

DAFTAR PUSTAKA

- Ahrens, W. dan Pigeot, I. 2014. *Handbook of Epidemiology*. Edisi 2. New York: Springer.
- Alberts, B., Johnson, A., Lewis, J., Raff, M., Roberts, K. dan Walter, P. 2015. *Molecular Biology of the Cell*. Edisi 6. Garland Science.
- Aubrey, B.J., Kelly, G.L., Janic, A., Herold, M.J. dan Strasser, A. 2018. How does p53 induce apoptosis and how does this relate to p53-mediated tumour suppression? *Cell Death and Differentiation*, vol. 25, no. 1, pp. 104–113.
- Batiha, G.E.-S., Magdy Beshbishy, A., Wasef, L., Elewa, Y.H.A., Abd El-Hack, M.E., Taha, A.E., Al-Sagheer, A.A., Devkota, H.P. dan Tufarelli, V. 2020. *Uncaria tomentosa* (Willd. ex Schult.) DC.: a review on chemical constituents and biological activities. *Applied Sciences*, vol. 10, no. 8, p. 2668.
- Bell Atlas 2020, *Minnesota Biodiversity Atlas: Uncaria nervosa* [Online] (Diakses di <https://oitvmwvm0022.msi.umn.edu/> pada 25 November 2020).
- Bi, Y., Min, M., Shen, W. dan Liu, Y. 2018. Genistein induced anticancer effects on pancreatic cancer cell lines involves mitochondrial apoptosis, G₀/G₁ cell cycle arrest and regulation of STAT3 signalling pathway. *Phytomedicine*, vol. 39, pp. 10–16.
- Böttcher, J.P., Bonavita, E., Chakravarty, P., Blees, H., Cabeza-Cabrerizo, M., Sammiceli, S., Rogers, N.C., Sahai, E., Zelenay, S. dan Reis e Sousa, C. 2018. NK cells stimulate recruitment of cDC1 into the tumor microenvironment promoting cancer immune control. *Cell*, vol. 172, no. 5, pp. 1022-1037.e14.
- Bribi, N. 2018. Pharmacological activity of alkaloids: a review. *Asian Journal of Botany*, vol. 1, no. 1, pp. 1–6.
- Brodowska, K.M. 2017. Natural flavonoids: classification, potential role, and application of flavonoid analogues. *European Journal of Biological Research*, vol. 7, no. 2, pp. 108–123.
- Chen, L., Zeng, Y. dan Zhou, S.-F. 2018. Role of Apoptosis in Cancer Resistance to Chemotherapy. Dalam: *Current Understanding of Apoptosis - Programmed Cell Death*. InTech.
- Dark, G.G. 2013. *Oncology at a Glance*. Oxford: John Wiley & Sons.

- David, A.V.A., Arulmoli, R. dan Parasuraman, S. 2016. Overviews of biological importance of quercetin: a bioactive flavonoid. *Pharmacognosy Reviews*, vol. 10, no. 20, pp. 84–89.
- Dila, K.A.S. 2012. Telaah kritis artikel review sistematik dan meta analisis. *Fakultas Kedokteran Universitas Udayana*.
- Dodo, Solihah, S.M. dan Yuzammi 2016. *Koleksi Kebun Raya Banua: Tumbuhan Berpotensi Obat*. Jakarta: LIPI Press.
- Dorland, W.A.N. 2012. *Kamus Saku Kedokteran Dorland*. Edisi 28. Mahode, A.A. (Ed.). Jakarta: EGC.
- Efferth, T. dan Oesch, F. 2019. Repurposing of plant alkaloids for cancer therapy: pharmacology and toxicology. *Seminars in Cancer Biology*.
- Erwin 2020. Review kandungan metabolit sekunder beberapa tumbuhan *Uncaria* yang terdapat di Kalimantan Timur. *Jurnal Atomik*, vol. 05, no. 1, pp. 18–24.
- Farisi, M.I. 2012. Pengembangan asesmen diri siswa (student self-assessment) sebagai model penilaian dan pengembangan karakter. *Kongres Ilmiah Nasional*, pp. 1–10.
- Febriani, A. dan Furqon, A. 2020. Metastasis Kanker Paru. *Jurnal Respirasi*, vol. 4, no. 3, p. 94.
- Fernando, J. dan Jones, R. 2015. The principles of cancer treatment by chemotherapy. *Surgery (Oxford)*, vol. 33, no. 3, pp. 131–135.
- Flores-Sanchez, I.J. dan Ramos-Valdivia, A.C. 2017. A review from patents inspired by two plant genera: *Uncaria* and *Hamelia*. *Phytochemistry Reviews*, vol. 16, no. 4, pp. 693–723.
- GBIF 2019, *Uncaria nervosa Elmer* [Online] (Diakses di <https://www.gbif.org/species/5338161> pada 10 Agustus 2020).
- Gonzalez, H., Hagerling, C. dan Werb, Z. 2018. Roles of the immune system in cancer: from tumor initiation to metastatic progression. *Genes & Development*, vol. 32, no. 19–20, pp. 1267–1284.
- Guan, X. 2015. Cancer metastases: challenges and opportunities. *Acta Pharmaceutica Sinica B*, vol. 5, no. 5, pp. 402–418.
- Halimatussakdiah dan Amna, U. 2016. Isolasi senyawa alkaloid indol dari ekstrak akar *Kopsia singaporensis* Ridl. (Apocynaceae). *Jurutera*, vol. 3, no. 1, pp. 32–37.
- Hanahan, D. dan Weinberg, R.A. 2011. Hallmarks of cancer: the next generation. *Cell*, vol. 144, no. 5, pp. 646–674.

- Hassanpour, S.H. dan Dehghani, M. 2017. Review of cancer from perspective of molecular. *Journal of Cancer Research and Practice*, vol. 4, no. 4, pp. 127–129.
- Hayati, H. dan Wanda, D. 2016. “Ketinggalan pelajaran”: pengalaman anak usia sekolah menjalani kemoterapi. *Jurnal Keperawatan Indonesia*, vol. 19, no. 1, pp. 8–15.
- Izza, A.Z., Falah, M. dan Susilawati, S. 2020. Studi literatur: problematika evaluasi pembelajaran dalam mencapai tujuan pendidikan di era merdeka belajar. *Konferensi Ilmiah Pendidikan 2020*, vol. 1, no. 1, pp. 10–15.
- Kementerian Kesehatan Republik Indonesia 2018. *Riset Kesehatan Dasar*.
- Kew Science 2020, *Plants of the World: Uncaria nervosa Elmer* [Online] (Diakses di <http://plantsoftheworldonline.org/> pada 25 November 2020).
- Kuczynski, E.A., Vermeulen, P.B., Pezzella, F., Kerbel, R.S. dan Reynolds, A.R. 2019. Vessel co-option in cancer. *Nature reviews Clinical oncology*, vol. 16, no. 8, pp. 469–493.
- Kumar, V., Cotran, R.S. dan Robbins, S.L. 2012. *Buku Ajar Patologi Robbins*. Edisi 7. Jakarta: EGC.
- Kurnianda, V., Ramadhan, M.R., Karina, S., Agustina, S., Ulfah, M., Octavina, C., Mardiah, A., Syahliza, F. dan Purnawan, S. 2018. An indole alkaloid produced by Indonesian’s marine sponge *Raspailia ramosa* as an inhibitory of the panc-1 cell adapted to nutrient starvation. *IOP Conference Series: Earth and Environmental Science*, vol. 216, no. 1, p. 012042.
- Lee, H., Baek, S., Lee, J., Kim, C., Ko, J.-H., Lee, S.-G., Chinnathambi, A., Alharbi, S., Yang, W., Um, J.-Y., Sethi, G. dan Ahn, K. 2017. Isorhynchophylline, a potent plant alkaloid, induces apoptotic and anti-metastatic effects in human hepatocellular carcinoma cells through the modulation of diverse cell signaling cascades. *International Journal of Molecular Sciences*, vol. 18, no. 5, p. 1095.
- Liang, J.-H., Wang, C., Huo, X.-K., Tian, X.-G., Zhao, W.-Y., Wang, X., Sun, C.-P. dan Ma, X.-C. 2020. The genus *Uncaria*: a review on phytochemical metabolites and biological aspects. *Fitoterapia*, vol. 147.
- Liu, B., Zhu, K., Chan, C., Zhang, L.-H., Mok, D.K.-W. dan Chen, S. 2017. Anticancer activities of terpenoid compounds isolated from the plant *centipeda minima* against nasopharyngeal carcinoma cells. *Experimental and Molecular Therapeutics*, vol. 77, no. 13.
- Liu, J.-S., Huo, C.-Y., Cao, H.-H., Fan, C.-L., Hu, J.-Y., Deng, L.-J., Lu, Z.-B., Yang, H.-Y., Yu, L.-Z., Mo, Z.-X. dan Yu, Z.-L. 2019. Aloperine induces apoptosis and G2/M cell cycle arrest in hepatocellular carcinoma cells through the PI3K/Akt signaling pathway. *Phytomedicine*, vol. 61.

- Ludwiczuk, A., Skalicka-Woźniak, K. dan Georgiev, M.I. 2017. Terpenoids. Dalam: *Pharmacognosy: Fundamentals, Applications and Strategy*. Boston: Academic Press. pp. 233–266.
- Lyman, G.H., Cassidy, J., Bisset, D. dan Spence, R.A.J. 2015. *Oxford American Handbook of Oncology*. Edisi 2. Oxford: Oxford University Press.
- Malik, S.K., Ahmed, M. dan Khan, F. 2018. Identification of novel anticancer terpenoids from *Prosopis juliflora* (Sw) DC (Leguminosae) pods. *Tropical Journal of Pharmaceutical Research*, vol. 17, no. 4, pp. 661–668.
- Martins, D. dan Nunez, C.V. 2015. Secondary metabolites from Rubiaceae species. *Molecules*, vol. 20, no. 7, pp. 13422–13495.
- Masturoh, I. dan Anggita, N. 2018. *Metodologi Penelitian Kesehatan*. Jakarta: Pusat Pendidikan Sumber Daya Manusia Kesehatan.
- Matsuura, K., Canfield, K., Feng, W. dan Kurokawa, M. 2016. Metabolic regulation of apoptosis in cancer. *International Review of Cell and Molecular Biology*, vol. 327, pp. 43–87.
- Maulina, S., Pratiwi, D.R. dan Erwin, E. 2019. Skrining fitokimia dan bioaktivitas ekstrak akar *Uncaria nervosa* Elmer (bajakah). *Jurnal Atomik*, vol. 4, no. 2, pp. 100–102.
- McGranahan, N., Rosenthal, R., Hiley, C.T., Rowan, A.J., Watkins, T.B.K., Wilson, G.A., Birnbak, N.J., Veeriah, S., Van Loo, P., Herrero, J., dan Swanton, C. 2017. Allele-specific HLA loss and immune escape in lung cancer evolution. *Cell*, vol. 171, no. 6, pp. 1259-1271.e11.
- Melfianora 2019, *Penulisan karya tulis ilmiah dengan studi literatur* [Online] (Diakses di <https://osf.io/gfe9w/> pada 10 Agustus 2020).
- Miller, K.D., Nogueira, L., Mariotto, A.B., Rowland, J.H., Yabroff, K.R., Alfano, C.M., Jemal, A., Kramer, J.L. dan Siegel, R.L. 2019. Cancer treatment and survivorship statistics, 2019. *CA: A Cancer Journal for Clinicians*, vol. 69, no. 5, pp. 363–385.
- Milluzzo, A., Tumminia, A., Vella, V., Gianì, F., Manzella, L., Frittitta, L., Belfiore, A., Vigneri, R. dan Sciacca, L. 2019. Short-term adverse effects of anticancer drugs in patients with type 2 diabetes. *Journal of Chemotherapy*, vol. 31, no. 3, pp. 150–159.
- Mirzaei, H.H., Jassbi, A.R., Pirhadi, S. dan Firuzi, O. 2020. Study of the mechanism of action, molecular docking, and dynamics of anticancer terpenoids from *Salvia lachnocalyx*. *Journal of Receptors and Signal Transduction*, vol. 40, no. 1, pp. 24–33.

- Murti, Y. dan Sharma, S. 2017. Flavonoid: a pharmacologically significant scaffold. *World Journal of Pharmacy and Pharmaceutical Sciences*, vol. 6, no. 5, pp. 488–504.
- Nafrialdi dan Gan, S. 2016. Antikanker. Dalam: *Farmakologi dan Terapi*. Jakarta: Badan Penerbit FKUI. pp. 737–762.
- Panche, A.N., Diwan, A.D. dan Chandra, S.R. 2016. Flavonoids: an overview. *Journal of Nutritional Science*, vol. 5, no. c47, pp. 1–15.
- Pérez-Soto, E., Estanislao-Gómez, C.C., Pérez-Ishiwara, D.G., Ramirez-Celis, C. dan del Consuelo Gómez-García, M. 2019. Cytotoxic Effect and Mechanisms from Some Plant-Derived Compounds in Breast Cancer. Dalam: *Cytotoxicity - Definition, Identification, and Cytotoxic Compounds*. London: IntechOpen.
- Pott, D.M., Osorio, S. dan Vallarino, J.G. 2019. From central to specialized metabolism: an overview of some secondary compounds derived from the primary metabolism for their role in conferring nutritional and organoleptic characteristics to fruit. *Frontiers in Plant Science*, vol. 10.
- Pratama, F.E. dan Nuwarda, R.F. 2018. Senyawa aktif antikanker dari bahan alam dan aktivitasnya. *Farmaka*, vol. 16, no. 1, pp. 149–158.
- Purnomo, W. dan Bramantoro, T. 2018. *Pengantar Metodologi Penelitian Bidang Kesehatan*. Surabaya: Airlangga University Press.
- Qin, N., Lu, X., Liu, Y., Qiao, Y., Qu, W., Feng, F. dan Sun, H. 2020. Recent research progress of *Uncaria* spp. based on alkaloids: phytochemistry, pharmacology and structural chemistry. *European Journal of Medicinal Chemistry*.
- Qiu, T., Wu, D., Yang, L.L., Ye, H., Wang, Q., Cao, Z. dan Tang, K. 2018. Exploring the mechanism of flavonoids through systematic bioinformatics analysis. *Frontiers in Pharmacology*, vol. 9, no. AUG, pp. 1–12.
- Raffa, D., Maggio, B., Raimondi, M.V., Plescia, F. dan Daidone, G. 2017. Recent discoveries of anticancer flavonoids. *European Journal of Medicinal Chemistry*, vol. 142, pp. 213–228.
- Ravipati, A.S., Reddy, N. dan Koyyalamudi, S.R. 2014. Biologically active compounds from the genus *Uncaria* (Rubiaceae). *Studies in Natural Products Chemistry*, vol. 43, pp. 381–408.
- Riggi, N., Aguet, M. dan Stamenkovic, I. 2018. Cancer metastasis: a reappraisal of its underlying mechanisms and their relevance to treatment. *Annual Review of Pathology: Mechanisms of Disease*, vol. 13, no. 1, pp. 117–140.

- Sampath, S., Subramani, S., Janardhanam, S., Subramani, P., Yuvaraj, A. dan Chellan, R. 2018. Bioactive compound 1,8-Cineole selectively induces G2/M arrest in A431 cells through the upregulation of the p53 signaling pathway and molecular docking studies. *Phytomedicine*, vol. 46, no. February, pp. 57–68.
- Sari, L.M. 2018. Apoptosis: mekanisme molekuler kematian sel. *Cakradonya Dent J*, vol. 10, no. 2, pp. 65–70.
- Saroya, A.S. 2011. *Herbalism, Phytochemistry and Ethnopharmacology*. New Hampshire: Science Publisher.
- Siegel, R.L., Miller, K.D. dan Jemal, A. 2018. Cancer statistics, 2018. *CA: A Cancer Journal for Clinicians*, vol. 68, no. 1, pp. 7–30.
- Sindu Sakti, A., Saputri, F.C. dan Munim, A. 2019. Microscopic characters, phytochemical screening focus on alkaloid and total phenolic content of *Uncaria gambir* Roxb. and *Uncaria sclerophylla* Roxb. leaves. *Pharmacognosy Journal*, vol. 11, no. 1, pp. 119–123.
- Singh, B. dan Sharma, R.A. 2015. Plant terpenes: defense responses, phylogenetic analysis, regulation and clinical applications. *3 Biotech*, vol. 5, no. 2, pp. 129–151.
- Singh, R., Letai, A. dan Sarosiek, K. 2020. Regulation of apoptosis in health and disease: the balancing act of BCL-2 family proteins. *Nat Rev Mol Cell Biol.*, vol. 20, no. 3, pp. 175–193.
- Siyoto, S. dan Sodik, M.A. 2015. *Dasar Metodologi Penelitian*. Yogyakarta: Literasi Media Publishing.
- Sjamsuhidajat, R. dan Jong, W. De 2017. *Buku Ajar Ilmu Bedah*. Edisi 3. Jakarta: EGC.
- Song, W.Y., Yang, Q.L., Zhao, W.L., Jin, H.X., Yao, G.D., Peng, Z.F., Shi, S.L., Yang, H.Y., Zhang, X.Y. dan Sun, Y.P. 2016. The effects of anticancer drugs TSA and GSK on spermatogenesis in male mice. *American Journal of Translational Research*, vol. 8, no. 1, pp. 221–229.
- Starobova, H. dan Vetter, I. 2017. Pathophysiology of chemotherapy-induced peripheral neuropathy. *Frontiers in Molecular Neuroscience*, vol. 10, no. May, pp. 1–21.
- Sülsen, V.P., Lizarraga, E., Mamadalieva, N.Z. dan Lago, J.H.G. 2017. Potential of terpenoids and flavonoids from Asteraceae as anti-inflammatory, antitumor, and antiparasitic agents. *Evidence-Based Complementary and Alternative Medicine*, vol. 2017, pp. 1–2.

- Teleanu, R.I., Chircov, C., Grumezescu, A.M. dan Teleanu, D.M. 2019. Tumor angiogenesis and anti-angiogenic strategies for cancer treatment. *Journal of Clinical Medicine*, vol. 9, no. 1, p. 84.
- Thakur, M. dan Rao, G.V. 2016. Tumour invasion and metastasis: a review. *Saudi Journal of Pathology and Microbiology*, vol. Vol-1, no. Iss-2 (Jul-Sep, 2016), pp. 65–72.
- Thawabteh, A., Juma, S., Bader, M., Karaman, D., Scrano, L., Bufo, S.A. dan Karaman, R. 2019. The biological activity of natural alkaloids against herbivores, cancerous cells and pathogens. *Toxins*, vol. 11, no. 11, p. 656.
- Thirumurugan, D., Cholarajan, A., Raja, S.S.S. dan Vijayakumar, R. 2018. An Introductory Chapter: Secondary Metabolites. Dalam: *Secondary Metabolites - Sources and Applications*. InTech.
- Veeramuthu, D., Raja, W.R.T., Al-Dhabi, N.A. dan Savarimuthu, I. 2017. Flavonoids: Anticancer Properties. Dalam: *Flavonoids - From Biosynthesis to Human Health*. InTech. pp. 287–303.
- Waks, A.G. dan Winer, E.P. 2019. Breast cancer treatment: a review. *JAMA*, vol. 321, no. 3, pp. 288–300.
- Wang, T., Li, Q. dan Bi, K. 2018. Bioactive flavonoids in medicinal plants: Structure, activity and biological fate. *Asian Journal of Pharmaceutical Sciences*, vol. 13, no. 1, pp. 12–23.
- Wei, X.Q., Ma, Y., Chen, Y., Liu, X., Zhao, M. dan Zhou, L.W. 2018. Laparoscopic surgery for early cervical squamous cell carcinoma and its effect on the micrometastasis of cancer cells. *Medicine (United States)*, vol. 97, no. 34.
- Welch, D.R. dan Hurst, D.R. 2019. Defining the hallmarks of metastasis. *Cancer Research*, vol. 79, no. 12, pp. 3011–3027.
- WFO 2020, *Uncaria Schreb.* [Online] (Diakses di <http://worldfloraonline.org/> pada 25 November 2020).
- WHO 2020, *Global Health Observatory (GHO): NCD Mortality and Morbidity* [Online] (Diakses di https://www.who.int/gho/ncd/mortality_morbidity/en/ pada 11 Agustus 2020).
- Wink, M. 2010. *Functions and Biotechnology of Plant Secondary Metabolites*. Edisi 2. Oxford: Blackwell Publishing.
- Wong, R.S.Y. 2011. Apoptosis in cancer: from pathogenesis to treatment. *Journal of Experimental dan Clinical Cancer Research*, vol. 30, no. 87, pp. 1–14.

Yang, W., Ip, S.-P., Liu, L., Xian, Y.-F. dan Lin, Z.-X. 2020. *Uncaria rhynchophylla* and its major constituents on central nervous system: a review on their pharmacological actions. *Current Vascular Pharmacology*, vol. 18, no. 4, pp. 346–357.

Zhang, Q., Zhao, J.J., Xu, J., Feng, F. dan Qu, W. 2015. Medicinal uses, phytochemistry and pharmacology of the genus *Uncaria*. *Journal of Ethnopharmacology*, vol. 173, pp. 48–80.