UNIVERSITAS GADJAH MADA
EFEK SITOTOKSISITAS SEDIAAN NANOPARTIKEL KITOSAN BERBASIS MIKRORNA TERHADAP KULTUR SEL LINE KANKER OVARIUM SKOV3
YSRAFIL, Dr. Med. dr. Indwiani Astuti.; Dr. rer. nat. Ronny Martien, M.Si
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Adams, B.D., Kasinski, A.L., Slack, F.J., 2015. Aberrant Regulation and Function of MicroRNAs in Cancer. *Curr Biol.* 24: 762–776.

Agnihotri, S.A., Mallikarjuna, N.N., Aminabhavi, T.M., 2004. Recent advances on chitosan-based micro- and nanoparticles in drug delivery. *J. Control. Release* 100: 5–28.

Ananta, J.S., Paulmurugan, R., Massoud, T.F., 2016. Tailored nanoparticle codelivery of antimiR-21 and antimiR-10b augments glioblastoma cell kill by temozolomide: Toward a "personalized" anti-microRNA therapy. *Mol. Pharm.* 13: 3164–3175.

Anwar, S.L., Haryono, S.J., Aryandono, T., Haryana, S.M., 2017. Micro-RNA : Biogenesis, Fungsi, dan Perannya dalam Proses Karsinogenesis dan Penatalaksanaan Kanker. Gadjah Mada University Press, Yogyakarta.

Bader, A.G., Brown, D., Winkler, M., 2010. The promise of microRNA replacement therapy. *Cancer Res.* 70: 7027–7030.

Bartel, D.P., 2004. MicroRNAs: Genomics, Biogenesis, Mechanism, and Function. *Cell* 116: 281–297.

Battista, M.J., Schmidt, M., Jakobi, S., Cotarelo, C., Almstedt, K., Heimes, A.S., Makris, G.M., Weyer, V., Lebrecht, A., Hoffmann, G., Eichbaum, M., 2016. C-met is overexpressed in type I ovarian cancer: Results of an investigative analysis in a cohort of consecutive ovarian cancer patients. *Oncol. Lett.* 12: 2001–2007.

Bayrak, O.F., Gulluoglu, S., Aydemir, E., Ture, U., Acar, H., Atalay, B., Demir, Z., Sevli, S., Creighton, C.J., Ittmann, M., Sahin, F., Ozen, M., 2013. MicroRNA expression profiling reveals the potential function of microRNA-31 in chordomas. *J. Neurooncol.* 115: 143–151.

Beg, M.S., Brenner, A.J., Sachdev, J., Borad, M., Kang, Y.K., Stoudemire, J., Smith, S., Bader, A.G., Kim, S., Hong, D.S., 2017. Phase I study of MRX34, a liposomal miR-34a mimic, administered twice weekly in patients with advanced solid tumors. *Invest. New Drugs* 35: 180–188.

Bell, D.A., 2005. Origins and molecular pathology of ovarian cancer. *Mod. Pathol.* 18: 19–32.

Bindewald, E., & Shapiro, B., 2017. RNA Nano- structures. Springer Nature, New York.

Brahimi-Horn, M.C., Chiche, J., Pouysségur, J., 2007. Hypoxia and cancer. *J. Mol. Med.* 85: 1301–1307.

UNIVERSITAS GADJAH MADA
EFEK SITOTOKSISITAS SEDIAAN NANOPARTIKEL KITOSAN BERBASIS MIKRORNA TERHADAP KULTUR SEL LINE KANKER OVARIUM SKOV3
YSRAFIL, Dr. Med. dr. Indwiani Astuti.; Dr. rer. nat. Ronny Martien, M.Si
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Brett M., R., Jennifer B., P., Thomas A., S., Brett M., R., Jennifer B., P., Thomas A., S., 2017. Epidemiology of ovarian cancer: a review. *Cancer Biol. Med.* 14: 9–32.

Brown, D.M., Croce, C., Nana-Sinkam, S.P., 2017. Clinical and Therapeutic Application of MicroRNA in Cancer, in: Laurence, J. (Ed.), Translating MicroRNAs To The Clinic. Mica Haley, New York, pp. 17–37.

Brueckner, B., Stresemann, C., Kuner, R., Mund, C., Musch, T., Meister, M., Sültmann, H., Lyko, F., 2007. The human let-7a-3 locus contains an epigenetically regulated microRNA gene with oncogenic function. *Cancer Res.* 67: 1419–1423.

Bruning, U., Cerone, L., Neufeld, Z., Fitzpatrick, S.F., Cheong, a., Scholz, C.C., Simpson, D. a., Leonard, M.O., Tambuwala, M.M., Cummins, E.P., Taylor, C.T., 2011. MicroRNA-155 Promotes Resolution of Hypoxia-Inducible Factor 1 Activity during Prolonged Hypoxia. *Mol. Cell. Biol.* 31: 4087–4096.

Cao, L., Xie, B., Yang, X., Liang, H., Jiang, X., Zhang, D., Xue, P., Chen, D., Shao, Z., 2015. MIR-324-5p suppresses hepatocellular carcinoma cell invasion by counteracting ECM degradation through post-transcriptionally downregulating ETS1 and SP1. *PLoS One* 10: 1–16.

Chasanah, S.N., Fitriawan, A.S., Pukan, F.K., Kartika, A.I., 2016. The expression of miRNA-155 and hypoxia inducible factor alpha (HIF1A) mRNA in the early and advanced stages of ovarian cancer patients blood plasma. *Suppl. J Med Sci*. 48: 2016.

Chen, C.-Z., 2005. Micro-RNAs as Oncogenes and Tumour Suppressors. *N. Engl. J. Med.* 1768–1771.

Chen, X., Gu, S., Chen, B.F., Shen, W.L., Yin, Z., Xu, G.W., Hu, J.J., Zhu, T., Li, G., Wan, C., Ouyang, H.W., Lee, T.L., Chan, W.Y., 2015. Nanoparticle delivery of stable miR-199a-5p agomir improves the osteogenesis of human mesenchymal stem cells via the HIF1a pathway. *Biomaterials* 53: 239–250.

Corney, D.C., Nikitin, A.Y., 2008. microRNA and Ovarian Cancer. *Histol Histopathol.* 23: 1161–1169.

Csaba, N., Köping-Höggård, M., Alonso, M.J., 2009. Ionically crosslinked chitosan/tripolyphosphate nanoparticles for oligonucleotide and plasmid DNA delivery. *Int. J. Pharm.* 382: 205–214.

Dedes, K.J., Natrajan, R., Lambros, M.B., Geyer, F.C., Lopez-Garcia, M.A., Savage, K., Jones, R.L., Reis-Filho, J.S., 2011. Down-regulation of the miRNA master regulators Drosha and Dicer is associated with specific subgroups of breast cancer. *Eur. J. Cancer* 47: 138–150.

UNIVERSITAS GADJAH MADA
EFEK SITOTOKSISITAS SEDIAAN NANOPARTIKEL KITOSAN BERBASIS MIKRORNA TERHADAP KULTUR SEL LINE KANKER OVARIUM SKOV3
YSRAFIL, Dr. Med. dr. Indwiani Astuti.; Dr. rer. nat. Ronny Martien, M.Si
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Donzelli, S., Cioce, M., Muti, P., Strano, S., Yarden, Y., Blandino, G., 2016. MicroRNAs: Non-coding fine tuners of receptor tyrosine kinase signalling in cancer. *Semin. Cell Dev. Biol.* 50: 133–142.

Elgadir, M.A., Uddin, M.S., Ferdosh, S., Adam, A., Chowdhury, A.J.K., Sarker, M.Z.I., 2015. Impact of chitosan composites and chitosan nanoparticle composites on various drug delivery systems: A review. *J. Food Drug Anal.* 23: 619–629.

Faraoni, I., Antonetti, F.R., Cardone, J., Bonmassar, E., 2009. miR-155 gene: A typical multifunctional microRNA. *Biochim. Biophys. Acta - Mol. Basis Dis.* 1792: 497–505.

Fazi, F., Racanicchi, S., Zardo, G., Starnes, L.M., Mancini, M., Travaglini, L., Diverio, D., Ammatuna, E., Cimino, G., Lo-Coco, F., Grignani, F., Nervi, C., 2007. Epigenetic Silencing of the Myelopoiesis Regulator microRNA-223 by the AML1/ETO Oncoprotein. *Cancer Cell* 12: 457–466.

Ferlay, J., Soerjomataram I, I., Dikshit, R., Eser, S., Mathers, C., Rebelo, M., Parkin, D.M., Forman D, D., Bray, F., 2015. Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012. *Int J Cancer* 136: E359-386.

Fitzmaurice, C., Allen, C., Barber, R.M., Barregard, L., Bhutta, Z. a., Brenner, H., Dicker, D.J., Chimed-Orchir, O., Dandona, R., Dandona, L., Fleming, T., et al., 2017. Global, regional, and national cancer incidence, mortality, years of life lost, years lived with disability, and disability-adjusted life-years for 32 cancer groups, 1990 to 2015: A Systematic Analysis for the Global Burden of Disease Study Global Burden. *JAMA Oncol.* 3: 524–548.

Freier, T., Koh, H.S., Kazazian, K., Shoichet, M.S., 2005. Controlling cell adhesion and degradation of chitosan films by N-acetylation. *Biomaterials* 26: 5872–5878.

Gaur, S., Wen, Y., Song, J.H., Parikh, N.U., Lingegowda, S., Shi, Y., Lopez-berestein, G., Frigo, D.E., Sood, A.K., 2015. Chitosan nanoparticle-mediated delivery of miRNA-34a decreases prostate tumor growth in the bone and its expression induces non-canonical autophagy. *Oncotarget* 6: 29161–29177.

Gironella, M., Seux, M., Xie, M.-J., Cano, C., Tomasini, R., Gommeaux, J., Garcia, S., Nowak, J., Yeung, M.L., Jeang, K.-T., Chaix, A., Fazli, L., Motoo, Y., Wang, Q., Rocchi, P., Russo, A., Gleave, M., Dagorn, J.-C., Iovanna, J.L., Carrier, A., Pebusque, M.-J., Dusetti, N.J., 2007. Tumor protein 53-induced nuclear protein 1 expression is repressed by miR-155, and its restoration inhibits pancreatic tumor development. *Proc. Natl. Acad. Sci.* 104: 16170–16175.

Graham, K., Hakam, Y., Kaza, N., Mikhail, M., Doherty, R.M., Tasker, R., Torode, J., Von der Muhill, V., 2016. World cancer declaration: Progress report 2016, Union for

UNIVERSITAS GADJAH MADA
EFEK SITOTOKSISITAS SEDIAAN NANOPARTIKEL KITOSAN BERBASIS MIKRORNA TERHADAP KULTUR SEL LINE KANKER OVARIUM SKOV3
YSRAFIL, Dr. Med. dr. Indwiani Astuti.; Dr. rer. nat. Ronny Martien, M.Si
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

international cancer control.

Gulyaeva, L.F., Kushlinskiy, N.E., 2016. Regulatory mechanisms of microRNA expression. *J. Transl. Med.* 14: 1–10.

Hayes, J., Peruzzi, P.P., Lawler, S., 2014. MicroRNAs in cancer: Biomarkers, functions and therapy. *Trends Mol. Med.* 20: 460–469.

Hemann, M.T., Lowe, S.W., 2006. The p53-Bcl-2 connection. *Cell Death Differ.* 13: 1256–1259.

Holzerny, P., Ajdini, B., Heusermann, W., Bruno, K., Schuleit, M., Meinel, L., Keller, M., 2012. Biophysical properties of chitosan/siRNA polyplexes: Profiling the polymer/siRNA interactions and bioactivity. *J. Control. Release* 157: 297–304.

Huang, M., Fong, C.W., Khor, E., Lim, L.Y., 2005. Transfection efficiency of chitosan vectors: Effect of polymer molecular weight and degree of deacetylation. *J. Control. Release* 106: 391–406.

Iorio, M. V., Visone, R., Di Leva, G., Donati, V., Petrocca, F., Casalini, P., Taccioli, C., Volinia, S., Liu, C.G., Alder, H., Calin, G.A., Ménard, S., Croce, C.M., 2007. MicroRNA signatures in human ovarian cancer. *Cancer Res.* 67: 8699–8707.

Jansen, A.P., Camalier, C.E., Colburn, N.H., 2005. Epidermal expression of the translation inhibitor programmed cell death 4 suppresses tumorigenesis. *Cancer Res.* 65: 6034–6041.

Jansson, M.D., Lund, A.H., 2012. MicroRNA and cancer. *Mol. Oncol.* 6: 590–610.

Jayson, G.C., Kohn, E.C., Kitchener, H.C., Ledermann, J. a., 2014. Ovarian cancer. *Lancet* 384: 1376–1388.

Kaban, K., Salva, E., Akbuga, J., 2016. In Vitro Dose Studies on Chitosan Nanoplexes for microRNA Delivery in Breast Cancer Cells. *Nucleic Acid Ther.* 00: 1–11.

Karimi, M., Avci, P., Ahi, M., Gazori, T., Hamblin, M.R., Naderi-Manesh, H., 2013. Evaluation of Chitosan-Tripolyphosphate Nanoparticles as a p- shRNA Delivery Vector: Formulation, Optimization and Cellular Uptake Study. *J Nanopharm Drug Deliv.* 1: 266–278178.

Katas, H., Alpar, H.O., 2006. Development and characterisation of chitosan nanoparticles for siRNA delivery. *J. Control. Release* 115: 216–225.

Kent, O.A., Mendell, J.T., 2006. A small piece in the cancer puzzle: MicroRNAs as tumor suppressors and oncogenes. *Oncogene* 25: 6188–6196.

UNIVERSITAS GADJAH MADA
EFEK SITOTOKSISITAS SEDIAAN NANOPARTIKEL KITOSAN BERBASIS MIKRORNA TERHADAP KULTUR SEL LINE KANKER OVARIUM SKOV3
YSRAFIL, Dr. Med. dr. Indwiani Astuti.; Dr. rer. nat. Ronny Martien, M.Si
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Kharia, A.A., Singhai, A.K., Verma, R., 2012. Formulation and Evaluation of Polymeric Nanoparticles of an Antiviral Drug for Gastroretention. *Int. J. Pharm. Sci. Nanotechnol.* 4: 1557–1562.

Kinose, Y., Sawada, K., Nakamura, K., Kimura, T., 2014. The Role of microRNAs in Ovarian Cancer. *BioMed Res. Int* 14: 1–11.

Kong, Y.W., Ferland-McCollough, D., Jackson, T.J., Bushell, M., 2012. MicroRNAs in cancer management. *Lancet Oncol.* 13: 249–258.

L Hollis, R., Gourley, C., L Hollis, R., Gourley, C., 2016. Genetic and molecular changes in ovarian cancer. *Cancer Biol. Med.* 13: 236–247.

Lan, H., Lu, H., Wang, X., Jin, H., 2015. MicroRNAs as Potential Biomarkers in Cancer: Opportunities and Challenges. *Biomed Res. Int.* 2015: 1–17.

Lee, J.-W., Bae, S.-H., Jeong, J.-W., Kim, S.-H., Kim, K.-W., 2004. Hypoxia-inducible factor (HIF-1)alpha: its protein stability and biological functions. *Exp. Mol. Med.* 36: 1–12.

Lehmann, U., Hasemeier, B., Christgen, M., Muller, M., Romermann, D., Langer, F., Kreipe, H., 2008. Epigenetic inactivation of microRNA gene hsa-mir-9-1 in human breast cancer. *J. Pathol.* 214: 17–24.

Li, W., Zhou, J., Xu, Y., 2015. Study of the in vitro cytotoxicity testing of medical devices. *Biomed. Reports* 3: 617–620.

Lin, M.H., Chen, Y.Z., Lee, M.Y., Weng, K.P., Chang, H.T., Yu, S.Y., Dong, B.J., Kuo, F.R., Hung, L.T., Liu, L.F., Chen, W.S., Tsai, K.W., 2018. Comprehensive identification of microRNA arm selection preference in lung cancer: MiR-324-5p and -3p serve oncogenic functions in lung cancer. *Oncol. Lett.* 15: 9818–9826.

Liu, J., Liu, X., Ma, W., Kou, W., Li, C., Zhao, J., 2018. Anticancer activity of cucurbitacin-A in ovarian cancer cell line SKOV3 involves cell cycle arrest, apoptosis and inhibition of mTOR/PI3K/Akt signaling pathway. *J. BUON.* 23: 124–128.

Lu, Z., Liu, M., Stribinskis, V., Klinge, C.M., Ramos, K.S., Colburn, N.H., Li, Y., 2008. MicroRNA-21 promotes cell transformation by targeting the programmed cell death 4 gene. *Oncogene* 27: 4373–4379.

Lum, E., Vigliotti, M., Banerjee, N., Cutter, N., Wrzeszczynski, K.O., Khan, S., Kamalakaran, S., Levine, D. a., Dimitrova, N., Lucito, R., 2013. Loss of DOK2 induces carboplatin resistance in ovarian cancer via suppression of apoptosis. *Gynecol. Oncol.* 130: 369–376.

UNIVERSITAS GADJAH MADA
EFEK SITOTOKSISITAS SEDIAAN NANOPARTIKEL KITOSAN BERBASIS MIKRORNA TERHADAP KULTUR SEL LINE KANKER OVARIUM SKOV3
YSRAFIL, Dr. Med. dr. Indwiani Astuti.; Dr. rer. nat. Ronny Martien, M.Si
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Mansouri, S., Lavigne, P., Corsi, K., Benderdour, M., Beaumont, E., Fernandes, J.C., 2004. Chitosan-DNA nanoparticles as non-viral vectors in gene therapy : strategies to improve transfection efficacy 57: 1–8.

Mao, S., Sun, W., Kissel, T., 2010. Chitosan-based formulations for delivery of DNA and siRNA. *Adv. Drug Deliv. Rev.* 62: 12–27.

Martien, R., Loretz, B., Sandbichler, A.M., Schnürch, A.B., 2008. Thiolated chitosan nanoparticles: Transfection study in the Caco-2 differentiated cell culture. *Nanotechnology* 19: 1–9.

Mattiske, S., Suetani, R.J., Neilsen, P.M., Callen, D.F., 2012. The oncogenic role of miR-155 in breast cancer. *Cancer Epidemiol. Biomarkers Prev.* 21: 1236–1243.

Mayr, C., Hemann, M.T., Bartel, D.P., 2007. Disrupting the pairing between let-7 and Hmga2 enhances oncogenic transformation. *Science (80-.).* 315: 1576–1579.

Meng, F., Henson, R., Lang, M., Wehbe, H., Maheshwari, S., Mendell, J.T., Jiang, J., Schmittgen, T.D., Patel, T., 2006. Involvement of Human Micro-RNA in Growth and Response to Chemotherapy in Human Cholangiocarcinoma Cell Lines. *Gastroenterology* 130: 2113–2129.

Merritt, W.M., Lin, Y.G., Liz Y. Han, M.D., Aparna A. Kamat, M.D., Whitney A. Spannuth, M.D., Rosemarie Schmandt, P.D., Diana Urbauer, M.S., Len A. Pennacchio, Ph.D., Jan-Fang Cheng, P.D., Alpa M. Nick, M.D., Michael T. Deavers, M.D., Alexandra Mourad-Zeidan, M.S., Hua Wang, P.D., Peter Mueller, Ph.D., Marc E. Lenburg, P.D., Joe W. Gray, P.D., Samuel Mok, P.D., Michael J. Birrer, M.D., P.D., Gabriel Lopez-Berestein, M.D., Robert L. Coleman, M.D., Menashe Bar-Eli, Ph.D., A., Anil K. Sood, M.., 2008. Dicer, Drosha, and Outcomes in Patients with Ovarian Cancer. *N. Engl. J. Med.* 359: 2641–2650.

Mohammed, M.A., Syeda, J.T.M., Wasan, K.M., Wasan, E.K., 2017. An overview of chitosan nanoparticles and its application in non-parenteral drug delivery. *Pharmaceutics* 9: 1–26.

Negrini, M., Ferracin, M., Sabbioni, S., Carlo, M.C., 2007. MicroRNAs in cancer : from research to therapy. *J. Cell Sci.* 120: 1833–1840.

Nguyen, D.D., Chang, S., 2018. Development of novel therapeutic agents by inhibition of oncogenic microRNAs. *Int. J. Mol. Sci.* 19: 1–17.

Nguyen, L., Cardenas-Goicoechea, S.J., Gordon, P., Curtin, C., Momeni, M., Chuang, L., Fishman, D., 2013. Biomarkers for early detection of ovarian cancer. *Women's Heal.* 9: 171–187.

Nidhin, M., Indumathy, R., Sreeram, K.J., Nair, B.U., 2008. Synthesis of iron oxide

UNIVERSITAS GADJAH MADA
EFEK SITOTOKSISITAS SEDIAAN NANOPARTIKEL KITOSAN BERBASIS MIKRORNA TERHADAP KULTUR SEL LINE KANKER OVARIUM SKOV3
YSRAFIL, Dr. Med. dr. Indwiani Astuti.; Dr. rer. nat. Ronny Martien, M.Si
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

nanoparticles of narrow size distribution on.pdf>. *Bull. Mater. Sci.* 31: 93–96.

Pellegrino, T., Sperling, R.A., Alivisatos, A.P., Parak, W.J., 2008. Gel Electrophoresis of Gold-DNA Nanoconjugates. *J. Biomed. Biotechnol.* 2007: 1–9.

Phan, L.M., Yeung, S.-C.J., Lee, M.-H., 2014. Cancer metabolic reprogramming: importance, main features, and potentials for precise targeted anti-cancer therapies. *Cancer Biol Med* 11: 1–19.

Poltronieri, P., D'Urso, P.I., Mezzolla, V., D'Urso, O.F., 2013. Potential of Anti-Cancer Therapy Based on Anti-miR-155 Oligonucleotides in Glioma and Brain Tumours. *Chem. Biol. Drug Des.* 81: 79–84.

Qin, J., Liu, Y., Lu, Y., Liu, M., Li, M., Li, J., Wu, L., 2017. Hypoxia-inducible factor 1 alpha promotes cancer stem cells-like properties in human ovarian cancer cells by upregulating SIRT1 expression. *Sci. Rep.* 7: 1–12.

Qin, W., Ren, Q., Liu, T., Huang, Y., Wang, J., 2013. MicroRNA-155 is a novel suppressor of ovarian cancer-initiating cells that targets CLDN1. *FEBS Lett.* 587: 1434–1439.

Quiñones-Lombraña, A., Blanco, J.G., 2015. Chromosome 21-derived hsa-miR-155-5p regulates mitochondrial biogenesis by targeting Mitochondrial Transcription Factor A (TFAM). *Biochim. Biophys. Acta - Mol. Basis Dis.* 1852: 1420–1427.

Rabinovich, A., Medina, L., Piura, B., Segal, S., Huleihel, M., 2007. Regulation of ovarian carcinoma SKOV-3 cell proliferation and secretion of MMPs by autocrine IL-6. *Anticancer Res.* 27: 267–272.

Raemdonck, K., Martens, T.F., Braeckmans, K., Demeester, J., De Smedt, S.C., 2013. Polysaccharide-based nucleic acid nanoformulations. *Adv. Drug Deliv. Rev.* 1–25.

Ragelle, H., Vandermeulen, G., Préat, V., 2013. Chitosan-based siRNA delivery systems. *J. Control. Release* 172: 207–218.

Reid, G., Kao, S.C., Pavlakis, N., Brahmbhatt, H., MacDiarmid, J., Clarke, S., Boyer, M., Van Zandwijk, N., 2016. Clinical development of TargomiRs, a miRNA mimic-based treatment for patients with recurrent thoracic cancer. *Epigenomics* 8: 1079–1085.

Rennie, W., Kanoria, S., Liu, C., Mallick, B., Long, D., Wolenc, A., Carmack, C.S., Lu, J., Ding, Y., 2016. STarMirDB: A database of microRNA binding sites. *RNA Biol.* 13: 554–560.

Resnick, K.E., Alder, H., Hagan, J.P., Richardson, D.L., Croce, C.M., Cohn, D.E., 2009. The detection of differentially expressed microRNAs from the serum of ovarian cancer patients using a novel real-time PCR platform. *Gynecol. Oncol.* 112: 55–59.

UNIVERSITAS
GADJAH MADA
EFEK SITOTOKSISITAS SEDIAAN NANOPARTIKEL KITOSAN BERBASIS MIKRORNA TERHADAP KULTUR SEL LINE KANKER OVARIUM SKOV3
YSRAFIL, Dr. Med. dr. Indwiani Astuti.; Dr. rer. nat. Ronny Martien, M.Si
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Rupaimoole, R., Slack, F.J., 2017. MicroRNA therapeutics: Towards a new era for the management of cancer and other diseases. *Nat. Rev. Drug Discov.* 16: 203–221.

Sadri, N., Zhang, P.J., 2013. Hypoxia-inducible factors: Mediators of cancer progression; prognostic and therapeutic targets in soft tissue sarcomas. *Cancers (Basel).* 5: 320–333.

Saito, Y., Liang, G., Egger, G., Friedman, J.M., Chuang, J.C., Coetzee, G.A., Jones, P.A., 2006. Specific activation of microRNA-127 with downregulation of the proto-oncogene BCL6 by chromatin-modifying drugs in human cancer cells. *Cancer Cell* 9: 435–443.

Santos-Carballal, B., Aaldering, L.J., Ritzefeld, M., Pereira, S., Sewald, N., Moerschbacher, B.M., Götte, M., Goycoolea, F.M., 2015. Physicochemical and biological characterization of chitosan-microRNA nanocomplexes for gene delivery to MCF-7 breast cancer cells. *Sci. Rep.* 5: 1–15.

Semenza, G.L., 2003. Targeting HIF-1 for cancer therapy. *Nat. Rev. Cancer* 3: 721–732.

Semenza, G.L., 2002. HIF-1 and tumor progression: Pathophysiology and therapeutics. *Trends Mol. Med.* 8: 62–67.

Shah, M.Y., Ferrajoli, A., Sood, A.K., Lopez-Berestein, G., Calin, G.A., 2016. microRNA Therapeutics in Cancer — An Emerging Concept. *EBioMedicine* 12: 34–42.

Shenouda, S.K., Alahari, S.K., 2009. MicroRNA function in cancer: Oncogene or a tumor suppressor? *Cancer Metastasis Rev.* 28: 369–378.

Siegel, R.L., Miller, K.D., Jemal, A., 2017. Cancer Statistics , 2017. *CA Cancer J. Clin.* 00: 1–24. doi:10.3322/caac.21387.

Sumadi, F. agung N., 2018. Formulasi Nanopartikel Kitosan Berbasis MikroRNA Sebagai Terapi Tertarget Molekular Pada Kultur Sel Kanker Ovarium. *ETD UGM*.

Sundarbose, K., Kartha, R., Subramanian, S., 2013. MicroRNAs as Biomarkers in Cancer. *Diagnostics* 3: 84–104.

Szender, J.B., Emmons, T., Belliotti, S., Dickson, D., Khan, A., Morrell, K., Khan, a. N.M.N., Singel, K.L., Mayor, P.C., Moysich, K.B., Odunsi, K., Segal, B.H., Eng, K.H., 2017. Impact of ascites volume on clinical outcomes in ovarian cancer: A cohort study. *Gynecol. Oncol.* 146: 491–497.

Tang, B., Xu, A., Xu, J., Huang, H., Chen, L., Su, Y., Zhang, L., Li, J., Fan, F., Deng, J., Tang, L., Sun, C., Hu, Y., 2018. MicroRNA-324-5p regulates stemness, pathogenesis and sensitivity to bortezomib in multiple myeloma cells by targeting hedgehog signaling. *Int. J. Cancer* 142: 109–120.

UNIVERSITAS GADJAH MADA
EFEK SITOTOKSISITAS SEDIAAN NANOPARTIKEL KITOSAN BERBASIS MIKRORNA TERHADAP KULTUR SEL LINE KANKER OVARIUM SKOV3
YSRAFIL, Dr. Med. dr. Indwiani Astuti.; Dr. rer. nat. Ronny Martien, M.Si
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Tang, M.X., Szoka, F.C., 1997. The influence of polymer structure on the interactions of cationic polymers with DNA and morphology of the resulting complexes. *Gene Ther.* 4: 823–832.

Taylor, D.D., Gercel-Taylor, C., 2008. MicroRNA signatures of tumor-derived exosomes as diagnostic biomarkers of ovarian cancer. *Gynecol. Oncol.* 110: 13–21.

Teplyuk, N.M., Uhlmann, E.J., Gabriely, G., Volfovsky, N., Wang, Y., Teng, J., Karmali, P., Marcusson, E., Peter, M., Mohan, A., Kraytsberg, Y., Cialic, R., Chiocca, E.A., Godlewski, J., Tannous, B., Krichevsky, A.M., 2016. Therapeutic potential of targeting microRNA- 10 b in established intracranial glioblastoma : first steps toward the clinic. *EMBO Mol. Med.* 8: 268–287.

Thomson, D.W., Bracken, C.P., Szubert, J.M., Goodall, G.J., 2013. On Measuring miRNAs after Transient Transfection of Mimics or Antisense Inhibitors. *PLoS One* 8: 1–7.

Torpy, J.M., 2015. Ovarian Cancer. *J. Am. Med. Assoc.* 305: 2484.

Toyota, M., Suzuki, H., Sasaki, Y., Maruyama, R., Imai, K., Shinomura, Y., Tokino, T., 2008. Epigenetic silencing of microRNA-34b/c and B-cell translocation gene 4 is associated with CpG island methylation in colorectal cancer. *Cancer Res.* 68: 4123–4132.

Trang, P., Medina, P.P., Wiggins, J.F., Ruffino, L., Kelnar, K., Omotola, M., Homer, R., Brown, D., Bader, A.G., Weidhaas, J.B.A., Slack, F.J., 2010. Regression of murine lung tumors by the let-7 microRNA. *Oncogene* 29: 1580–1587.

Walker, J.M., 2009. Micro and Nano Technologies in Bioanalysis : Method and Protocol. Humana Press, Hertfordshire, UK.

Wigerup, C., Påhlman, S., Bexell, D., 2016. Therapeutic targeting of hypoxia and hypoxia-inducible factors in cancer. *Pharmacol. Ther.* 164: 152–169.

Wiggins, J.F., Ruffino, L., Kelnar, K., Omotola, M., Patrawala, L., Brown, D., Bader, A.G., 2010. Development of a lung cancer therapeutic based on the tumor suppressor microRNA-34. *Cancer Res.* 70: 5923–5930.

Wu, Y. ling, Mehew, J.W., Heckman, C.A., Arcinas, M., Boxer, L.M., 2001. Negative regulation of bcl-2 expression by p53 in hematopoietic cells. *Oncogene* 20: 240–251.

Xu-Monette, Z.Y., Jeffrey Medeiros, L., Li, Y., Orlowski, R.Z., Andreeff, M., Bueso-Ramos, C.E., Greiner, T.C., McDonnell, T.J., Young, K.H., 2012. Dysfunction of the TP53 tumor suppressor gene in lymphoid malignancies. *Blood* 119: 3668–3683.

Xu, H.S., Zong, H.L., Shang, M., Ming, X., Zhao, J.P., Ma, C., Cao, L., 2014. MiR-324-5p

UNIVERSITAS
GADJAH MADA
EFEK SITOTOKSISITAS SEDIAAN NANOPARTIKEL KITOSAN BERBASIS MIKRORNA TERHADAP KULTUR SEL LINE KANKER OVARIUM SKOV3
YSRAFIL, Dr. Med. dr. Indwiani Astuti.; Dr. rer. nat. Ronny Martien, M.Si
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

inhibits proliferation of glioma by target regulation of GLI1. *Eur. Rev. Med. Pharmacol. Sci.* 18: 828–832.

Yeo, Y., Park, K., 2004. Control of Encapsulation Efficiency and Initial Burst in Polymeric Microparticle Systems. *Arch Pharm Res Vol* 27: 1–12.

Zhang, B., Pan, X., George, P.C., Anderson, T.A., 2013. MicroRNAs as Oncogenes and Tumor Suppressors. *Dev. Biol.* 302: 1–12.

Zhang, L., Lv, R., Qu, X., Chen, X., Lu, H., Wang, Y., 2017. Aloesin Suppresses Cell Growth and Metastasis in Ovarian Cancer SKOV3 Cells through the Inhibition of the MAPK Signaling Pathway. *Anal. Cell. Pathol. (Amst).* 2017: 8158254.

Zhang, S., Lu, Z., Unruh, a. K., Ivan, C., Baggerly, K. a., Calin, G. a., Li, Z., Bast, R.C., Le, X.-F., 2015. Clinically Relevant microRNAs in Ovarian Cancer. *Mol. Cancer Res.* 13: 393–401.

Zhang, X.F., Tu, R., Li, K., Ye, P., Cui, X., 2017. Tumor Suppressor PTPRJ Is a Target of miR-155 in Colorectal Cancer. *J. Cell. Biochem.* 118: 3391–3400.

Zhu, S., Si, M.L., Wu, H., Mo, Y.Y., 2007. MicroRNA-21 targets the tumor suppressor gene tropomyosin 1 (TPM1). *J. Biol. Chem.* 282: 14328–14336.