitochondrial apoptotic priming is a key determinant of cell fate upon p53 restoration. *Proceedings of the National Academy of Sciences*, *118*(23). <https://doi.org/10.1073/pnas.2019740118>
- Sasich, L. D., & Sukkari, S. R. (2011). The US FDA's withdrawal of the breast cancer indication for Avastin (bevacizumab). *Saudi Pharmaceutical Journal*, *20*(4), 381–385. <https://doi.org/10.1016/j.jsps.2011.12.001>
- Savas, P., Lo, L. L., Luen, S. J., Blackley, E. F., Callahan, J., Moodie, K., Van Geelen, C. T., Ko, Y., Weng, C., Wein, L., Silva, M. J., Bujak, A. Z., Yeung, M. M., Ftouni, S., Hicks, R. J., Francis, P. A., Lee, C. K., Dawson, S., & Loi, S. (2022). Alpelisib Monotherapy for PI3K-Altered, Pretreated Advanced Breast Cancer: a Phase II study. *Cancer Discovery*, *12*(9), 2058–2073. <https://doi.org/10.1158/2159-8290.cd-21-1696>
- Sawant, S., Prakruthi, J., Daddi, A., Ghosh, J., Joshi, A., & Dhir, A. (2015). Cisplatin-induced cardiotoxicity – two case reports. *OncoReview*, *5*(4), 145–150. <https://doi.org/10.5604/20828691.1189719>
- Schrödl, K., Oelmez, H., Edelmann, M., Huber, R. M., & Bergner, A. (2009). Altered Ca²⁺-homeostasis of cisplatin-treated and low level resistant non-small-cell and small-cell lung cancer cells. *PubMed*. <https://doi.org/10.3233/clo-2009-0472>
- Sharma, V., & Mukhopadhyay, C. D. (2023). Exosome as drug delivery system: Current advancements. *Extracellular Vesicle*, *3*, 100032. <https://doi.org/10.1016/j.vesic.2023.100032>
- Silva, M. M., Rocha, C. R. R., Kinker, G. S., Pelegri, A. L., & Menck, C. F. M. (2019). The balance between NRF2/GSH antioxidant mediated pathway and DNA repair modulates cisplatin resistance in lung cancer cells. *Scientific Reports*, *9*(1). <https://doi.org/10.1038/s41598-019-54065-6>
- Sinnarkar, S., Suryawanshi, P., Dilip, A., Bhawalkar, J., & Ladke, V. (2024). Galangin promotes apoptosis by upregulating the pro-apoptotic gene BAX in triple-negative breast cancer. *Journal of the Egyptian National Cancer Institute*, *36*(1). <https://doi.org/10.1186/s43046-024-00246-y>
- Skotland, T., Hessvik, N. P., Sandvig, K., & Llorente, A. (2018). Exosomal lipid composition and the role of ether lipids and phosphoinositides in exosome biology. *Journal of Lipid Research*, *60*(1), 9–18. <https://doi.org/10.1194/jlr.r084343>
- Smolarz, B., Nowak, A. Z., & Romanowicz, H. (2022). Breast Cancer—Epidemiology, Classification, Pathogenesis and Treatment (Review of Literature). *Cancers*, *14*(10), 2569. <https://doi.org/10.3390/cancers14102569>
- Stelling-Férez, J., Cappellacci, I., Pandolfi, A., Gabaldón, J. A., Pipino, C., & Nicolás, F. J. (2023). Oleanolic acid rescues critical features of umbilical

- vein endothelial cells permanently affected by hyperglycemia. *Frontiers in Endocrinology*, 14. <https://doi.org/10.3389/fendo.2023.1308606>
- Stockert, J. C., Horobin, R. W., Colombo, L. L., & Blázquez-Castro, A. (2018). Tetrazolium salts and formazan products in Cell Biology: Viability assessment, fluorescence imaging, and labeling perspectives. *Acta Histochemica*, 120(3), 159–167. <https://doi.org/10.1016/j.acthis.2018.02.005>
- Sudnitsyna, J., Skverchinskaya, E., Dobrylko, I., Nikitina, E., Gambaryan, S., & Mindukshev, I. (2020). Microvesicle formation induced by oxidative stress in human erythrocytes. *Antioxidants*, 9(10), 929. <https://doi.org/10.3390/antiox9100929>
- Svoronos, A. A., Engelman, D. M., & Slack, F. J. (2016). OnCOMIR or tumor suppressor? The duplicity of MicroRNAs in cancer. *Cancer Research*, 76(13), 3666–3670. <https://doi.org/10.1158/0008-5472.can-16-0359>
- Tanida, S., Mizoshita, T., Ozeki, K., Tsukamoto, H., Kamiya, T., Kataoka, H., Sakamuro, D., & Joh, T. (2012). Mechanisms of Cisplatin-Induced apoptosis and of Cisplatin sensitivity: Potential of BIN1 to act as a potent predictor of Cisplatin sensitivity in gastric cancer treatment. *International Journal of Surgical Oncology*, 2012, 1–8. <https://doi.org/10.1155/2012/862879>
- Tavanafar, F., Safaralizadeh, R., Hosseinpour-Feizi, M. A., Mansoori, B., Shanebandi, D., Mohammadi, A., & Baradaran, B. (2017). Restoration of miR-143 expression could inhibit migration and growth of MDA-MB-468 cells through down-regulating the expression of invasion-related factors. *Biomedicine & Pharmacotherapy*, 91, 920–924. <https://doi.org/10.1016/j.biopha.2017.04.119>
- Tchounwou, P. B., Dasari, S., Noubissi, F. K., Ray, P., & Kumar, S. (2021). Advances in our understanding of the molecular mechanisms of action of cisplatin in cancer therapy. *Journal of Experimental Pharmacology*, Volume 13, 303–328. <https://doi.org/10.2147/jep.s267383>
- Thompson, W., & Papoutsakis, E. T. (2023). The role of biomechanical stress in extracellular vesicle formation, composition and activity. *Biotechnology Advances*, 66, 108158. <https://doi.org/10.1016/j.biotechadv.2023.108158>
- Tkaczuk, K., & Yared, J. (2012). Update on taxane development: new analogs and new formulations. *Drug Design Development and Therapy*, 371. <https://doi.org/10.2147/dddt.s28997>
- Tokumaru, Y., Takabe, K., Yoshida, K., & Akao, Y. (2020). Effects of MIR143 on rat sarcoma signaling networks in solid tumors: A brief overview. *Cancer Science*, 111(4), 1076–1083. <https://doi.org/10.1111/cas.14357>
- Traina, T. A., Miller, K., Yardley, D. A., Eakle, J., Schwartzberg, L. S., O’Shaughnessy, J., Gradishar, W., Schmid, P., Winer, E., Kelly, C., Nanda, R., Gucalp, A., Awada, A., Garcia-Estevez, L., Trudeau, M. E., Steinberg, J., Uppal, H., Tudor, I. C., Peterson, A., & Cortes, J. (2018). Enzalutamide for the treatment of androgen Receptor–Expressing Triple-Negative breast Cancer. *Journal of Clinical Oncology*, 36(9), 884–890. <https://doi.org/10.1200/jco.2016.71.3495>

- Tsujino, T., Sugito, N., Taniguchi, K., Honda, R., Komura, K., Yoshikawa, Y., Takai, T., Minami, K., Kuranaga, Y., Shinohara, H., Tokumaru, Y., Heishima, K., Inamoto, T., Azuma, H., & Akao, Y. (2019). MicroRNA-143/Musashi-2/KRAS cascade contributes positively to carcinogenesis in human bladder cancer. *Cancer Science*, *110*(7), 2189–2199. <https://doi.org/10.1111/cas.14035>
- Umar, A. K. (2022). Stem cell's Secretome delivery systems. *Advanced Pharmaceutical Bulletin*, *13*(2), 244–258. <https://doi.org/10.34172/apb.2023.027>
- Verschoor, C. P., Lelic, A., Bramson, J. L., & Bowdish, D. M. E. (2015). An introduction to Automated flow cytometry gating tools and their implementation. *Frontiers in Immunology*, *6*. <https://doi.org/10.3389/fimmu.2015.00380>
- Wang, F., Cerione, R. A., & Antonyak, M. A. (2021). Isolation and characterization of extracellular vesicles produced by cell lines. *STAR Protocols*, *2*(1), 100295. <https://doi.org/10.1016/j.xpro.2021.100295>
- Wang, S., Zhang, Q., Zhang, T., & Mao, X. (2024). Invasive papillary carcinoma of the breast: A case report. *Oncology Letters*, *28*(1). <https://doi.org/10.3892/ol.2024.14433>
- Wang, Y., Xu, X., Yu, S., Jeong, K. J., Zhou, Z., Han, L., Tsang, Y. H., Li, J., Chen, H., Mangala, L. S., Yuan, Y., Eterovic, A. K., Lu, Y., Sood, A. K., Scott, K. L., Mills, G. B., & Liang, H. (2017). Systematic characterization of A-to-I RNA editing hotspots in microRNAs across human cancers. *Genome Research*, *27*(7), 1112–1125. <https://doi.org/10.1101/gr.219741.116>
- Wang, Y., Zhao, L., Xiang, Z., Zhou, X., Gui, Y., & He, C. (2012). Correlation analysis of the results of double fluorescence (AO/PI) staining and clinical outcomes. *Journal of Reproduction and Contraception*, *23*(2), 111–118. [https://doi.org/10.1016/s1001-7844\(13\)60013-9](https://doi.org/10.1016/s1001-7844(13)60013-9)
- Wang, Z., Wang, C., Liu, W., & Ai, Z. (2019). Upregulation of microRNA-143-3p induces apoptosis and suppresses proliferation, invasion, and migration of papillary thyroid carcinoma cells by targeting MSI2. *Experimental and Molecular Pathology*, *112*, 104342. <https://doi.org/10.1016/j.yexmp.2019.104342>
- Watanabe, Y., Tsuchiya, A., & Terai, S. (2020). The development of mesenchymal stem cell therapy in the present, and the perspective of cell-free therapy in the future. *Clinical and Molecular Hepatology*, *27*(1), 70–80. <https://doi.org/10.3350/cmh.2020.0194>
- Won, K., & Spruck, C. (2020). Triple-negative breast cancer therapy: Current and future perspectives (Review). *International Journal of Oncology*, *57*(6), 1245–1261. <https://doi.org/10.3892/ijo.2020.5135>
- Wu, J., Zhu, Y., Liu, D., Cong, Q., & Bai, C. (2024). Biological functions and potential mechanisms of miR-143-3p in cancers (Review). *Oncology Reports*, *52*(3). <https://doi.org/10.3892/or.2024.8772>
- Wu, Y., Zhou, C., Liam, C., Wu, G., Liu, X., Zhong, Z., Lu, S., Cheng, Y., Han, B., Chen, L., Huang, C., Qin, S., Zhu, Y., Pan, H., Liang, H., Li, E., Jiang, G., How, S., Fernando, M., . . . Zuo, Y. (2015). First-line erlotinib versus

- gemcitabine/cisplatin in patients with advanced EGFR mutation-positive non-small-cell lung cancer: analyses from the phase III, randomized, open-label, ENSURE study. *Annals of Oncology*, 26(9), 1883–1889. <https://doi.org/10.1093/annonc/mdv270>
- Xia, C., Yang, Y., Kong, F., Kong, Q., & Shan, C. (2018). MiR-143-3p inhibits the proliferation, cell migration and invasion of human breast cancer cells by modulating the expression of MAPK7. *Biochimie*, 147, 98–104. <https://doi.org/10.1016/j.biochi.2018.01.003>
- Xie, F., Li, C., Zhang, X., Peng, W., & Wen, T. (2019). MiR-143-3p suppresses tumorigenesis in pancreatic ductal adenocarcinoma by targeting KRAS. *Biomedicine & Pharmacotherapy*, 119, 109424. <https://doi.org/10.1016/j.biopha.2019.109424>
- Xie, Q., Zheng, J., Ding, J., Wu, Y., Liu, L., Yu, Z., & Chen, G. (2022). Exosome-Mediated immunosuppression in tumor microenvironments. *Cells*, 11(12), 1946. <https://doi.org/10.3390/cells11121946>
- Xiong, X., Zheng, L., Ding, Y., Chen, Y., Cai, Y., Wang, L., Huang, L., Liu, C., Shao, Z., & Yu, K. (2025). Breast cancer: pathogenesis and treatments. *Signal Transduction and Targeted Therapy*, 10(1). <https://doi.org/10.1038/s41392-024-02108-4>
- Yan, F., Pang, J., Peng, Y., Molina, J. R., Yang, P., & Liu, S. (2016). Elevated cellular PD1/PD-L1 expression confers acquired resistance to cisplatin in small cell lung cancer cells. *PLoS ONE*, 11(9), e0162925. <https://doi.org/10.1371/journal.pone.0162925>
- Yang, T., Kang, L., Li, D., & Song, Y. (2023). Immunotherapy for HER-2 positive breast cancer. *Frontiers in Oncology*, 13. <https://doi.org/10.3389/fonc.2023.1097983>
- Yang, Z., Wang, J., Pan, Z., & Zhang, Y. (2018). miR-143-3p regulates cell proliferation and apoptosis by targeting IGF1R and IGFBP5 and regulating the Ras/p38 MAPK signaling pathway in rheumatoid arthritis. *Experimental and Therapeutic Medicine*. <https://doi.org/10.3892/etm.2018.5907>
- Yin, L., Duan, J., Bian, X., & Yu, S. (2020). Triple-negative breast cancer molecular subtyping and treatment progress. *Breast Cancer Research*, 22(1). <https://doi.org/10.1186/s13058-020-01296-5>
- Yu, Y., Nangia-Makker, P., Farhana, L., Rajendra, S. G., Levi, E., & Majumdar, A. P. N. (2015). miR-21 and miR-145 cooperation in regulation of colon cancer stem cells. *Molecular Cancer*, 14(1). <https://doi.org/10.1186/s12943-015-0372-7>
- Zerdan, M. B., Ghorayeb, T., Saliba, F., Allam, S., Zerdan, M. B., Yaghi, M., Bilani, N., Jaafar, R., & Nahleh, Z. (2022). Triple negative breast Cancer: Updates on classification and treatment in 2021. *Cancers*, 14(5), 1253. <https://doi.org/10.3390/cancers14051253>
- Zhang, D., Lee, H., Zhu, Z., Minhas, J. K., & Jin, Y. (2016). Enrichment of selective miRNAs in exosomes and delivery of exosomal miRNAs in vitro and in vivo. *AJP Lung Cellular and Molecular Physiology*, 312(1), L110–L121. <https://doi.org/10.1152/ajplung.00423.2016>

- Zhang, F., & Cao, H. (2018). MicroRNA-143-3p suppresses cell growth and invasion in laryngeal squamous cell carcinoma via targeting the k-Ras/Raf/MEK/ERK signaling pathway. *International Journal of Oncology*. <https://doi.org/10.3892/ijo.2018.4655>
- Zhang, H., Zang, C., Zhao, W., Zhang, L., Liu, R., Feng, Z., Wu, J., & Cui, R. (2023). Exosome Derived from Mesenchymal Stem Cells Alleviates Hypertrophic Scar by Inhibiting the Fibroblasts via TNFSF-13/HSPG2 Signaling Pathway. *International Journal of Nanomedicine, Volume 18*, 7047–7063. <https://doi.org/10.2147/ijn.s433510>
- Zhang, Y., Lv, Z., & He, Q. (2022). Agmatine alleviates Cisplatin-Induced ototoxicity by activating PI3K/AKT signaling pathway. *eNeuro*, 9(2), ENEURO.0434-21.2022. <https://doi.org/10.1523/eneuro.0434-21.2022>
- Zhou, L., Dong, J., Huang, G., Sun, Z., & Wu, J. (2017). MicroRNA-143 inhibits cell growth by targeting ERK5 and MAP3K7 in breast cancer. *Brazilian Journal of Medical and Biological Research*, 50(8). <https://doi.org/10.1590/1414-431x20175891>
- Zullo, J., Matsumoto, K., Xavier, S., Ratliff, B., & Goligorsky, M. S. (2015). The cell secretome, a mediator of cell-to-cell communication. *Prostaglandins & Other Lipid Mediators*, 120, 17–20. <https://doi.org/10.1016/j.prostaglandins.2015.03.012>