

DAFTAR PUSTAKA

- Andri Anugrah Pratama, Yusnita Rifai, A. M. (2017). Docking Molekuler Senyawa 5,5'Dibromometilsesamin. *Majalah Farmasi Dan Farmakolog Fakultas Farmasi, Universitas Hasanuddin, Makassar*, 21(3), 67–69. <https://doi.org/http://dx.doi.org/10.20956/mff.v21i3.6857>
- Aouidate, A., Ghaleb, A., Chtita, S., Aarjane, M., Ousaa, A., Maghat, H., Sbai, A., Choukrad, M., Bouachrine, M., & Lakhli, T. (2020). Identification of a novel dual-target scaffold for 3CLpro and RdRp proteins of SARS-CoV-2 using 3D-similarity search, molecular docking, molecular dynamics and ADMET evaluation. *Journal of Biomolecular Structure and Dynamics*, 0(0), 1–14. <https://doi.org/10.1080/07391102.2020.1779130>
- Apriani, F. (2015). Studi Penambatan Molekul Senyawa-Senyawa Amidasi Etil Para Metokisinamat Pada Peroxisome Proliferator-Activated Receptor-Gamma (Ppary). *Skripsi*, 1–121.
- Berman, H. M., Battistuz, T., Bhat, T. N., Bluhm, W. F., Bourne, P. E., Burkhardt, K., Feng, Z., Gilliland, G. L., Iype, L., Jain, S., Fagan, P., Marvin, J., Padilla, D., Ravichandran, V., Schneider, B., Thanki, N., Weissig, H., Westbrook, J. D., & Zardecki, C. (2002). The protein data bank. *Acta Crystallographica Section D: Biological Crystallography*, 58(6 I), 899–907. <https://doi.org/10.1107/S0907444902003451>
- Cheke, R. S. (2020). The Molecular Docking Study of Potential Drug Candidates Showing Anti-COVID-19 Activity by Exploring of Therapeutic Targets of SARS-CoV-2. *Eurasian Journal of Medicine and Oncology*, 4(3), 185–195. <https://doi.org/10.14744/ejmo.2020.31503>
- de Oliveira, O. V., Rocha, G. B., Paluch, A. S., & Costa, L. T. (2020). Repurposing approved drugs as inhibitors of SARS-CoV-2 S-protein from molecular modeling and virtual screening. *Journal of Biomolecular Structure and Dynamics*, 0(0), 1–10. <https://doi.org/10.1080/07391102.2020.1772885>
- De Wilde, A. H., Jochmans, D., Posthuma, C. C., Zevenhoven-Dobbe, J. C., Van Nieuwkoop, S., Bestebroer, T. M., Van Den Hoogen, B. G., Neyts, J., & Snijder, E. J. (2014). Screening of an FDA-approved compound library identifies four small-molecule inhibitors of Middle East respiratory syndrome coronavirus replication in cell culture. *Antimicrobial Agents and Chemotherapy*, 58(8), 4875–4884. <https://doi.org/10.1128/AAC.03011-14>
- Deng, X., & Baker, S. C. (2018). An “Old” protein with a new story: Coronavirus endoribonuclease is important for evading host antiviral defenses. *Virology*, 517(January), 157–163. <https://doi.org/10.1016/j.virol.2017.12.024>

- El-hachem, N., Khalil, A., Kobeissy, F., & Nemer, G. (2017). *AutoDock and AutoDockTools for Protein-Ligand Docking: Beta-Site Amyloid Precursor Protein Cleaving Enzyme 1(BACE1) as a Case Study*. 1(September). <https://doi.org/10.1007/978-1-4939-6952-4>
- Elfiky, A. A. (2020). Ribavirin, Remdesivir, Sofosbuvir, Galidesivir, and Tenofovir against SARS-CoV-2 RNA dependent RNA polymerase (RdRp): A molecular docking study. *Life Sciences*, 253(February). <https://doi.org/10.1016/j.lfs.2020.117592>
- Farid, M., Pratama, Y., Abidi, S. R., Firdaus, K. A., Aulia, A. F., & Santoso, B. (2016). *KAJIAN DOCKING MOLEKULAR PADA BINDING SITE POCKET DARI FLAVOPIRIDOL DALAM MENGHAMBAT GLIKOGEN FOSFORILASE MENGGUNAKAN PyRx-AUTODOCK-VINA*. 154–158.
- Ferwadi, S., Gunawan, R., & Astuti, W. (2017). Studi Docking Molekular Senyawa Asam Sinamat Dan Derivatnya Sebagai Inhibitor Protein 1J4X Pada Sel Kanker Serviks. *Jurnal Kimia Mulawarman*, 14(2), 85–90. <http://jurnal.kimia.fmipa.unmul.ac.id/index.php/JKM/article/view/401/307>
- Glowacki, E. D., Irimia-Vladu, M., Bauer, Siegfried, Sariciftcia, & Serdar, N. (2013). *Materials Chemistry B*. 1(31). <https://doi.org/10.1039/c3tb20193g>
- Gilbert, B. E., & Knight, V. (1986). Biochemistry and clinical applications of ribavirin. *Antimicrobial Agents and Chemotherapy*, 30(2), 201–205. <https://doi.org/10.1128/AAC.30.2.201>
- Hung, I. F. N., Lung, K. C., Tso, E. Y. K., Liu, R., Chung, T. W. H., Chu, M. Y., Ng, Y. Y., Lo, J., Chan, J., Tam, A. R., Shum, H. P., Chan, V., Wu, A. K. L., Sin, K. M., Leung, W. S., Law, W. L., Lung, D. C., Sin, S., Yeung, P., ... Yuen, K. Y. (2020). Triple combination of interferon beta-1b, lopinavir-ritonavir, and ribavirin in the treatment of patients admitted to hospital with COVID-19: an open-label, randomised, phase 2 trial. *The Lancet*, 395(10238), 1695–1704. [https://doi.org/10.1016/S0140-6736\(20\)31042-4](https://doi.org/10.1016/S0140-6736(20)31042-4)
- I. Siswadono (Ed.). (2016). *Kimia Medisinal 1* (2nd ed.). Airlangga University Press.
- Kadam, R. U., & Wilson, I. A. (2017). Structural basis of influenza virus fusion inhibition by the antiviral drug Arbidol. *Proceedings of the National Academy of Sciences of the United States of America*, 114(2), 206–214. <https://doi.org/10.1073/pnas.1617020114>
- Karim, M. Al. (2018). Analisis Docking Molekuler Senyawa Flavonoid dan Steroid terhadap Enzim Siklooksigenase dan Fosfolipase. *Skripsi*.

Kepala Badan Pengawas Obat dan Makanan Republik Indonesia. (2020). *Keputusan Kepala Badan Pengawas Obat dan Makanan Republik Indonesia tentang Penetapan Pedoman Obat dalam Penanganan Corona Virus Disease 2019 (COVID-19)* (p. 236).

Khalili, J. S., Zhu, H., Mak, N. S. A., Yan, Y., & Zhu, Y. (2020). Novel coronavirus treatment with ribavirin: Groundwork for an evaluation concerning COVID-19. *Journal of Medical Virology*, 92(7), 740–746. <https://doi.org/10.1002/jmv.25798>

Kim, S., Thiessen, P. A., Bolton, E. E., Chen, J., Fu, G., Gindulyte, A., Han, L., He, J., He, S., Shoemaker, B. A., Wang, J., Yu, B., Zhang, J., & Bryant, S. H. (2016). PubChem substance and compound databases. *Nucleic Acids Research*, 44(D1), D1202–D1213. <https://doi.org/10.1093/nar/gkv951>

Kim, Y., Jedrzejczak, R., Maltseva, N. I., Wilamowski, M., Endres, M., Godzik, A., Michalska, K., & Joachimiak, A. (2020). Crystal structure of Nsp15 endoribonuclease NendoU from SARS-CoV -2. *Protein Science*, 29(7), 1596–1605. <https://doi.org/10.1002/pro.3873>

Kuntari, F. R., Pranoto, S., Tiswati, K. A., & Sutresno, A. (2019). Studi Proses Difusi melalui Membran dengan Pendekatan Kompartemen. *Jurnal Fisika Dan Aplikasinya*, 15(2), 62. <https://doi.org/10.12962/j24604682.v15i2.4617>

Lam, N., Muravez, S. N., & Boyce, R. W. (2015). A comparison of the Indian Health Service counseling technique with traditional, lecture-style counseling. In *Journal of the American Pharmacists Association* (Vol. 55, Issue 5). <https://doi.org/10.1331/JAPhA.2015.14093>

Lipinski, C. A. (2004). *Lead profiling Lead- and drug-like compounds : the rule-of-five revolution*. 337–341. <https://doi.org/10.1016/j.ddtec.2004.11.007>

Lipinski, C. A., Lombardo, F., Dominy, B. W., & Feeney, P. J. (2001). *Experimental and computational approaches to estimate solubility and permeability in drug discovery and development settings*. 46, 3–26.

Mahévas, M., Tran, V. T., Roumier, M., Chabrol, A., Paule, R., Guillaud, C., Fois, E., Lepeule, R., Szwebel, T. A., Lescure, F. X., Schlemmer, F., Matignon, M., Khellaf, M., Crickx, E., Terrier, B., Morbieu, C., Legendre, P., Dang, J., Schoindre, Y., ... Costedoat-Chalumeau, N. (2020). Clinical efficacy of hydroxychloroquine in patients with covid-19 pneumonia who require oxygen: Observational comparative study using routine care data. *The BMJ*, 369, 1–8. <https://doi.org/10.1136/bmj.m1844>

Mochamad, Z. R. (2010). *Penambatan Molekuler Beberapa Senyawa Xanton Dari Tanaman*. 1–104.

- National Center for Biotechnology Information. (2020a). *PubChem Compound Summary for CID 121304016, Remdesivir*. <https://pubchem.ncbi.nlm.nih.gov/compound/Remdesivir>
- National Center for Biotechnology Information. (2020b). *PubChem Compound Summary for CID 12947, Hydroxychloroquine sulfate*. <https://pubchem.ncbi.nlm.nih.gov/compound/Hydroxychloroquine-sulfate>
- National Center for Biotechnology Information. (2020c). *PubChem Compound Summary for CID 131411, Arbidol*. <https://pubchem.ncbi.nlm.nih.gov/compound/Arbidol>
- National Center for Biotechnology Information. (2020d). *PubChem Compound Summary for CID 2719, Chloroquine*. <https://pubchem.ncbi.nlm.nih.gov/compound/Chloroquine>
- National Center for Biotechnology Information. (2020e). *PubChem Compound Summary for CID 37542, Ribavirin*. <https://pubchem.ncbi.nlm.nih.gov/compound/Ribavirin>
- National Center for Biotechnology Information. (2020f). *PubChem Compound Summary for CID 392622, Ritonavir*. <https://pubchem.ncbi.nlm.nih.gov/compound/Ritonavir>
- National Center for Biotechnology Information. (2020g). *PubChem Compound Summary for CID 492405, Favipiravir*. <https://pubchem.ncbi.nlm.nih.gov/compound/Favipiravir>
- National Center for Biotechnology Information. (2020h). *PubChem Compound Summary for CID 65028, Oseltamivir*. <https://pubchem.ncbi.nlm.nih.gov/compound/Oseltamivir>
- National Center for Biotechnology Information. (2020i). *PubChem Compound Summary for CID 92727, Lopinavir*. <https://pubchem.ncbi.nlm.nih.gov/compound/Lopinavir>
- Naufal, A. W. (2017). *SINTESIS DAN PREDIKSI AKTIVITAS BIOLOGI SENYAWA 3-BROMO-N-[(PYRIDIN-4-YL) CARBONYL] BENZOHYDRAZIDE SEBAGAI KANDIDAT ANTITUBERKULOSIS AHMAD WAIFI NAUFAL.*
- Nauli, T. (2014). *Penentuan Sisi Aktif Selulase Aspergillus Nigen Dengan Docking Ligan*. 16(2), 94–100.
- PERDAFKI. (2020). Kajian Farmakoterapi Pengobatan Covid-19. *Perdafki*, 2(April). <https://covid19.idionline.org/wp-content/uploads/2020/04/10.-PERDAFKI-.pdf>

- Perlman, A. R. F. and S. (2015). Coronaviruses: An Overview of Their Replication and Pathogenesis. *Coronaviruses: Methods and Protocols*, 1282(1), 1–282. <https://doi.org/10.1007/978-1-4939-2438-7>
- Rachma, N., Yana, A., & Leorita, M. (2020). *Desain Turunan AntiInflamasi Senyawa Leonurine Sebagai Kandidat Obat (Design of Leonurine Derivatives as Anti-Inflammatory Candidates)*. 6(1), 181–191. <https://doi.org/10.22487/j24428744.2020.v6.i1.15025>
- Rahmania, R. A., Supandi, & Anggun, O. L. (2015). In-Silico Analisys of Diterpeneoid Lactone Compounds of Bitter Herbs (*Andrographis paniculata* Nees) on Alpha-Glucosidase Receptor As Antidiabetic Type II Agents. *Pharmacy*, 12.
- Rastini, M. B. O., Giantari, N. K. M., Adnyani, K. D., & Laksmani, N. P. L. (2019). Molecular Docking Aktivitas Antikanker Dari Kuersetin Terhadap Kanker Payudara Secara in Silico. *Jurnal Kimia*, 180. <https://doi.org/10.24843/jchem.2019.v13.i02.p09>
- RCSB. (2014). *About the PDB Archive the RCSB PDB*. http://www.rcsb.org/pdb/statistic.do?p=general_information/about_pdb/index.html
- Ruswanto, R. (2015). Molecular Docking Empat Turunan Isonicotinohydrazide Pada *Mycobacterium tuberculosis* Enoyl-Acyl Carrier Protein Reductase (InhA). *Jurnal Kesehatan Bakti Tunas Husada: Jurnal Ilmu-Ilmu Keperawatan, Analisis Kesehatan Dan Farmasi*, 13(1), 135–141. <https://doi.org/10.36465/jkbth.v13i1.25>
- Ruswanto, R., Nofianti, T., Mardianingrum, R., & Lestari, T. (2018). Desain dan Studi In Silico Senyawa Turunan Kuwanon-H sebagai Kandidat Obat Anti-HIV. *Jurnal Kimia VALENSI*, 4(1), 57–66. <https://doi.org/10.15408/jkv.v4i1.6867>
- Ruswanto, Rahayuningsih, N., Hidayati, N. L. D., Nuryani, G. S., & Mardianingrum2, R. (2019). Uji In Vitro dan Studi In Silico Senyawa Turunan N' -Benzoylisonicotinohydrazide sebagai Kandidat Antituberkulosis (In Vitro and In Silico Study of N' - Benzoylisonicotinohydrazide as Antituberculosis Candidate). *Jurnal ILmu Kefarmasian Indonesia*, 17(2), 218–226.
- Ruswanto, Ratnasari, A., & Tuslinah, L. (2015). Sintesis Senyawa N' - (3 , 5-Dinitrobenzoyl) -Isonicotinohydrazide Dan Studi Interaksinya Pada *Mycobacterium tuberculosis* Enoyl Acyl Carrier Protein Reductase (INHA). *Jurnal Kesehatan Bakti Tunas Husada: Jurnal Ilmu-Ilmu Keperawatan, Analisis Kesehatan Dan Farmasi*, 14.

- Sari, I. W., Junaidin, & Pratiwi, D. (2020). STUDI MOLECULAR DOCKING SENYAWA FLAVONOID HERBA KUMIS KUCING (Orthosiphon stamineus %_ 3\$' \$5(6(3725.-GLUKOSIDASE SEBAGAI ANTIDIABETES TIPE 2. *Jurnal Farmagazine*, VII(2), 54–60.
- Statement, C. (2020). *The species*. 5(March). <https://doi.org/10.1038/s41564-020-0695-z>
- Susilo, A., Rumende, C. M., Pitoyo, C. W., Santoso, W. D., Yulianti, M., Herikurniawan, H., Sinto, R., Singh, G., Nainggolan, L., Nelwan, E. J., Chen, L. K., Widhani, A., Wijaya, E., Wicaksana, B., Maksum, M., Annisa, F., Jasirwan, C. O. M., & Yunihastuti, E. (2020). Coronavirus Disease 2019: Tinjauan Literatur Terkini. *Jurnal Penyakit Dalam Indonesia*, 7(1), 45. <https://doi.org/10.7454/jpdi.v7i1.415>
- Syahputra, G, L Ambarsari, dan T. S. (2014). Simulasi Docking Kurkumin Enol , Bismetoksikurkumin Dan Analognya Sebagai Inhibitor Enzim12-Lipokksigenase. *Jurnal Biofisika*10(1): 55–67.
- Syahputra, G., Ambarsari L, & T, S. (2014). Simulasi docking kurkumin enol, bisdemetoksikurkumin dan analognya sebagai inhibitor enzim12-lipokksigenase. *Biofisika*, 10(1), 55–67.
- Vankadari, N. (2020). Arbidol: A potential antiviral drug for the treatment of SARS-CoV-2 by blocking trimerization of the spike glycoprotein. *International Journal of Antimicrobial Agents*, 56(2), 105998. <https://doi.org/10.1016/j.ijantimicag.2020.105998>
- Wang, M., Cao, R., Zhang, L., Yang, X., Liu, J., Xu, M., Shi, Z., Hu, Z., Zhong, W., & Xiao, G. (2020). Remdesivir and chloroquine effectively inhibit the recently emerged novel coronavirus (2019-nCoV) in vitro. *Cell Research*, 30(3), 269–271. <https://doi.org/10.1038/s41422-020-0282-0>
- Wang, Y., Zhang, D., Du, G., Du, R., Zhao, J., Jin, Y., Fu, S., Gao, L., Cheng, Z., Lu, Q., Hu, Y., Luo, G., Wang, K., Lu, Y., Li, H., Wang, S., Ruan, S., Yang, C., Mei, C., ... Wang, C. (2020). Remdesivir in adults with severe COVID-19: a randomised, double-blind, placebo-controlled, multicentre trial. *The Lancet*, 395(10236), 1569–1578. [https://doi.org/10.1016/S0140-6736\(20\)31022-9](https://doi.org/10.1016/S0140-6736(20)31022-9)
- Wang, Z., Qiang, W., & Ke, H. (2020). A Handbook of 2019-nCoV Pneumonia Control and Prevention. *Hubei Science and Technology Press*, 1–108.
- Wardani, F. (2012). *UNIVERSITAS INDONESIA Studi Derivat Ribavirin dan GTP Sebagai Inhibitor Untuk NS5 Metiltransferase Virus Dengue Studi Derivat Ribavirin dan GTP Sebagai Inhibitor Untuk NS5 Metiltransferase Virus Dengue*.

- WHO. (2020a). Tes Diagnostik untuk SARS-CoV-2. *World Health Organization, September*, 1–19.
- WHO. (2020b). *WHO Coronavirus Disease (COVID-19) Dashboard*. World Health Organization. <https://covid19.who.int/>
- WHO. (2020c). *WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020*. World Health Organization. <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>
- Wu, F., Zhao, S., Yu, B., Chen, Y. M., Wang, W., Song, Z. G., Hu, Y., Tao, Z. W., Tian, J. H., Pei, Y. Y., Yuan, M. L., Zhang, Y. L., Dai, F. H., Liu, Y., Wang, Q. M., Zheng, J. J., Xu, L., Holmes, E. C., & Zhang, Y. Z. (2020). A new coronavirus associated with human respiratory disease in China. *Nature*, 579(7798), 265–269. <https://doi.org/10.1038/s41586-020-2008-3>
- Zhang, L., Shen, F. M., Chen, F., & Lin, Z. (2020). Origin and Evolution of the 2019 Novel Coronavirus. *Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America*, 71(15), 882–883. <https://doi.org/10.1093/cid/ciaa112>
- Zhou, D., Dai, S. M., & Tong, Q. (2020). COVID-19: A recommendation to examine the effect of hydroxychloroquine in preventing infection and progression. *Journal of Antimicrobial Chemotherapy*, 75(7), 1667–1670. <https://doi.org/10.1093/jac/dkaa114>