

DAFTAR PUSTAKA

- Amelinda, Nathania, Harijono Kariosentono, Mardiana, Budi Eko Prasetyorini, Fatimah Fitriani, and Didik H. Utomo. 2023. "Analisis Silico Pada Senyawa Aktif *Prunus Dulcis* Sebagai Terapi Dermatitis Atopik." *Biomedika* 15(1):1–12. doi: 10.23917/biomedika.v15i1.1743.
- Badan Pusat Statistik Provinsi Sumatera Selatan. 2023. *Provinsi Sumatera Selatan Dalam Angka 2023*. Palembang: BPS Provinsi Sumatera Selatan.
- Bezerra, Frank Silva, Manuella Lanzetti, Renata Tiscoski Nesi, Akinori Cardozo Nagato, Cyntia Pecli e Silva, Emanuel Kennedy-Feitosa, Adriana Correa Melo, Isabella Cattani-Cavaliere, Luís Cristóvão Porto, and Samuel Santos Valenca. 2023. "Oxidative Stress and Inflammation in Acute and Chronic Lung Injuries." *Antioxidants* 12(3):548. doi: 10.3390/antiox12030548.
- Bonnesen, Barbara, Jens-Ulrik S. Jensen, Alexander G. Mathioudakis, Alexandru Corlateanu, and Pradeesh Sivapalan. 2023. "Promising Treatment Biomarkers in Asthma." *Frontiers in Drug Safety and Regulation* 3. doi: 10.3389/fdsfr.2023.1291471.
- Correia, Ana Salomé, Fátima Gärtner, and Nuno Vale. 2021. "Drug Combination and Repurposing for Cancer Therapy: The Example of Breast Cancer." *Heliyon* 7(1):e05948. doi: 10.1016/j.heliyon.2021.e05948.
- Daina, Antoine, Olivier Michielin, and Vincent Zoete. 2019. "SwissTargetPrediction: Updated Data and New Features for Efficient Prediction of Protein Targets of Small Molecules." *Nucleic Acids Research* 47(W1):W357–3664. doi: 10.1093/nar/gkz382.
- Dewi, Ratna Sari, Anni Anggraeni, Husein H. Bahti, M. Yusuf, A. Hardianto, and Abdul Mutholib. 2022. "Simulasi Dinamika Molekuler Ligan Disekunderbutil Ditiyofosfat (DSBBDTP) Untuk Ekstraksi Logam Tanah Jarang." *SainsMath: Jurnal MIPA Sains Terapan* 20(3):1–9.
- Dharmayanti, Ika, Dwi Hapsari, and Khadijah Azhar. 2015. "Asma Pada Anak Indonesia: Penyebab Dan Pencetus." *Kesmas: National Public Health Journal* 9(4):320. doi: 10.21109/kesmas.v9i4.738.
- Druzhilovskiy, Dmitry S., Anastasia V Rudik, Dmitry A. Filimonov, Narahari S. Garikapati, and Vladimir V Poroikov. 2018. "Way2Drug Platform Ligand-Based Approach To Drug Repurposing." *Abstracts of Papers of the American Chemical Society* 256(16):2012.
- Elkomy, Mohammed H., Shahira F. El Menshawe, Rasha M. Kharshoum, Amany M. Abdeltwab, Raghda R. S. Hussein, Doaa S. Hamad, Izzeddin Alsalahat, and Heba M. Aboud. 2022. "Innovative Pulmonary Targeting of Terbutaline Sulfate-Laded Novasomes for Non-Invasive Tackling of Asthma: Statistical Optimization and Comparative in Vitro/in Vivo Evaluation." *Drug Delivery* 29(1):2058–71. doi: 10.1080/10717544.2022.2092236.

- Fan, Zeru, Tao Liu, and Wei Na. 2023. "Association of Nitric Oxide Synthase Gene Polymorphism with Asthma: A Systematic Review and Meta-analysis." *The Clinical Respiratory Journal* 17(6):516–26. doi: 10.1111/crj.13617.
- Fath, Dwi Hanif Muluqul, Muhammad Artabah Muchlisin, and Ahmad Shobrun Jamil. 2024. "Analisis Network Pharmacology Senyawa Metabolit Sekunder Tanaman Lengkuas (*Alpinia Galanga*) Pada Penyakit Kanker." *Journal of Islamic Pharmacy* 9(1):43–49. doi: 10.18860/jip.v9i1.27094.
- Ferguson, Jennifer E., Shiven S. Patel, and Richard F. Lockey. 2017. "Acute Asthma, Prognosis, and Treatment." *Journal of Allergy and Clinical Immunology* 139(2):438–47. doi: 10.1016/j.jaci.2016.06.054.
- Firdausi, Novandina Izzatillah. 2020. "Analisis Struktur Kovarians Indikator Kesehatan pada Lansia yang Tinggal di Rumah Berfokus pada Persepsi Kesehatan Subyektif." *Kaos GL Dergisi* 8(75):147–54.
- Frimayanti, Neni, Anita Lukman, and Livia Nathania. 2021. "Studi Molecular Docking Senyawa 1,5-Benzothiazepine Sebagai Inhibitor Dengue DEN-2 NS2B/NS3 Serine Protease." *Chempublish Journal* 6(1):54–62. doi: 10.22437/chp.v6i1.12980.
- Global Asthma Network. 2022. *The Global Asthma Report 2022*. Auckland, New Zealand: Global Asthma Network.
- Ha, Thi-Kim-Quy, Nguyen-Huan Pham-Khanh, and Thanh-Khiet Nguyen. 2024. "Molecular Docking Screening, Dynamics Simulations, ADMET, and Semi-Synthesis Prediction of Flavones and Flavonols from the COCONUT Database as Potent Bifunctional Neuraminidase Inhibitors." *Pharmacia* 71:1–10. doi: 10.3897/pharmacia.71.e114967.
- Herdini, Herdini. 2023. "Studi In Silico: Senyawa Aktif Akar Senggugu (*Clerodendrum Serratum*) Terhadap Penghambatan Reseptor Human Chitotriosidase-1 (HCHIT1) Sebagai Antiasma." *Sainstech: Jurnal Penelitian Dan Pengkajian Sains Dan Teknologi* 33(2):91–107. doi: 10.37277/stch.v33i2.1717.
- Irsal, Riyan A. Putera, Gusnia Meilin Gholam, Maheswari Alfira Dwicesaria, Tiyara F. Mansyah, and Fernanda Chairunisa. 2024. "Computational Exploration of Palmitoyl-Protein Thioesterase 1 Inhibition by *Juniperus Phoenicea* L. for Anti-Dementia Treatment." *Journal of Taibah University Medical Sciences* 19(6):1165–80. doi: 10.1016/j.jtumed.2024.12.005.
- Kementerian Kesehatan Republik Indonesia. 2021. *Profil Kesehatan Indonesia tahun 2020*. Jakarta: Kementerian Kesehatan RI.
- Khoirunnisa, Azka, Ahmad Shobrun Jamil, M. Artabah, Muchlisin Program, Studi Farmasi, Ilmu Kesehatan, and Universitas Muhammadiyah Malang. 2024. "Analisis Network Pharmacology Senyawa Metabolit Sekunder Tanaman Ciplukan (*Physalis Angulata* L.) Pada Penyakit Kanker Paru-Paru." *Majalah*

Farmaseutik 20(2):282–91. doi: 10.22146/farmaseutik.v20i2.96275.

- Lei, Xiaoli, Lina Lv, Yongsheng Ma, Chenda Zhang, Li Li, and Yanqin Huang. 2025. “Investigation of Potential Targets for Bupleuri Radix in the Treatment of Subacute Thyroiditis” edited by P. Grzmil. *International Journal of Endocrinology* 2025(1). doi: 10.1155/ije/7460422.
- Liu, Shaoyu, Mingming Xu, Zhuofan Yang, Yangzi Li, Depei Wu, and Xiaowen Tang. 2024. “Network Pharmacology-Based Investigation and Experimental Validation of the Mechanism of Metformin in the Treatment of Acute Myeloid Leukemia.” *European Journal of Medical Research* 29(1):475. doi: 10.1186/s40001-024-02022-z.
- Lumbantobing, Valentina B. M. 2017. “Efektivitas Terapi Nebulizer Dengan Ipratropium Dan Fenoterol Terhadap Saturasi Oksigen.” *Jurnal Keperawatan BSI* 5(1):59–64.
- Maia, Eduardo Habib Bechelane, Leticia Cristina Assis, Tiago Alves de Oliveira, Alisson Marques da Silva, and Alex Gutterres Taranto. 2020. “Structure-Based Virtual Screening: From Classical to Artificial Intelligence.” *Frontiers in Chemistry* 8(April). doi: 10.3389/fchem.2020.00343.
- Marques, Lara, and Nuno Vale. 2022. “Salbutamol in the Management of Asthma: A Review.” *International Journal of Molecular Sciences* 23(22):1–19. doi: 10.3390/ijms232214207.
- Marques, Lara, and Nuno Vale. 2023. “Unraveling the Impact of Salbutamol Polytherapy: Clinically Relevant Drug Interactions.” *Future Pharmacology* 3(1):296–316. doi: 10.3390/futurepharmacol3010019.
- Millan-Casarrubias, Elmer Joel, Yunia Verónica García-Tejeda, Claudia Haydée González-De la Rosa, Lucero Ruiz-Mazón, Yazmín Mariela Hernández-Rodríguez, and Oscar Eduardo Cigarroa-Mayorga. 2025. “Molecular Docking and Pharmacological In Silico Evaluation of Camptothecin and Related Ligands as Promising HER2-Targeted Therapies for Breast Cancer.” *Current Issues in Molecular Biology* 47(3):193. doi: 10.3390/cimb47030193.
- Mohanty, Madhuchhanda, and Priti S. Mohanty. 2023. “Molecular Docking in Organic, Inorganic, and Hybrid Systems: A Tutorial Review.” *Monatshefte Für Chemie - Chemical Monthly* 154(7):683–707. doi: 10.1007/s00706-023-03076-1.
- Nugraha, Gerry, and Enade Perdana Istyastono. 2020. “Pembuatan Protokol Penapisan Virtual Berbasis Stuktur (Pvbs) Untuk Identifikasi Ligan Inhibitor Reseptor Platelet-Activating Factor (PAF-r) Sebagai Target Terapeutik Asma Menggunakan YASARA.” *Jurnal Riset Kimia* 11(1):35–42. doi: 10.25077/jrk.v11i1.346.
- Nugraha, Gerry, Harno Dwi Pranowo, Mudasir Mudasir, and Enade Perdana Istyastono. 2022. “Virtual Target Construction for Discovery of Human

- Histamine H4 Receptor Ligands Employing a Structure-Based Virtual Screening Approach.” *International Journal of Applied Pharmaceutics* 14(4):213–18. doi: 10.22159/ijap.2022v14i4.44067.
- Nurfadhila, Lina, Diah Muldianah, Diany Aprillia Nurdimayanthi, Dinda Shafira Rahmawati, Hajar Hartati, and Hana Fadhilah. 2023. “Review Artikel: Pemanfaatan Kimia Komputasi Dengan Berbagai Metode Dalam Menentukan Desain Senyawa Baru.” *Journal of Pharmaceutical and Sciences* 6(2):555–66. doi: 10.36490/journal-jps.com.v6i2.42.
- Ogoshi, Takaaki, K. Yatera, Hiroshi Mukae, and Masato Tsutsui. 2024. “Role of Nitric Oxide Synthases in Respiratory Health and Disease: Insights from Triple Nitric Oxide Synthases Knockout Mice.” *International Journal of Molecular Sciences* 25.
- Oqviani, Riri Nur, Elisabeth Kasih, and Yufita Ratnasari Wilianto. 2023. “Kajian Pustaka Efektivitas Dan Efek Samping Terapi Kombinasi Budesonide - Formoterol Fumarate Pada Pasien Asma.” *Jurnal Farmasi Sains Dan Terapan* 10(1):1–13. doi: 10.33508/jfst.v10i1.4111.
- Paulo, Elisio, and Dorosario Ferreira. 2020. “Evaluasi Ketepatan Dosis Obat Penyakit Asma Pada Pasien Rawat Inap Di Rumah Sakit Umum Daerah Ungaran Kabupaten Semarang Periode 2019.” *Ungaran Kabupaten Semarang Periode 2019 Program Studi S1 Farmasi Universitas Ngudi Waluyo*.
- Safran, Marilyn, Naomi Rosen, Michal Twik, Ruth BarShir, Tsippi Iny Stein, Dvir Dahary, Simon Fishilevich, and Doron Lancet. 2022. “The GeneCards Suite.” *Practical Guide to Life Science Databases* 27–56. doi: 10.1007/978-981-16-5812-9_2.
- Sailah, Illah, Trina E. Tallei, Linda Safitri, Yulianida Tamala, Ernie Halimatushadyah, Dewi Ekatanti, Nur B. Maulydia, and Ismail Celik. 2024. “A Network Pharmacology Approach to Elucidate the Anti-Inflammatory and Antioxidant Effects of Bitter Leaf (*Vernonia Amygdalina* Del.).” *Narra J* 4(3):e1016. doi: 10.52225/narra.v4i3.1016.
- Setiawan, Hartanto, and Mohammad Isa Irawan. 2017. “Kajian Pendekatan Penempatan Ligan Pada Protein Menggunakan Algoritma Genetika.” *Jurnal Sains Dan Seni ITS* 6(2):2–6. doi: 10.12962/j23373520.v6i2.25468.
- Singh, Gajendra, Gyan Singh, and Jitender K. Malik. 2022. “Design and Development of Terbutaline Sulphate Fast Mouth Dissolving Tablet.” *South Asian Research Journal of Pharmaceutical Sciences* 4(5):96–104. doi: 10.36346/sarjps.2022.v04i05.002.
- Siregar, Khalish Arsy Al Khairy, Paula Mariana Kustiawan, Anissa Nofita Sari, and Feri Eko Hermanto. 2024. “Exploring Therapeutic Potential of Nutraceutical Compounds from Propolis on MAPK1 Protein Using Bioinformatics Approaches as Anti-Coronavirus Disease 2019 (COVID-19)” edited by E. Widodo, T. C. Loh, H. Louton, A. R. Alimon, A. Khatib, D. Le

- Feuvre, M. Muchlas, A. T. Satria, F.E. Hermanto, and F. Andri. *BIO Web of Conferences* 88:00007. doi: 10.1051/bioconf/20248800007.
- Siyah, Pinar. 2024. “Advanced Computational Pipeline for FAK Inhibitor Discovery: Combining Multiple Docking Methods with MD and QSAR for Cancer Therapy.” *Computation* 12(11):222. doi: 10.3390/computation12110222.
- Śliwa, Paweł, Magdalena Dziurzyńska, Rafał Kurczab, and Katarzyna Kucwaj-Brysz. 2024. “The Pivotal Distinction between Antagonists’ and Agonists’ Binding into Dopamine D4 Receptor—MD and FMO/PIEDA Studies.” *International Journal of Molecular Sciences* 25(2):746. doi: 10.3390/ijms25020746.
- Tandon, Sonakshi, Anna Balaji, and Shaheen Sultana. 2023. “Molecular Docking : A Decision-Making Tool for Drug Discovery Sonakshi Tandon , Anna Balaji , Shaheen Sultana *.” 8(3):2520–31. doi: 10.35629/7781-080325202531.
- Uddin, Md. Jamal, and Jitang Fan. 2024. “Interpretable Machine Learning Framework to Predict the Glass Transition Temperature of Polymers.” *Polymers* 16(8):1049. doi: 10.3390/polym16081049.
- Wang, Boyang, Tingyu Zhang, Qingyuan Liu, Chayanis Sutcharitchan, Ziyi Zhou, Dingfan Zhang, and Shao Li. 2025. “Elucidating the Role of Artificial Intelligence in Drug Development from the Perspective of Drug-Target Interactions.” *Journal of Pharmaceutical Analysis* 15(3):101144. doi: 10.1016/j.jpha.2024.101144.
- Wu, Wanhua, Jianing Li, Su Chen, and Suidong Ouyang. 2024. “The Airway Neuro-Immune Axis as a Therapeutic Target in Allergic Airway Diseases.” *Respiratory Research* 25(1):83. doi: 10.1186/s12931-024-02702-8.
- Xia, Zhenwei, Wenwei Zhong, Min Wu, and Scott E. Evans. 2023. “Editorial: The Interplay between Microbiota and Allergen in Shaping Respiratory Mucosa Immunity: Role in Development of Asthma.” *Frontiers in Immunology* 14. doi: 10.3389/fimmu.2023.1131215.
- Yasir, Muhammad, Jinyoung Park, Eun-Taek Han, Jin-Hee Han, Won Sun Park, Jongseon Choe, and Wanjoon Chun. 2025. “Investigating Natural Product Inhibitors of IKK α : Insights from Integrative In Silico and Experimental Validation.” *Molecules* 30(9):2025. doi: 10.3390/molecules30092025.
- Zhou, Yongfang, Xin Yang, Canhui Hong, Tangfei Guan, Peiyun Xiao, Yongshou Yang, Chenggui Zhang, and Zhengchun He. 2025. “Periplaneta Americana Extract Protects Glutamate-Induced Nerve Cell Damage by Inhibiting N-Methyl-D-Aspartate Receptor Activation.” *Biology* 14(2):193. doi: 10.3390/biology14020193.