

DAFTAR PUSTAKA

- Ali, A., and Ali, A., 2024, Identification of Naturally Occurring Flavonoids as Anticancer Agents: *In Silico* Studies, *J. Indian Chem. Soc.* 101(9), 1-18.
- Anonim, 2024^a, Cancer Today, *International Agency for Research on Cancer*. <http://gco.iarc.fr/> - Diakses September 2024.
- Anonim, 2024^b, Strategi Indonesia dalam Upaya Melawan Kanker, *Rencana Kanker Nasional 2024-2034*, www.kemkes.go.id/ -Diakses Desember 2024.
- Anwar, C., Prasetyo, Y.D., Matsjeh, S., Haryadi, W., Sholikhah, E.N., and Nendrowati, 2018, Synthesis of Chalcone Derivatives and Their in vitro Anticancer Test against Breast (T47D) and Colon (WiDr) Cancer Cell Line, *Indones. J. Chem.*, 18(1), 102-107.
- Amin, K.M., Eissa, A.A.M., Seri, S.M.A., Awadallah, F.M., and Hassan, G.S., 2013, Synthesis and Biological Evaluation of Novel Coumarin-Pyrazoline Hybrids Endowed with Phenylsulfonyl Moiety as Antitumor Agents, *Eur. J. Med. Chem.*, 60, 187-198.
- Amin, S., Supriatna, G.T., Ardian, M.I., dan Abdurrahman, M.I., 2024, Potensi Senyawa Turunan Terpenoid sebagai Agen Anti-Kanker. *Jurnal Imu Medis Indonesia*, 4(1), 53-61.
- Balachandran, R.S., and Kipreos, E.T., 2017, Addressing a Weakness of Anticancer Therapy with Mitosis Inhibitors: Mitotic Slippage, *Mol. Cell. Oncol.*, 4(2), 1-6.
- Balatif, R., dan Sukma, A.A.M., 2021, Memahami Kaitan Gaya Hidup dengan Kanker: sebagai Langkah Awal Pencegahan Kanker, *Sci. Med. J.*, 3(1), 40-50.
- Basanagouda, M., Jambagi, V.B., Barigidad, N.N., Laxmeshwar, S.S., Devaru, V., Narayanachar, 2014. Synthesis, structure-activity relationship of iodinated-4-aryloxymethyl-coumarins as potential anti-cancer and anti-mycobacterial agents. *Eur. J. Med. Chem.* 74, 225–233.
- Belsare, D.P., Pal, S.C., Kazi, A.A., Kankate, R.S., and Vanjari, S.S., 2010, Evaluation of Antioxidant Activity of Chalcones and Flavonoids, *Int. J. Chemtech Res.*, 2(2), 1080–1089.
- Chiocca, E.A., and Rabkin, S.D., 2014, Oncolytic Viruses and Their Application to Cancer Immunotherapy, *Cancer Immunol. Res.*, 2(4), 295-300.
- Damasuri, A.R., Sholikhah, E.N., and Mustofa, 2020, Cytotoxicity of ((E)-1-(4-aminophenyl)-3-phenylprop-2-en-1-one)) on HeLa cell line, *IJPTHER*, 1(2), 54-59.
- Deka, D., Das, S.R.C., Da, T., Chakraborty, P., Kar, K., and Chowdhury, S., 2025, Chalcone Derivatives: *In Silico* Design, Molecular Docking Study and Anticancer Activity on MCF-7 Cells, *In Silico Research in Biomedicine*, 1, 1-12.

- Emami, S., and Dadashpour, S., 2015. Current Developments in Coumarin-Based Anti-Cancer Agents in Medicinal Chemistry. *Eur. J. Med. Chem.*, 102, 611-630.
- Ganot, N., Meker, S., Reytman, L., Tzuber, A., Tshuva, E.Y., 2013, Anticancer Metal Complexes: Synthesis and Cytotoxicity Evaluation by the MTT Assay, *J. Vis. Exp.*, 81, e50767.
- Han, B., Zheng, R., Zeng, H., Wang, S., Sun, K., Chen, R., Li, L., Wei, W., He, J., 2024, Cancer incidence and mortality in China, 2022. *J. Natl. Cancer Cent.*, 4(1), 47-53.
- Hu, C.M., Luo, Y.X., Wang, W.J., Li, J.P., Li, M.Y., Zhang, Y.F., Xiao, D., Lu, L., Xiong, Z., Feng, N., and Li, C., 2022, Synthesis and Evaluation of Coumarin-Chalcone Derivatives as α -Glucosidase Inhibitors, *Front. Chem.*, 10, 1-8.
- Huiskes, M., Kong, W., Oud, M., Crama, K., Rasch, C., Breedveld, S., Henjimen, B., and Astreinidou, E., 2024, Validation of Fully Automated Robust Multicriterial Treatment Planning for Head and Neck Cancer IMPT, *Int. J. Radiat. Oncol. Biol. Phys.*, 119(3), 968-977.
- Jayapal, M.R., Prasad, K.S., and Sreedhar, N.Y., 2010, Synthesis and Characterization of 4-Hydroxychalcones by Aldol Condensation Using $\text{SOCl}_2/\text{EtOH}$. *Int. J. Curr. Pharm. Res.*, 4(2), 60-62.
- Johnson, H.M., Irish, W., Vohra, N.A., and Wong, J.H., 2021, Refining Breast Cancer Prognosis by Incorporating Age at Diagnosis into Clinical Prognostic Staging: Introduction of Novel Online Calculator, *Breast Cancer Res. Treat.*, 187(3), 805-814.
- Kamble, R.R., Sathe, B.S., Jadhav, V.M., and Kadam, V.J., 2011, Synthesis and Biological Evaluation of Some New Chalcones Containing 2,4-Thiazolidinedione, *J. Chem. Pharm. Res.*, 3(3), 404-410.
- Kumar, S., Shukla, M.K., Sharma, A.K., Jayaprakash, G.K., Tonk, R.K., Chellappan, D.K., Singh, S.K., Dua, K., Ahmed, F., Bhattacharyya, S., and Kumar, D., 2023, Metal-based Nanomaterials and Nanocomposites as Promising Frontier in Cancer Chemotherapy, *Med. Comm.*, 4, 1-26.
- Kurt, B.Z., Kandas, N.O., Dag, A., Sonmez, F., and Kucukislamoglu, M., 2020, Synthesis and Biological Evaluation of Novel Coumarin-Chalcone Derivatives Containing Urea Moiety as Potential Anticancer Agents, *Arab. J. Chem.*, 13, 1120-1129.
- Li, J., Feng, J., Li, M., Wang, Q., Su, Y., and Jia, Z., 2013, Studies of Manufacturing Controlled-Release Graphene Acid and Catalyzing Synthesis of Chalcone with Claisen Schmidt Condensation Reaction, *Solid State Sci.*, 21, 1-5.
- McCauley, J., Zivanovic, A., and Skropeta, D., 2013, Bioassays for Anticancer Activities, *Methods Mol. Biol.*, 1055, 191-205.

- Machana, S., Weerapreeyakul, N., Barusrux, S., Nonpunya, A., Sripanidkulchai, B., and Thitimetharoch, T., 2011, Cytotoxic and apoptotic effects of six herbal plants against the human hepatocarcinoma (HepG2) cell line, *Chin. Med.*, 6(39), 1-8.
- Mai, C.W., Yaeghoobi, M., Abd-Rahman, N., Kang, Y.B., Pichika, M.R., 2014. Chalcones with electron-withdrawing and electron-donating substituents: anticancer activity against TRAIL resistant cancer cells, structure-activity relationship analysis and regulation of apoptotic proteins. *Eur. J. Med. Chem.* 77, 378–387.
- Millan-Casarrubias, E.J, García-Tejeda, Y.V., González-De laRosa, C.H., Ruiz-Mazón, L., Hernández-Rodríguez, Y.M., and Cigarroa-Mayorga, O.E., 2025, Molecular Docking and Pharmacological *In Silico* Evaluation of Camptothecin and Related Ligands as Promising HER2-Targeted Therapies for Breast Cancer, *Curr. Issues Mol. Biol.* 193(47), 1-20.
- Mosmann, T., 1983, Rapid Colorimetric Assay for Cellular Growth and Survival: Application to Proliferation and Cytotoxicity Assays, *J. Immunol. Methods.*, 65, 55-63.
- Nivedya, T., Roy, N., Paira, P., and Chakrabarty, R., 2025, Synthesis, Characterization and Biological Evaluation of Novel Chalcone Derivatives Bearing Different Heterocyclic Moieties, *RSC Advances*, 15(15), 11617–11638.
- Patel, A., 2020, Benign vs Malignant Tumors, *JAMA Oncol.*, 6(9), 1488.
- Patel, M., Pandey, N., Timaniya, J., Parikh, P., Chauhan, A., Jain, N., and Patel, K., 2021, Coumarin–Carbazole Based Functionalized Pyrazolines: Synthesis, Characterization, Anticancer Investigation and Molecular Docking, *RSC Adv.*, 11, 27627-276444.
- Patel, S., Challagundla, N., Rajput, R.A., and Mishra, S., 2022, Design, Synthesis, Characterization and Anticancer Actipatevity Evaluation of Deoxycholic Acid-Chalcone Conjugates, *Bioorg. Chem.*, 127, 1-8.
- Patil, C.B., Mahajan, S.K., and Katti, S.A., 2009, Chalcone: A Versatile Molecule, *J. Pharm. Sci. Res.*, 1(3), 11-12.
- Perez-Cruz, F., Vazquez-Rodriguez, S., Matos, M.J., Herrera-Morales, A., Villamena, F.A., Das, A., Gopalakrishnan, B., Olea-Azar, C., Santana, L., Uriarte, E., 2013. Synthesis and electrochemical and biological studies of novel coumarin-chalcone hybrid compounds. *J. Med. Chem.* 56, 6136–6145.
- Pingaew, R., Saekee, A., Mandi, P., Nantasenamat, C., Prachayasittikul, S., Ruchirawat, S., Prachayasittikul, V., 2014. Synthesis, biological evaluation, and molecular docking of novel chalconecoumarin hybrids as anticancer and antimalarial agents. *Eur. J. Med. Chem.* 85, 65–76.
- Rahama, M.S., Khairuddean, M., Ismail, N.Z., Al-Amin, M., and Salhimi, S.M.,

- 2025, Synthesis, Characterization and In Silico Studies of Coumarin-Chalcone Derivatives and Their Cytotoxicity Activity Against Breast Cancer Cells, *J. Mol. Struct.*, 1322(2), 1-16.
- Rahman, M.A., 2011, Chalcone: A Valuable Insight into the Recent Advances and Potential Pharmacological Activities, *Chem. Sci. J.*, 29, 1-16.
- Romero, Y., Tittenburn, Z., Trapani, D., Given, L., Hohman, K., and Cira, M.K., 2025, The Changing Global Landscape of National Cancer Control Plans, *Lancet Oncol.*, 26 (1), 46-54.
- Samota, M.K., Yadav, D.K., Koli, P., Kaur, M., Kaur, M., Rani, H., Selvan, S.S., Mahala, P., Tripathi, K., and Kumar, S., 2024, Exploring Natural Chalcones: Innovative Extraction Techniques, Bioactivities, and Health Potential, *Sustain. Food Technol.*, 2(5), 1456-1468.
- Shah, S., Narang, R., Singh, V.J., Pilli, G., and Nayak, S.K., 2023, A Review on Anticancer Profile of Flavonoids: Sources, Chemistry, Mechanisms, Structure-activity Relationship and Anticancer Activity, *Curr. Drug Res. Rev.*, 15(2), 122–148.
- Shao, Q., Zhang, W., Lang, H., Wang, Y., Tang, H., Dua, J., Liang, Y., Jing, P., Gu, Z., Yan, X., and Shang, L., 2025, Development and Application of Patient-Reported Experience Measures for Cancer Patients: a Scoping Review, *Int. J. Nurs. Stud. Adv.*, 8, 1-13.
- Sobiesiak, M., Fatyga, N., Brzozowski, A., Sikora, A., Kupcewicz, B., and Maj, M., 2025, Chromanone derivatives: Evaluating Selective Anticancer Activity Across Human Cell Lines, *Eur. J. Med. Chem.*, 295, 1-8.
- Tanamatayarat, P., Limtrakul, P.N., Chunsakaow, S., and Duangrat, C., 2003, Screening of Some Rubiaceae Plants for Cytotoxic Activity Against Cervix Carcinoma (KB-3-1) Cell Line, *Thai J. Pharm. Sci.*, 3(4), 167-172.
- Trayes, K.P., and Cokenakes, S.E.H., 2021, Breast Cancer Treatment, *Am. Fam. Physician*, 104(2), 171-178.
- Usman, H., Jalaluddin, M.N., Harlim, T., Hakim, E.H., Achmad, S.A., Syah, Y.M., Latip, J., dan Said, M., 2006, Senyawa Kalkon Baru Bersifat Anti-Bakteri dari Tumbuhan *Cryptocarya Costata* (Lauraceae), *Berkala MIPA*, 16(1), 37-40.
- Vazquez-Rodriguez, S., Lopez, R.L., Matos, M.J., Armesto-Quintas, G., Serra, S., Uriarte, E., Santana, L., Borges, F., Crego, A.M., Santos, Y., 2015. Design, synthesis and antibacterial study of new potent and selective coumarin-chalcone derivatives for the treatment of tenacibaculosis. *Bioorg. Med. Chem.*, 23, 7045–7052.
- Wang, E.J., Chen, J.S., Jain, S., Morshed, R.A., Haddad, A.F., Gill, S., Beniwal, A.S., and Aghi, M.K., 2021, Immunotherapy Resistance in Glioblastoma, *Front. Genet.*, 12, 1-22.
- Wang, M., Wang, Y., and Zhang, H., 2025, Dietary Polyphenols for Tumor Therapy:

Bioactivities, Nano-therapeutic Systems and Delivery Strategies, *Food Funct.*, 16, 853-866.

Wang, X., Gong, Z., Wang, T., Law, J., Chen, X., Wanggou, S., Wang, J., Ying, B., Fransisco, M., Dong, W., Xiong, Y., Fan., J.J., MacLeod, G., Angers, S., Li, Z., Dirks, P.B., Liu, X., Huang, X., and Sun, Y., 2023, Mechanical Nanosurgery of Chemoresistant Glioblastoma using Magnetically Controlled Carbon Nanotubes, *Sci. Adv.*, 9, 1-14.

Weerapreeyakul, N., Nonpunya, A., Barusrux, S., Thitumetharoch, T., and Sripanidkulchai, B., 2012, Evaluation of the Anticancer Potential of Six Herbs Against a Hepatoma Cell Line, *Chin. Med.*, 7(15), 1-7.

Wei, H., Ruan, J.L., Zhang, X.J., 2016. Coumarin-Chalcone Hybrids: Promising Agents with Diverse Pharmacological Properties. *Rsc Adv.*, 6, 10846–10860.

Zhang, C., Xu, C., Gao, X., and Yao, Q., 2022, Platinum-Based Drugs for Cancer Therapy and Anti-Tumor Strategies, *Theranostics*, 12(5), 2115-2132.