

DAFTAR PUSTAKA

- Akbar, M. A., N. Y. Mohd Yusof, N. I. Tahir, A. Ahmad, G. Usup, F. K. Sahrani, and H. Bunawan. 2020. Biosynthesis of Saxitoxin in Marine Dinoflagellates: An Omics Perspective. *Marine Drugs* 18(2): 1–24.
- Akbora, D. H., I. Kunter, T. Erçetin, A. Murat Elagöz, and B. A. Çiçek, 2019. Determination of Tetrodotoxin (TTX) Levels in Various Tissues of the Silver Cheeked Puffer Fish (*Lagocephalus sceleratus* (Gmelin, 1789)) in Northern Cyprus Sea (Eastern Mediterranean). *Toxicon*.
- Akram, M., M. Iqbal, M. Daniyal, and A. U. Khan. 2017. Awareness and current knowledge of breast cancer. *Biol Res* 50(33): 1-23.
- Amaral C. R. L., P. M. Brito, D. A. Silva, and E. F. Carvalho. 2013. A New Cryptic Species of South American Freshwater Pufferfish of the Genus *Colomesus* (Tetraodontidae), Based on Both Morphology and DNA Data. *Plos One* 8.
- Angus, M., P. Ruben. 2019. Voltage Gated Sodium Channels in Cancer and Their Potential Mechanisms of Action. *Channels*.
- Ansdell, V. 2019. Seafood Poisoning. *Travel Medicine* 449–456.
- Aslanturk, O. S. 2018. In Vitro Cytotoxicity and Cell Viability Assays: Principles, Advantages, and Disadvantages. *Genotoxicity - A Predictable Risk to Our Actual World* 1–18.
- Bacsokay, I., D. Nemes, F. Fenyvesi, J. Váradi, G. Vasvári, P. Fehér, M. Vecsernyés, and Z. Ujhelyi. 2018. Role of Cytotoxicity Experiments in Pharmaceutical Development. *Cytotoxicity*.
- Bahuguna, A., I. Khan, V. K. Bajpai, and S. C. Kang, 2017. MTT assay to evaluate the cytotoxic potential of a drug. *Bangladesh Journal of Pharmacology* 12(2): 115–118.
- Bandar, H., A.Hijazi, H. Rammal, A. Hachem, Z. Saad, and B. Badran. 2013. Techniques for the Extraction of Bioactive Compounds from Lebanese *Urtica dioica*. *American Journal of Phytomedicine and Clinical Therapeutics* 6: 507-513.
- Barrientos, R. G., G. Hernández-Mora, F. Alegre, T. Field, L. Flewelling, S. McGrath, and B. A. Stacy. 2019. Saxitoxin Poisoning in Green Turtles (*Chelonia mydas*) Linked to Scavenging on Mass Mortality of Caribbean Sharpnose Puffer Fish (*Canthigaster rostrata*-Tetraodontidae). *Frontiers in Veterinary Science* 6.
- Berkovitz, B., and P. Shellis. 2017. Bony fishes. *The Teeth of Non-Mammalian Vertebrates* 43–111.
- Bragadeeswaran, S., D. Therasa, K. Prabhu, and K. Kathiresan, K. 2010. Biomedical and pharmacological potential of tetrodotoxin-producing bacteria isolated from marine pufferfish *Arothron hispidus* (Muller, 1841). *Journal of Venomous Animals and Toxins Including Tropical Diseases* 16(3): 421–431.
- Brescia P., P. Banks. 2009. Quantifying Cytotoxicity of Thiostrepton on Mesothelioma

Cells using MTT Assay and the Epoch™ Microplate Spectrophotometer. *BioTek Instruments, Inc.* 1-3.

- Camarillo, I. G., F. Xiao, S. Madhivanan, T. Salameh, M. Nichols, L. M. Reece, J. F. Leary, K. Otto, A. Natarajan, A. Ramesh, and R. Sundararajan. 2014. Low and high voltage electrochemotherapy for breast cancer: an in vitro model study. In *Electroporation-Based Therapies for Cancer*. Woodhead Publishing Limited.
- Campbell, K., and S. Haughey. 2014. *Tetrodotoxin*. UK : Queen's University Belfast.
- Carmona, N. J. A., A. Santana, A. L. Rheingold, and E. Meléndez, E. 2019. Synthesis, structure, docking and cytotoxic studies of ferrocene-hormone conjugates for hormone-dependent breast cancer application. *Dalton Transactions* 48(18): 5952–5964.
- Chulanetra, M., N. Sookrung, P. Srimanote, N. Indrawattana, J. Thanongsaksrikul, Y. Sakolvaree, and W. Chaicumpa. 2011. Toxic Marine Puffer Fish in Thailand Seas and Tetrodotoxin They Contained. *Toxins* 3(10): 1249-1262.
- DiBona, C.W., T. L. Williams, S. R. Dinneen, S. F. Jones Labadie, L. F. Deravi. 2016. A Method for Extracting Pigments from Squid *Doryteuthis pealeii*. *J. Vis. Exp.* 117.
- Dekkers, W. J. 1975. Review of the Asiatic Freshwater Puffers of The Genus *Tetraodon* Linnaeus, 1758 (Pisces, Tetraodontiformes, Tetraodontidae). *Bijdragen Tot De* 45(1): 88-141.
- Eskandari, B., M. Safavi, S. N. S. Lamardi, and M. Vazirian. 2019. Cytotoxic Evaluation of *Daphne pontica* L. Aerial Part Extracts on Three Cancerous Cell Lines by MTT Assay. *Traditional And Integrative Medicine* 4(2): 58-63.
- Fabri, R. L., D. S. De Sá, A. P. O. Pereira, E. Scio, D. S. Pimenta, and L. M. Chedier. 2015. Antimicrobial, antioxidant and cytotoxicity potential of *Manihot multifida* (L.) Crantz (Euphorbiaceae). *Anais Da Academia Brasileira de Ciencias* 87(1): 303–311.
- Fang, I. J., and B. Trewyn. 2012. Application of mesoporous silica nanoparticles in intracellular delivery of molecules and proteins. In *Methods in Enzymology* (1st ed., Vol. 508). Elsevier Inc.
- Fouda, F. M. 2005. Anti-tumor activity of tetrodotoxin extracted from the masked puffer fish *Arothron diadema*. *Egyptian Journal of Biology* 7 : 1-13.
- Ford, C. H. J., A. L. B. Maie, A. L. A. Bushra, and F. Issam. 2011. Reassessment of estrogen receptor expression in human breast cancer cell lines. *Anticancer Research* 31(2): 521–527.
- Gao, W., Y. Kanahara, M. Yamada, R. Tatsuno, H. Yoshikawa, H. Doi, O. Arakawa. 2019. Contrasting Toxin Selectivity between the Marine Pufferfish *Takifugu pardalis* and the Freshwater Pufferfish *Pao suvattii*. *Toxins* 11(8): 470.
- Gradek, F., L. O. Charcas, S. Chadet, L. Poisson, L. Ouldamer, C. Goupille, M. L. Jourdan, S. Chevalier, D. Moussata, P. Besson, and S. Roger. 2019. Sodium Channel Nav1.5 Controls Epithelial-to-Mesenchymal Transition and Invasiveness in Breast Cancer Cells Through its Regulation by the Salt-Inducible Kinase-1. *Scientific Reports*, 9(1).

- Grudzinski, W., L. Nierzwicki, E. Welc, R., Reszczynska, R. Luchowski, J. Czup, and W. I. Gruszecki, 2017. Localization and Orientation of Xanthophylls in a Lipid Bilayer. *Scientific Reports*, 7(1).
- Hashiguchi, Y., J. M. Lee, M. Shiraishi, S. Komatsu, S. Miki, Y. Shimasaki, Y. Oshima. 2015. Characterization and evolutionary analysis of tributyltin-binding protein and pufferfish saxitoxin and tetrodotoxin-binding protein genes in toxic and nontoxic pufferfishes. *Journal of Evolutionary Biology* 28(5): 1103–1118.
- Indumathi, S. M., and S. S. Khora. 2017. Toxicity assessment and screening of tetrodotoxin in the oblong blowfish (*Takifugu oblongus*) from the Tamil Nadu Coast of Bay of Bengal, India. *Asian Pacific Journal of Tropical Medicine* 10(3): 278–284.
- Istifli, S. E., M. Tahir Hüsünet, and H. Basri İla, H. 2019. Cell Division, Cytotoxicity, and the Assays Used in the Detection of Cytotoxicity. *Cytotoxicity - Definition, Identification, and Cytotoxic Compounds* 1–19.
- Kementrian Kesehatan RI. 2018. *Profil Kesehatan Indonesia 2017*. Jakarta : Kemenkes RI. 27 Januari 2020.
- Kleensang, A., M. M. Vantangoli, S. Odwin-DaCosta, M. E. Andersen, K. Boekelheide, M. Bouhifd, and T. Hartung. 2016. Genetic variability in frozen batch of MCF-7 cells invisible in routine authentication affecting cell function. *Scientific Reports* 6(1).
- Kosker, A. R., F. Ozogul, M. Durmus, Y. Ucar, D. Ayas, J. M. Regenstien, and Y. Ozogul. 2016. Tetrodotoxin level in pufferfish (*Lagocephalus sceleratus*) caught in the Northeastern Mediterranean Sea. *Food Chemistry* 210: 332-337.
- Kumar, A., A. Anand, R. K. Singh, P. K. Verma, S. P. Singh, S. Kumar, and A. Acharya. 2020. Developing a Non-Immunogenic and Biocompatible Polymeric Self-Assembly By Using RAFT Methodology for Therapeutics Application. *Journal of Scientific Research*.
- Lagana, A., J. Vadnais, P. U. Le, T. N. Nguyen, R. Laprade1, I. R. Nabi, and J. Noël. 2000. Regulation of the formation of tumor cell pseudopodia by the Na⁺/H⁺ exchanger NHE1. *Journal of Cell Science* 113: 3649-3662.
- Lam, V. K., T. V. Nguyen, B. M. Bui, L. C. Chung, G. Chang, G. Nehmetallah, and C. B. Raub. 2020. Quantitative scoring of epithelial and mesenchymal qualities of cancer cells using machine learning and quantitative phase imaging. *Journal of Biomedical Optics* 25(02): 1.
- Lenaeus, M. J., T. M. Gamal El-Din, K. Ramanadane, R. Pomès, N. Zheng, and W. A. Catterall. 2017. Structures of closed and open states of a voltage-gated sodium channel. *Proceedings of the National Academy of Sciences* 114(15): E3051–E3060.
- Li, S., Q. Zhao, B. Wang, S. Yuan, X. Wang, and K. Li. 2018. Quercetin reversed MDR in breast cancer cells through down-regulating P-gp expression and eliminating cancer stem cells mediated by YB-1 nuclear translocation. *Phytotherapy Research* 32(8): 1530–1536.
- Lim, S. W., H. S. Loh, K. N. Ting, T. D. Bradshaw, and Z. N. Allaudin. 2015.

- Reduction of MTT to purple formazan by vitamin E isomers in the absence of cells. *Tropical Life Sciences Research* 26(1): 111–120.
- Liu, J., D. Liu, J. Liu, C. Zhao, S. Yao, and L. Hong. 2018. Blocking the Nav1.5 channel using eicosapentaenoic acid reduces migration and proliferation of ovarian cancer cells. *International Journal of Oncology*.
- Lobikin, M., B. Chernet, D. Lobo, and M. Levin. 2012. Resting potential, oncogene-induced tumorigenesis, and metastasis: the bioelectric basis of cancer *in vivo*. *Phys. Biol.* 9:065002.
- Mahdavi, S., and S. Kuyucak. 2015. Mechanism of Ion Permeation in Mammalian Voltage-Gated Sodium Channels. *PLOS ONE* 10(8).
- Masriani., Mustofa., Sunarti., Jumina. 2019. The Cytotoxic Activities of the Extracts of Sengkubak (*Pycnarrhena cauliflora*) As Apoptosis Inducers to Hela Cervical Cancer Cells. *Journal of Chemical Natural Resources* 1 (2): 79 – 87.
- Mathew, A., P. S. Rajagopal, V. Villgrans, G. S. Sandhu, R. C. Jankowit, M. Jacob, M. Rosenzweig, S. Oesterreich, and A. Btufsky. 2017. Distinct Pattern of Metastases in Patients with Invasive Lobular Carcinoma of the Breast. *Geburtsh Frauenheilk* 77: 660–666.
- Mathonnet, M. 2014. Hallmarks in colorectal cancer: Angiogenesis and cancer stem-like cells. *World Journal of Gastroenterology*, 20(15), 4189.
- Matsuura K. 2015. Taxonomy and Systematics of Tetraodontiform Fishes: A Review Focusing Primarily on Progress in the Period from 1980 to 2014. *Ichthyol Res* 62: 72–113.
- Mulyani N. S., and Nuryani. 2013. *Kanker Payudara dan PMS pada Kehamilan*. Yogyakarta: Nuamedika.
- Nagai, J., M. Imamura, H. Sakagami, and Y. Uesawa. 2019. QSAR Prediction Model to Search for Compounds with Selective Cytotoxicity Against Oral Cell Cancer. *Medicines* 6(2):45.
- Nielsen, D. L. 2004. Mechanisms and functional aspects of multidrug resistance in Ehrlich ascites tumour cells, *Dan. Med. Bull* 51(4): 393-414.
- Nevozhay, D. 2014. Cheburator software for automatically calculating drug inhibitory concentrations from in vitro screening assays. *PLoS ONE* 9(9): 1–10.
- Nieto, F. R., E. J. Cobos, M. A. Tejada, C. S. Fernandez, R. G. Cano, and C. M. Cendan. 2012. Tetrodotoxin (TTX) as a therapeutic agent for pain. *Marine Drugs* 10: 281-305.
- Nieto, C., M. A. Vega, G. Marcelo, and E. M. Martin Dell Valle. 2018. Polydopamine nanoparticles kill cancer cells. *RSC Advances* 8(63): 36201–36208.
- Nigjeh, S. E., F. M. Yusoff, N. B. Mohamed Alitheen, M. Rasoli, Y. S. Keong, and R. A. Omar. 2013. Cytotoxic Effect of Ethanol Extract of Microalga, *Chaetoceros calcitrans*, and Its Mechanisms in Inducing Apoptosis in Human Breast Cancer Cell Line. *BioMed Research International* 1–8.
- Noguchi, T., K. Onuki, and O. Arakawa. 2012. Tetrodotoxin Poisoning Due to Pufferfish and Gastropods, and Their Intoxication Mechanism. *ISRN*

Toxicology, 1-10.

- Nontji, A. 2016. Danau Singkarak. http://www.limnologi.lipi.go.id/file/file_nontji/DANAU%20SINGKARAK.pdf
- Nordin, M. L., A. A. Kadir, Z. A. Zakaria. R. Abdullah, and N. H. Abdullah. 2018. In vitro investigation of cytotoxic and antioxidative activities of *Ardisia crispa* against breast cancer cell lines, MCF-7 and MDA-MB-231. *BMC Complementary and Alternative Medicine*, 18(1).
- Omar, Z., S. S., M. N. Ibrahim, and H. Katas. 2015. Particle size affects concentration-dependent cytotoxicity of chitosan nanoparticles towards mouse hematopoietic stem cells. *Journal of Nanotechnology*.
- Prayong, P., S. Barusruks, and N. Weerapreeyakul. 2008. Cytotoxic activity screening of some indigenous Thai plants. *Fitoterapia* 79(7-8), 598-601.
- Rawindraraj, A. D., C. Y. Zhou, and V. Pathak. 2018. Delayed breast cancer relapse with pleural metastasis and malignant pleural effusion after long periods of disease-free survival. *Respirology Case Reports* 6(9): 1–3.
- Riss, T. L., R. A. Moravec, and A. L. Niles, 2011. *Cytotoxicity testing: measuring viable cells, dead cells, and detecting mechanism of cell death*. Methods in Molecular Biology (Clifton, N.J.).
- Riss, T. L., R. A. Moravec, A. L. Niles, H. A. Benink, T. J. Worzella, L. Minor. 2013. *Cell Viability Assays. Assay Guidance Manual*. Bethesda, MD, USA: Eli Lilly and Company and the National Center for Advancing Translational Sciences.
- Roberts, T. R. 1998. Freshwater fugu or pufferfishes of the genus *Tetraodon* from the Mekong basin, with descriptions of two new species. *Ichthyological Research* 45(3): 225-234.
- Roger, S., J. Le Guennec, and P. Besson. 2004. Particular sensitivity to calcium channel blockers of the fast inward voltage-dependent sodium current involved in the invasive properties of a metastatic breast cancer cell line. *Brit. J. Pharmacology* 141: 610–615.
- Ruiz, D. L. M., R. L. Kraus. 2015. Voltage-Gated Sodium Channels: Structure, Function, Pharmacology, and Clinical Indications. *Journal of Medicinal Chemistry*, 58(18): 7093–7118
- Salehi, H., S. Al-Arag, E. Middendorp, C. Gergely, F. Cuisinier, and V. Orti. 2018. Dental pulp stem cells used to deliver the anticancer drug paclitaxel. *Stem Cell Research and Therapy*.
- Sebaugh, J. L. 2011. Guidelines for accurate EC₅₀/IC₅₀ estimation. *Pharmaceutical Statistics* 10(2): 128–134.
- Shan, Y., Y. Gao, W. Jin, M. Fan, Y. Wang, Y. Gu, and Q. Xu. 2019. Targeting HIBCH to reprogram valine metabolism for the treatment of colorectal cancer. *Cell Death & Disease* 10(8).
- Sheets, M. F., H. A. Fozzard, D. A. Hanck. 2015. Important Role of Asparagines in Coupling the Pore and Voltage-Sensor Domain in Voltage-Gated Sodium Channels. *Biophysical Journal*, 109(11): 2277-2286.

- Shono, T., A. P. Thiery, R. L. Cooper, D. Kurokawa, R. Britz, M. Okabe, and G. J. Fraser. 2019. *Evolution and Developmental Diversity of Skin Spines in Pufferfishes*. iScience.
- Skold, H. N., S. Aspengren, K. L. Cheney, and M. Wallin. 2016. Fish Chromatophores From Molecular Motors to Animals Behavior. *International Review of Cell and Molecular Biology* 171-219.
- Subamia, I., N. Meilisza, Sudarto, and S. Sugito. 2008. Domestication of freshwater puffer fish or Buntal (*Tetraodon palembangensis*). *Indonesian Aquaculture Journal* 3 (2): 133-138.
- Tolosa, L., M. T. Donato, and M. J. Gómez-Lechón. 2014. General Cytotoxicity Assessment by Means of the MTT Assay. *Protocols in In Vitro Hepatocyte Research* 333-348.
- Talupula, B. K. 2011. Cytotoxic of PBN spin trap on A204 cells. *J Adv Pharm Res* 2: 9-17.
- Taylor, R. C., S. P. Cullen, and S. J. Martin. 2008. Apoptosis: controlled demolition at the cellular level. *Nature Reviews Molecular Cell Biology* 9(3): 231-241.
- Tor, Y. S., L. S. Yazan, J. B. Foo, A. Wibowo, N. Ismail, Y. K. Cheah, R. Abdullah, M. Ismail, I. S. Ismail, and S. K. Yeap. 2015. Induction of apoptosis in MCF-7 cells via oxidative stress generation, mitochondria-dependent and caspase-independent pathway by ethyl acetate extract of *Dillenia suffruticosa* and its chemical profile. *PLoS ONE* 10(6): 1-25.
- Tsuchiya, K., T. Sano, N. Tomioka, A. Kohzu, K. Komatsu, R. Shinohara, S. Shimode, T. Toda, A. Imai. 2020. Incorporation characteristics of exogenous ¹⁵N-labeled thymidine, deoxyadenosine, deoxyguanosine and deoxycytidine into bacterial DNA. *PLoS ONE* 15(2): 1-12.
- Walker, J. R., P. A. Novick, W. H. Parsons, M. McGregor, J. Zablocki, V. S. Pande, and J. Du Bois. 2012. Marked difference in saxitoxin and tetrodotoxin affinity for the human nociceptive voltage-gated sodium channel (Nav1.7). *Proceedings of the National Academy of Sciences* 109(44): 18102-18107.
- Wang, S., M. He, L. Li, Z. Liang, Z. Zou, and A. Tao. 2016. Cell-in-cell death is not restricted by caspase-3 deficiency in MCF-7 cells. *Journal of Breast Cancer* 19(3): 231-241.
- Welsh, J. E. 2013. Animal Models for Studying Prevention and Treatment of Breast Cancer. In *Animal Models for the Study of Human Disease*. Elsevier.
- Wiese, M., P. M. D'Agostino, T. K. Mihali, M. C. Moffitt, and B. A. Neilam. 2010. Neurotoxic Alkaloids: Saxitoxin and Its Analogs. *Marine Drugs* 8(7), 2185-2211.
- Wisdom, K. M., Adebowale, K., Chang, J., Lee, J. Y., Nam, S., Desai, R., N. S. Rossen, M. Rafat, R. B. West, L. Hodgson, and O. Chaudhuri. 2018. Matrix mechanical plasticity regulates cancer cell migration through confining microenvironments. *Nature Communications*, 9(1).
- Xue, X., M. D. Hall, Q. Zhang, P. C. Wang, M. M. Gottesman, and X. J. Liang. 2013. Nanoscale Drug Delivery Platforms Overcome Platinum-Based

Resistance in Cancer Cells Due to Abnormal Membrane Protein Trafficking. *ACS Nano*, 7(12): 10452–10464.

- Yamashita, Y. M., N. Okoshi, K. Watanabe, N. Araki, H. Yamaki, Y. Shoji, and T. Terakawa. 2013. Localization of pufferfish saxitoxin and tetrodotoxin binding protein (PSTBP) in the tissues of the pufferfish, *Takifugu pardalis*, analyzed by immunohistochemical staining. *Toxicon* 72:23-28.
- Yamashita, Y. M., Y. Nagaoka, K. Muramoto, Y. Cho, and K. Konoki. 2018. Pufferfish Saxitoxin and Tetrodotoxin Binding Protein (PSTBP) Analogues in the Blood Plasma of the Pufferfish *Arothron nigropunctatus*, *A. hispidus*, *A. manilensis*, and *Chelonodon patoca*. *Marine Drugs*, 16(7), 224.
- Yu, D., E. Kahen, C. L. Cubitt, J. McGuire, J. Krehling, J. Lee, and D. R. Reed. 2015. Identification of Synergistic, Clinically Achievable, Combination Therapies for Osteosarcoma. *Scientific Reports*, 5(1).
- Zhou, Z., X. Tang, H. Chen, and Y. Wang. 2017. Comparative studies of saxitoxin (STX) -induced cytotoxicity in Neuro-2a and RTG-2 cell lines: An explanation with respect to changes in ROS. *Chemosphere* 192: 66–74.

