

DAFTAR PUSTAKA

- Ahlin, C. *et al.* (2017) 'High expression of cyclin D1 is associated to high proliferation rate and increased risk of mortality in women with ER-positive but not in ER-negative breast cancers', *Breast Cancer Research and Treatment*, 164(3), pp. 667–678. doi: 10.1007/s10549-017-4294-5.
- Aka, J. A. and Lin, S. X. (2012) 'Comparison of functional proteomic analyses of human breast cancer cell lines T47D and MCF7', *PLoS ONE*, 7(2), pp. 1–9. doi: 10.1371/journal.pone.0031532.
- Arca-Lafuente, S. *et al.* (2020) 'Nanotechnology: A reality for diagnosis of HCV infectious disease', *Journal of Infection*. Elsevier Ltd, 80(1), pp. 8–15. doi: 10.1016/j.jinf.2019.09.010.
- Babu, A. *et al.* (2017) 'Chemodrug delivery using integrin-targeted PLGA-Chitosan nanoparticle for lung cancer therapy', *Scientific Reports*. Springer US, 7(1), pp. 1–17. doi: 10.1038/s41598-017-15012-5.
- Bhome, R. *et al.* (2018) 'Exosomal microRNAs (exomiRs): Small molecules with a big role in cancer', *Cancer Letters*. Elsevier Ltd, 420, pp. 228–235. doi: 10.1016/j.canlet.2018.02.002.
- Bhoopathy, S. *et al.* (2020) 'Curcumin loaded chitosan nanoparticles fortify shrimp feed pellets with enhanced antioxidant activity', *Materials Science and Engineering C*. Elsevier B.V., (November), p. 111737. doi: 10.1016/j.msec.2020.111737.
- Boso, D. P. *et al.* (2011) 'Optimizing particle size for targeting diseased microvasculature: From experiments to artificial neural networks', *International Journal of Nanomedicine*, 6(1), pp. 1517–1526. doi: 10.2147/IJN.S20283.
- Catalanotto, C., Cogoni, C. and Zardo, G. (2016) 'MicroRNA in control of gene expression: An overview of nuclear functions', *International Journal of Molecular Sciences*, 17(10). doi: 10.3390/ijms17101712.
- Chang, P. H. *et al.* (2017) 'Chitosan promotes cancer progression and stem cell properties in association with Wnt signaling in colon and hepatocellular carcinoma cells', *Scientific Reports*. Nature Publishing Group, 8(October 2016), pp. 1–14. doi: 10.1038/srep45751.
- Chaudhary, V., Jangra, S. and Yadav, N. R. (2018) 'Nanotechnology based approaches for detection and delivery of microRNA in healthcare and crop protection', *Journal of Nanobiotechnology*. BioMed Central, 16(1), pp. 1–18. doi: 10.1186/s12951-018-0368-8.
- Chirshhev, E. *et al.* (2019) 'Let - 7 as biomarker, prognostic indicator, and therapy for precision medicine in cancer ', *Clinical and Translational Medicine*. Springer Berlin Heidelberg, 8(1). doi: 10.1186/s40169-019-0240-y.

- Ciriello, G. *et al.* (2013) 'The molecular diversity of Luminal A breast tumors', *Breast Cancer Research and Treatment*, 141(3), pp. 409–420. doi: 10.1007/s10549-013-2699-3.
- Clayton, K. N. *et al.* (2016) 'Physical characterization of nanoparticle size and surface modification using particle scattering diffusometry', *Biomicrofluidics*, 10(5), pp. 1–14. doi: 10.1063/1.4962992.
- Clogston, J. D. and Patri, A. K. (2011) 'Zeta potential measurement.', *Methods in molecular biology (Clifton, N.J.)*, 697, pp. 63–70. doi: 10.1007/978-1-60327-198-1_6.
- Collado-González, M. *et al.* (2017) 'Chitosan as stabilizing agent for negatively charged nanoparticles', *Carbohydrate Polymers*, 161, pp. 63–70. doi: 10.1016/j.carbpol.2016.12.043.
- Cosco, D. *et al.* (2015) 'Delivery of miR-34a by chitosan/PLGA nanoplexes for the anticancer treatment of multiple myeloma', *Scientific Reports*. Nature Publishing Group, 5(December), pp. 1–11. doi: 10.1038/srep17579.
- Dai, X. *et al.* (2017) 'Breast cancer cell line classification and Its relevance with breast tumor subtyping', *Journal of Cancer*, 8(16), pp. 3131–3141. doi: 10.7150/jca.18457.
- Danaei, M. *et al.* (2018) 'Impact of particle size and polydispersity index on the clinical applications of lipidic nanocarrier systems', *Pharmaceutics*, 10(2), pp. 1–17. doi: 10.3390/pharmaceutics10020057.
- Dang, Y. and Guan, J. (2020) 'Nanoparticle-based drug delivery systems for cancer therapy', *Smart Materials in Medicine*. Elsevier Ltd, 1(April), pp. 10–19. doi: 10.1016/j.smaim.2020.04.001.
- Deng, X. *et al.* (2014) 'Hyaluronic acid-chitosan nanoparticles for co-delivery of MiR-34a and doxorubicin in therapy against triple negative breast cancer', *Biomaterials*. Elsevier Ltd, 35(14), pp. 4333–4344. doi: 10.1016/j.biomaterials.2014.02.006.
- Duan, S. *et al.* (2019) 'Crosstalk between let-7a-5p and BCL-xL in the Initiation of Toxic Autophagy in Lung Cancer', *Molecular Therapy - Oncolytics*. Elsevier Ltd., 15(December), pp. 69–78. doi: 10.1016/j.omto.2019.08.010.
- Farrag, M., Abri, S. and Leipzig, N. D. (2020) 'pH-dependent RNA isolation from cells encapsulated in chitosan-based biomaterials', *International Journal of Biological Macromolecules*, 146, pp. 422–430. doi: 10.1016/j.ijbiomac.2019.12.263.
- Gurtner, A. *et al.* (2016) 'Dysregulation of microRNA biogenesis in cancer: The impact of mutant p53 on Drosha complex activity', *Journal of Experimental and Clinical Cancer Research*. Journal of Experimental & Clinical Cancer Research, 35(1), pp. 1–9. doi: 10.1186/s13046-016-0319-x.

- Hanahan, D. and Weinberg, R. A. (2011) 'Hallmarks of cancer: The next generation', *Cell*. Elsevier Inc., 144(5), pp. 646–674. doi: 10.1016/j.cell.2011.02.013.
- Harbeck, N. *et al.* (2019) *Breast cancer*, *Nature Reviews Disease Primers*. doi: 10.1038/s41572-019-0111-2.
- Hata, A. and Kashima, R. (2016) 'Dysregulation of microRNA biogenesis machinery in cancer', *Critical Reviews in Biochemistry and Molecular Biology*, 51(3), pp. 121–134. doi: 10.3109/10409238.2015.1117054.
- Howlader, N. *et al.* (2020) *SEER Cancer Stat Facts: Female Breast Cancer Subtypes*, *National Cancer Institute*. Available at: <https://seer.cancer.gov/statfacts/html/breast-subtypes.html%0A>.
- Hwang, H. W. and Mendell, J. T. (2006) 'MicroRNAs in cell proliferation, cell death, and tumorigenesis', *British Journal of Cancer*, 94(6), pp. 776–780. doi: 10.1038/sj.bjc.6603023.
- Ingenito, F. *et al.* (2019) 'The Role of Exo-miRNAs in Cancer: A Focus on Therapeutic and Diagnostic Applications', *International Journal of Molecular Sciences*, 20(19). doi: 10.3390/ijms20194687.
- International Agency for Research on Cancer (2018) *GLOBOCAN 2018: Global Cancer Observatory*. Available at: <https://gco.iarc.fr/today/fact-sheets-cancers> (Accessed: 1 December 2020).
- Kalyane, D. *et al.* (2018) *Transportation and biointeraction properties in nanomaterials across biological systems*, *Basic Fundamentals of Drug Delivery*. Elsevier Inc. doi: 10.1016/B978-0-12-817909-3.00009-1.
- Kargozar, S. and Mozafari, M. (2018) 'Nanotechnology and Nanomedicine: Start small, think big', *Materials Today: Proceedings*. Elsevier Ltd, 5(7), pp. 15492–15500. doi: 10.1016/j.matpr.2018.04.155.
- Kementerian Kesehatan Republik Indonesia (2019) *Hari Kanker Sedunia 2019*. Available at: <https://www.kemkes.go.id/article/view/19020100003/hari-kanker-sedunia-2019.html> (Accessed: 1 December 2020).
- Keydar, I. *et al.* (1979) 'Establishment and characterization of a cell line of human breast carcinoma origin', *European Journal of Cancer (1965)*, 15(5), pp. 659–670. doi: 10.1016/0014-2964(79)90139-7.
- Khan, Ibrahim, Saeed, K. and Khan, Idrees (2019) 'Nanoparticles: Properties, applications and toxicities', *Arabian Journal of Chemistry*. The Authors, 12(7), pp. 908–931. doi: 10.1016/j.arabjc.2017.05.011.
- Kim, S. J. *et al.* (2012) 'MicroRNA let-7a suppresses breast cancer cell migration and invasion through downregulation of C-C chemokine receptor type 7', *Breast Cancer Research*. BioMed Central Ltd, 14(1), p. R14. doi: 10.1186/bcr3098.

- Kumar, H. *et al.* (2020) *Nanoscience in Medicine Vol. 1, Anticancer research*.
- Li, J. P. *et al.* (2018) ‘Hyperoside and let-7a-5p synergistically inhibits lung cancer cell proliferation via inducing G1/S phase arrest’, *Gene*. Elsevier, 679(March), pp. 232–240. doi: 10.1016/j.gene.2018.09.011.
- Liu, D. *et al.* (2016) ‘The smart drug delivery system and its clinical potential’, *Theranostics*, 6(9), pp. 1306–1323. doi: 10.7150/thno.14858.
- Liu, L. *et al.* (2020) ‘MiR-let-7a-5p inhibits invasion and migration of hepatoma cells by regulating b2m expression’, *OncoTargets and Therapy*, 13, pp. 12269–12279. doi: 10.2147/OTT.S278954.
- Livak, K. J. and Schmittgen, T. D. (2001) ‘Analysis of relative gene expression data using real-time quantitative PCR and the 2- $\Delta\Delta$ CT method’, *Methods*, 25(4), pp. 402–408. doi: 10.1006/meth.2001.1262.
- Luo, C. H., Shanmugam, V. and Yeh, C. S. (2015) ‘Nanoparticle biosynthesis using unicellular and subcellular supports’, *NPG Asia Materials*. Nature Publishing Group, 7(8). doi: 10.1038/am.2015.90.
- Ma, J. *et al.* (2019) ‘miR-223 Regulates Cell Proliferation and Invasion via Targeting PDS5B in Pancreatic Cancer Cells’, *Molecular Therapy - Nucleic Acids*. Elsevier Ltd., 14(March), pp. 583–592. doi: 10.1016/j.omtn.2019.01.009.
- Mani, S. *et al.* (2020) ‘Synthesis and characterization of proanthocyanidin-chitosan nanoparticles: An assessment on human colorectal carcinoma HT-29 cells’, *Journal of Photochemistry and Photobiology B: Biology*. Elsevier, 210(July), p. 111966. doi: 10.1016/j.jphotobiol.2020.111966.
- Mitra, S., Ganguli, S. and Chakrabarti, J. (2018) *Introduction, Cancer and Noncoding RNAs*. Elsevier Inc. doi: 10.1016/b978-0-12-811022-5.00001-2.
- Mohammadi, A., Mansoori, B. and Baradaran, B. (2016) ‘The role of microRNAs in colorectal cancer’, *Biomedicine and Pharmacotherapy*. Elsevier Masson SAS, 84, pp. 705–713. doi: 10.1016/j.biopha.2016.09.099.
- Moreland, L. W. (2004) ‘No Title’, in *Rheumatology and Immunology Therapy*. Springer, Berlin, Heidelberg. doi: https://doi.org/10.1007/3-540-29662-X_2327.
- Negro, G. *et al.* (2020) ‘Molecular heterogeneity in breast carcinoma cells with increased invasive capacities’, *Radiology and Oncology*, 54(1), pp. 103–118. doi: 10.2478/raon-2020-0007.
- Nguyen, M. A. *et al.* (2019) ‘Delivery of MicroRNAs by Chitosan Nanoparticles to Functionally Alter Macrophage Cholesterol Efflux in Vitro and in Vivo’, *ACS Nano*, 13(6), pp. 6491–6505. doi: 10.1021/acsnano.8b09679.
- Nikezić, A. V. V., Bondžić, A. M. and Vasić, V. M. (2020) ‘Drug delivery systems based on nanoparticles and related nanostructures’, *European Journal of*

- Pharmaceutical Sciences*, 151(June). doi: 10.1016/j.ejps.2020.105412.
- Nishibeppu, K. *et al.* (2020) ‘Plasma microRNA profiles: identification of miR-1229-3p as a novel chemoresistant and prognostic biomarker in gastric cancer’, *Scientific reports*, 10(1), p. 3161. doi: 10.1038/s41598-020-59939-8.
- Noone, A.-M. *et al.* (2017) ‘Cancer incidence and survival trends by subtype using data from the Surveillance Epidemiology and End Results Program, 1992–2013’, *Cancer Epidemiol Biomarkers Prev*, 26(4), pp. 632–641. doi: 10.1158/1055-9965.EPI-16-0520.Cancer.
- Poudel, P. *et al.* (2019) ‘Heterocellular gene signatures reveal luminal-A breast cancer heterogeneity and differential therapeutic responses’, *npj Breast Cancer*. Springer US, 5(1), pp. 1–10. doi: 10.1038/s41523-019-0116-8.
- Rai, Y. *et al.* (2018) ‘Mitochondrial biogenesis and metabolic hyperactivation limits the application of MTT assay in the estimation of radiation induced growth inhibition’, *Scientific Reports*. Springer US, 8(1), pp. 1–15. doi: 10.1038/s41598-018-19930-w.
- Rasmussen, M. K., Pedersen, J. N. and Marie, R. (2020) ‘Size and surface charge characterization of nanoparticles with a salt gradient’, *Nature Communications*. Springer US, 11(1), pp. 1–8. doi: 10.1038/s41467-020-15889-3.
- Rehmsmeier, M., Giegerich, R. and Steffen, P. (2004) ‘Fast and effective prediction of microRNA/target duplexes’, *RNA*, 10(10), pp. 1507–1517. doi: 10.1261/rna.5248604.and.
- Ribeiro, E. F. *et al.* (2020) ‘Chitosan and crosslinked chitosan nanoparticles: Synthesis, characterization and their role as Pickering emulsifiers’, *Carbohydrate Polymers*. Elsevier, 250(May), p. 116878. doi: 10.1016/j.carbpol.2020.116878.
- Ruijtenberg, S. and van den Heuvel, S. (2016) ‘Coordinating cell proliferation and differentiation: Antagonism between cell cycle regulators and cell type-specific gene expression’, *Cell Cycle*. Taylor & Francis, 15(2), pp. 196–212. doi: 10.1080/15384101.2015.1120925.
- Samimi, S. *et al.* (2018) *Lipid-Based Nanoparticles for Drug Delivery Systems, Characterization and Biology of Nanomaterials for Drug Delivery: Nanoscience and Nanotechnology in Drug Delivery*. Elsevier Inc. doi: 10.1016/B978-0-12-814031-4.00003-9.
- Sempere, L. F., Keto, J. and Fabbri, M. (2017) ‘Exosomal microRNAs in breast cancer towards diagnostic and therapeutic applications’, *Cancers*, 9(7), pp. 1–15. doi: 10.3390/cancers9070071.
- Senapati, S. *et al.* (2018) ‘Controlled drug delivery vehicles for cancer treatment and their performance’, *Signal Transduction and Targeted Therapy*, 3(1), pp. 1–19. doi: 10.1038/s41392-017-0004-3.

- Shi, Y. *et al.* (2015) 'MiR-7-5p suppresses cell proliferation and induces apoptosis of breast cancer cells mainly by targeting REGγ', *Cancer Letters*, pp. 27–36. doi: 10.1016/j.canlet.2014.12.014.
- Shi, Y. *et al.* (2020) 'Let-7a-5p inhibits triple-negative breast tumor growth and metastasis through GLUT12-mediated warburg effect', *Cancer Letters*. Elsevier B.V., 495, pp. 53–65. doi: 10.1016/j.canlet.2020.09.012.
- Silva, D. *et al.* (2013) 'Chitosan and platelet-derived growth factor synergistically stimulate cell proliferation in gingival fibroblasts', *Journal of Periodontal Research*, 48(6), pp. 677–686. doi: 10.1111/jre.12053.
- Singh, A. P. *et al.* (2019) 'Targeted therapy in chronic diseases using nanomaterial-based drug delivery vehicles', *Signal Transduction and Targeted Therapy*. Springer US, 4(1), pp. 1–21. doi: 10.1038/s41392-019-0068-3.
- Sreekumar, S. *et al.* (2018) 'Parameters influencing the size of chitosan-TPP nano- and microparticles', *Scientific Reports*. Springer US, 8(1), pp. 1–11. doi: 10.1038/s41598-018-23064-4.
- Stillman, N. R. *et al.* (2020) 'In silico modelling of cancer nanomedicine, across scales and transport barriers', *npj Computational Materials*. Springer US, 6(1), pp. 1–10. doi: 10.1038/s41524-020-00366-8.
- Sultankulov, B. *et al.* (2019) 'Progress in the development of chitosan-based biomaterials for tissue engineering and regenerative medicine', *Biomolecules*, 9(9). doi: 10.3390/biom9090470.
- Sweeney, K. J. *et al.* (1998) 'Lack of relationship between CDK activity and G1 cyclin expression in breast cancer cells', *Oncogene*, 16(22), pp. 2865–2878. doi: 10.1038/sj.onc.1201814.
- Syeda, Z. A. *et al.* (2020) 'Regulatory mechanism of microrna expression in cancer', *International Journal of Molecular Sciences*, 21(5). doi: 10.3390/ijms21051723.
- Thakur, C. *et al.* (2021) *Treating blood cancer with nanotechnology: A paradigm shift, Nano Drug Delivery Strategies for the Treatment of Cancers*. INC. doi: 10.1016/b978-0-12-819793-6.00010-2.
- Thu, K. L. *et al.* (2018) 'Targeting the cell cycle in breast cancer: towards the next phase', *Cell Cycle*. Taylor & Francis, 17(15), pp. 1871–1885. doi: 10.1080/15384101.2018.1502567.
- Tomasetti, M. *et al.* (2017) 'Exosome-derived microRNAs in cancer metabolism: Possible implications in cancer diagnostics and therapy', *Experimental and Molecular Medicine*. Nature Publishing Group, 49(1), pp. e285-11. doi: 10.1038/emm.2016.153.
- Wasielewski, M. *et al.* (2006) 'Thirteen new p53 gene mutants identified among 41 human breast cancer cell lines', *Breast Cancer Research and Treatment*, 99(1),

pp. 97–101. doi: 10.1007/s10549-006-9186-z.

- Williams, M. *et al.* (2017) ‘NEExploring Mechanisms of MicroRNA Downregulation in Cancero Title’, *MicroRNA*, 1, pp. 2–16. doi: <https://doi.org/10.2174/2211536605666161208154633>.
- Wu, F. *et al.* (2021) ‘Signaling pathways in cancer-associated fibroblasts and targeted therapy for cancer’, *Signal Transduction and Targeted Therapy*. Springer US, 6(1), pp. 1–35. doi: 10.1038/s41392-021-00641-0.
- Wu, S. *et al.* (2018) ‘Evaluating intrinsic and non-intrinsic cancer risk factors’, *Nature Communications*. Springer US, 9(1). doi: 10.1038/s41467-018-05467-z.
- Xiao, Y. *et al.* (2019) ‘MiR-205 dysregulations in breast cancer: The complexity and opportunities’, *Non-coding RNA*, 5(4). doi: 10.3390/ncrna5040053.
- Yang, X. *et al.* (2019) ‘Chitosan nanoparticle mediated upregulation of microRNA34a expression to suppress the proliferation, migration, invasion of MDA-MB-231 cells’, *Journal of Drug Delivery Science and Technology*, pp. 1061–1069. doi: 10.1016/j.jddst.2019.06.020.
- Ysrafil, Y. *et al.* (2020) ‘MicroRNA-155-5p diminishes in vitro ovarian cancer cell viability by targeting HIF1 α expression’, *Advanced Pharmaceutical Bulletin*, 10(4), pp. 630–637. doi: 10.34172/apb.2020.076.
- Ysrafil, Y. and Astuti, I. (2021) ‘Chitosan nanoparticle-mediated effect of anti-miRNA-324-5p on decreasing the ovarian cancer cell proliferation by regulation of GLI1 expression’, *BioImpacts*, 11(5), pp. x–x. doi: 10.34172/bi.2021.22119.
- Yu, S. *et al.* (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*. Elsevier Ltd, 486(3), pp. 752–758. doi: 10.1016/j.bbrc.2017.03.114.
- Zha, W. *et al.* (2020) ‘Let-7a inhibits Bcl-xl and YAP1 expression to induce apoptosis of trophoblast cells in early-onset severe preeclampsia’, *Science of the Total Environment*. Elsevier B.V., 745(218), p. 139919. doi: 10.1016/j.scitotenv.2020.139919.
- Zhang, S., Gao, H. and Bao, G. (2015) ‘Physical Principles of Nanoparticle Cellular Endocytosis’, *ACS Nano*, 9(9), pp. 8655–8671. doi: 10.1021/acs.nano.5b03184.