

## DAFTAR PUSTAKA

- [KEGG] Kyoto Encyclopedia of Genes and Genomes. 2020. Tuberculosis-Homo Sapiens. [https://www.genome.jp/kegg-bin/show\\_pathway?hsa05152](https://www.genome.jp/kegg-bin/show_pathway?hsa05152) [20 Januari 2020].
- [USDA] United State Department of Agriculture. 2020. Plants Profile for Ocimum basilicum. <https://plants.usda.gov/core/profile?symbol=OCBA> [10 November 2020].
- [WHO] World Health Organization. 2020. A Global Strategy for Tuberculosis Research and Innovation [10 November 2020]
- [WHO] World Health Organization. 2020. Global Tuberculosis Report on Tuberculosis. <https://www.who.int/teams/global-tuberculosis-programme/tb-reports/global-tuberculosis-report-2020> [10 November 2020].
- [WHO] World Health Organization. 2020. Global strategy and targets for tuberculosis prevention, care and control after 2015. 2014. Available from: [http://apps.who.int/gb/ebwha/pdf\\_files/WHA67/A67\\_11-en.pdf](http://apps.who.int/gb/ebwha/pdf_files/WHA67/A67_11-en.pdf) [10 November 2020].
- Accerlys Enterprise Platform. 2005. *Induction To The Discovery Studio Visualizer*. San Diego, California, USA : Accerlys Software Inc
- Abdillah, M.N., N.R. Ilmah, dan A.B. Mahardhika. 2018. Penambatan Molekuler Senyawa Polifenolat Terhadap Enzim Reverse Transcriptase Sebagai Senyawa Antiretroviral (HIV-1). *Jurnal Sains Dan Teknologi Farmasi Indonesia* 6(1).
- Adamson, R. H. 2016. The acute lethal dose 50 (LD50) of caffeine in albino rats. *Regulatory Toxicology and Pharmacology* 80: 274-276.
- Ajeng, L. T., H. Rina, dan D. D. Asmiyenti. 2020. Analisis Docking Molekuler Senyawa Derivat Phthalimide sebagai Inhibitor Non-Nukleosida HIV-1 Reverse Transcriptase. Artikel Jurnal.
- Ambrose, G. O., O. J. Afees, N. C. Nwamaka, N. Simon, A. A. Oluwaseun, T. Soyinka, dan S. Bankole. 2018. Selection of Luteolin as a potential antagonist from molecular docking analysis of EGFR mutant. *Bioinformation* 14(5): 241.
- Amin, M. L. 2013. P-glycoprotein inhibition for optimal drug delivery. *Drug target insights* 7. DTI-S12519.
- Arrowsmith, J. 2011. Biobusiness briefs: trial watch: phase II failures: 2008–2010. *Nature Reviews Drug Discovery* 10: 328-329.
- Avdeef, A., E. Fuguet, A. Llinàs, C. Ràfols, E. Bosch, G. Völgyi, T. Verbić, E. Boldyreva, dan K.T. Novák. 2016. Equilibrium solubility measurement of ionizable drugs– consensus recommendations for improving data quality. *ADMET and DMPK* 4(2): 117-178.

- Azizah, R. N., G. Alam, Y. Rifai, dan C. Lethe. 2013. Aplikasi Komputasi Kimia Dalam Analisis Hubungan Kuantitatif Struktur-Aktivitas (Hksa) Dari Senyawa Aktif Antibakteri Analog N-Alkil Imidazol Pada Bakteri (*Staphilococcus Aureus*) Dengan Parameter Elektronikmetode Austin Model (Am 1). *As-Syifaa Jurnal Farmasi* 5(1): 1-11.
- Bagdanoff, J. T., R. Jain, W. Han, S. Zhu, A. M. Madiera, P. S. Lee, X. Ma, dan D. Poon. 2015. Tetrahydropyrrolo-diazepenones as inhibitors of ERK2 kinase. *Bioorganic & medicinal chemistry letters* 25(18): 3788-3792.
- Ballet, F. 1997. Hepatotoxicity in drug development: detection, significance and solutions. *Journal of hepatology* 26: 26-36.
- Batubara, P. L. 2008. Farmakologi Dasar, edisi II. Jakarta:Lembaga Studi dan Konsultasi Farmakologi
- Bae, K., K.N. Jeon, H.C. Kim, Y.S. Suh, G.D. Lee, J.Y. Kim, dan D. Song. 2017. Tuberculosis presenting as isolated bronchonodal fistula in a patient with systemic lupus erythematosus: Case report. *Medicine* 96 (45).
- Berg, J.M, J.L.Tymoczko, dan L.Styrer. 2004. *Biochemistry, Fifth Edition*. W. H. Freeman and Company.
- Berman, H.M., J. Westbrook, Z. Feng, G.Gilliland, T.N.Bhat, H. Weissig, I.N.Shindyalov, dan P.E.Bourne. 2000. The Protein Data Bank. *Nucleic Acids Research* 28(1): 235242.
- Bhal, S. K. 2007. Lipophilicity descriptors: Understanding when to use logP & logD. ACD/Labs PhysChem Software Application Notes.
- Bhat, Z. S., M.A. Rather, M. Maqbool, H.U. Lah, S.K. Yousuf, dan Z. Ahmad. 2017. Cell wall: A versatile fountain of drug targets in Mycobacterium tuberculosis. *Biomedicine and Pharmacotherapy* 95 : 1520–1534.
- Bjerregaard, P. 2018. Diagnosis and management of short QT syndrome. *Heart Rhythm* 15(8): 1261-1267.
- Brooijmans, N. 2009. Docking methods, ligan design, and validating data sets in the Structural genomics era. Editor: Jenny Gu dan Philip E. Bourne. *Structural Bioinformatics* 11:635-663.
- Chen, S.J. dan L.J. Ren. 2014. Identification of a Potential Anticancer Target of Danshensu by Inverse Docking. *Asian Pac J Cancer Prev* 15:111-116.
- Chiarelli, L. R., G. Mori, B. S. Orena, M. Esposito, T. Lane, A. L. D. J. L. Ribeiro, G. Degiacomi, J. Zemanová, S. Szádocka, S. Huszár, Z. Palčeková, M. Manfredi, F. Gosetti, J. Lelièvre, L. Ballell, E. Kazakova, V. Makarov, E. Marengo, K. Mikusova, S.T. Cole, G. Riccardi, S. Ekins, dan M.R. Pasca. 2018. A multitarget approach to drug discovery inhibiting Mycobacterium tuberculosis PyrG and PanK. *Scientific Reports* 8 (1) :1–10.
- Chinsembu, K.C. 2016. Tuberculosis and nature's pharmacy of putative anti-

- tuberculosis agents. *Acta Tropica*, 153 : 46–56.
- Csizmadia, P. 1999. MarvinSketch and MarvinView: molecule applets for the World Wide Web.
- Dahlgren, D. dan H. Lennernäs. 2019. Intestinal permeability and drug absorption: Predictive experimental, computational and in vivo approaches. *Pharmaceutics* 11(8): 411.
- Dahlin, J. L., J. Inglese, dan M.A. Walters. 2015. Mitigating risk in academic preclinical drug discovery. *Nature Reviews Drug Discovery* 14 (4) : 279-294.
- Daina, A., O. Michielin, dan V. Zoete. 2017. SwissADME: A Free Web Tool to Evaluate Pharmacokinetics, Drug-likeness and Medicinal Chemistry Friendliness of Small Molecules. *Scientific Reports* 7(1): 1-13.
- Deferme, S., dan P. Augustijns,. 2003. The effect of food components on the absorption of P-gp substrates: a review. *Journal of pharmacy and pharmacology* 55(2):153-162.
- DeLano, W. L., dan S. Bromberg. 2004. PyMOL user's guide. *DeLano Scientific LLC* : 629.
- Diyah, N.W., Siswandono, H.Suko, dan T.P.Bambang. 2013. Pemodelan Molekul dan Hubungan Kuantitatif Struktur Aktivitas Sitotoksik Turunan Benzoilurea Sebagai Antitumor. *Berkala Ilmiah Kimia Farmasi* 2: 2.
- Didziapetris, R., P. Japertas, A. Avdeef, dan A. Petrauskas. 2003. Classification Analysis of P-Glycoprotein Substrate Specificity. *Journal of Drug Targeting* 11(7): 391-406.
- DiPiro, B.G.W.J.T. dan T.L.S.C.V. DiPiro. 2015. *Pharmacotherapy Handbook*. Ninth Edition. USA : Mc Graw-Hill Education.
- Dixit, V. A. 2019. A simple model to solve a complex drug toxicity problem. *Toxicology research* 8(2): 157-171.
- Dong, J., N. N. Wang, Z.J. Yao, L. Zhang, Y. Cheng, D. Ouyang, dan D.S. Cao. 2018. ADMETlab: a platform for systematic ADMET evaluation based on a comprehensively collected ADMET database. *Journal of cheminformatics* 10 (1) : 29.
- Dowty, M. E., Lin, J., Ryder, T. F., Wang, W., Walker, G. S., Vaz, A., G.L. Chan, S.Krishnaswami, dan C. Prakash. 2014. The Pharmacokinetics, Metabolism, and Clearance Mechanisms of Tofacitinib, A Janus Kinase Inhibitor, In Humans. *Drug Metabolism and Disposition* 42(4): 759-773.
- Esaki, T., R. Ohashi, R.Watanabe, Y.N. Kitatani, H. Kawashima, C. Nagao, H. Komura, dan K. Mizuguchi. 2019. Constructing an In Silico Three-Class Predictor of Human Intestinal Absorption With Caco-2 Permeability and

- Dried-DMSO Solubility. *Journal of pharmaceutical sciences* 108(11): 3630-3639.
- Etna, M. P., Giacomini, E., Severa, M., dan Coccia, E. M. 2014. Pro-and anti-inflammatory cytokines in tuberculosis: a two-edged sword in TB pathogenesis. *In Seminars in immunology* 26 (6) : 543-551.
- Finch, A., dan Pillans, P. 2014. P-glycoprotein and its role in drug-drug interactions. *Aust Prescr* 37(4): 137-139.
- Forli, S., R.Huey, M.E.Pique, M.F.Sanner, D.S.Goodsell, dan A.J.Olson. 2016. Computational Protein–Ligand Docking and Virtual Drug Screening With The Autodock Suite. *Nature protocols* 11(5): 905-919.
- Ganiswarna, S. G. 1995. *Farmakologi dan Terapi (Pharmacology and Teraphy)*. Medical Faculty Indonesia University. Gaya Baru: Jakarta.
- Gfeller, D., A. Grosdidier, M. Wirth, A. Daina, O. Michielin, dan V. Zoete. 2014. SwissTargetPrediction: a web server for target prediction of bioactive small molecules. *Nucleic Acids Research* 42(W1): W32-W38.
- Gintant, G. A., Z. Su, R. L. Martin, dan B.F. Cox. 2006. Utility of hERG assays as surrogate markers of delayed cardiac repolarization and QT safety. *Toxicologic pathology* 34(1): 81-90.
- Goasdoué, K., S. M.Miller, P. B.Colditz, dan S. T.Björkman. 2017. The blood-brain barrier; protecting the developing fetal brain. *Placenta* 54: 111-116.
- Goldstein, D. M. dan T.Gabriel. 2005. Pathway to The Clinic: Inhibition of P38 MAP Kinase. A Review of Ten Chemotypes Selected for Development. *Current Topics in Medicinal Chemistry* 5(10): 1017-1029.
- Goldstein, D. M., T. Alfredson, J. Bertrand, M.F. Browner, K. Clifford, S.A. Dalrymple, J. Dunn, F. Li, T. Alfredson, J. F. Moar, E. Papp, E.B. Sjogren, T. Welch, J. Bertrand, S. Harris, D. McWeeney, O. So, P. Weller, M. F. Browner, S.S. Labadie, C. Ramesha, F.X. Talamas, P. E. Whiteley, K. Clifford, J.L. Fargue, R. Roberts, W. Tao, K. Young, dan S.Zipfel. 2006. Discovery of S-[5-Amino-1-(4-fluorophenyl)-1 H-pyrazol-4-yl]-[3-(2, 3-dihydroxypropoxy) phenyl] methanone (RO3201195), an Orally Bioavailable and Highly Selective Inhibitor of p38 Map Kinase. *Journal of medicinal chemistry* 49 (5): 1562-1575.
- Greenhough, S., dan D.C. Hay. 2012. Stem Cell-Based Toxicity Screening. *Pharmaceutical Medicine* 26(2): 85-89.
- Hancox, J.C., M. J. McPate, A.E.Harchi, dan Y. H. Zhang. 2008. The hERG potassium channel and hERG screening for drug-induced torsades de pointes. *Pharmacology & therapeutics* 119(2): 118-132.

- Hartono, K., P. Adi, dan D.Y.N. Hidayati. 2017. Mycobacterium Tuberculosis Strain H37rv Infection Towards Matrix Metalloproteinase (MMP)-2 In Brain. *Malang Neurology Journal* 3(2): 55-60.
- Hedley, P. L., P. Jørgensen, S. Schlamowitz, R. Wangari, J. M. Smook, P. A. Brink, J.K. Kanters, V.A. Corfield, dan M. Christiansen. 2009. The genetic basis of long QT and short QT syndromes: a mutation update. *Human mutation* 30(11): 1486-1511.
- Hevener, K. E., Zhao, W., Ball, D. M., Babaoglu, K., Qi, J., White, S. W., dan Lee, R. E. 2009. Validation of molecular docking programs for virtual screening against dihydropteroate synthase. *Journal of chemical information and modeling* 49(2): 444-460.
- Ip, Y.T., dan R.J Davis. 1998. Signal Transduction by The C-Jun N-Terminal Kinase (JNK) from Inflammation to Development. *Current Opinion in Cell Biology* 10 (2) : 205-219.
- Ivanov, S., M. Semin, A. Lagunin, D. Filimonov, dan V. Poroikov. 2017. In Silico Identification of Proteins Associated with Drug-Induced Liver Injury Based on the Prediction of Drug-Target Interactions. *Molecular informatics* 36(7): 1600142.
- Jahan, N. dan S. Ferdousi. 2013. Cystatin C-a Promising Marker of Glomerular Filtration Rate. *Bangladesh Journal of Medical Biochemistry* 6(1): 26-30.
- Jancova, P., P. Anzenbacher, dan E. Anzenbacherova. 2010. Phase II drug metabolizing enzymes. *Biomed Pap Med Fac Univ Palacky Olomouc Czech Repub* 154(2): 103-116.
- Jesus, C. C. M. D., M. H. D. Araujo, T. L. B. V. Simão, E. B. Lasunskaia, T. Barth, M. F. Muzitano, dan S. C. Pinto. 2020. Natural products from *Vitex polygama* and their antimycobacterial and anti-inflammatory activity. *Natural Product Research* 1-5.
- Jiménez, A.A., J. L. Herrera, J. C. Garrido, S. L. Garcia, M.E.C. Mussot, M.M. Fischer, D.M. Espinosa, B. Marquina, dan R.H. Pando. 2013. Ursolic and oleanolic acids as antimicrobial and immunomodulatory compounds for tuberculosis treatment. *BMC Complementary and Alternative Medicine* 13(1): 1-11.
- Krämer, S. D., H. E. Aschmann, M. Hatibovic, K. F. Hermann, C. S. Neuhaus, C. Brunner, dan S. Belli. 2016. When barriers ignore the “rule-of-five”. *Advanced drug delivery reviews* 101: 62-74.
- Kroesen, V. M., Gröschel, M. I., Martinson, N., Zumla, A., Maeurer, M., van der Werf, T. S., dan Vilaplana, C. 2017. Non-steroidal anti-inflammatory drugs as host-directed therapy for tuberculosis: a systematic review. *Frontiers in immunology* 8: 772.

- Kulkarni, R. A., dan Deshpande, A. R. 2016. Anti-inflammatory and antioxidant effect of ginger in tuberculosis. *Journal of Complementary and Integrative Medicine* 13(2):201-206.
- Lenaerts, A., C. E. Barry III, dan V. Dartois. 2015. Heterogeneity in tuberculosis pathology, microenvironments and therapeutic responses. *Immunological reviews* 264(1): 288-307.
- Liew, C. Y., Y. C. Lim, dan C.W. Yap. 2011. Mixed learning algorithms and features ensemble in hepatotoxicity prediction. *Journal of computer-aided molecular design* 25(9): 855.
- Madikizela, B., Ndhlala, A. R., Finnie, J. F., dan Van Staden, J. 2014. Antimycobacterial, anti-inflammatory and genotoxicity evaluation of plants used for the treatment of tuberculosis and related symptoms in South Africa. *Journal of ethnopharmacology* 153(2): 386-391.
- Martínez-Jiménez, F., G. Papadatos, L. Yang, I.M. Wallace, V. Kumar, U. Pieper, A. Sali, J.R. Brown, J.P. Overington, dan M.A. Marti-Renom. 2013. Target Prediction for an Open Access Set of Compounds Active Against Mycobacterium tuberculosis. *PLoS Computational Biology* 9 (10).
- Meng, Z.Y, H.X. Zhang, M. Meizai, dan M. Cui. 2011. Molecular Docking: A powerful approach for structure-base drug discovery. *Cur Comput Aided Drug Des* 7: 146-289.
- Meunier, B., S. P. D. Visser, dan S. Shaik. 2004. Mechanism of oxidation reactions catalyzed by cytochrome P450 enzymes. *Chemical reviews* 104(9): 3947-3980.
- Moitessier, N., P. Englebienne, D. Lee, J. Lawandi, dan A. C. Corbeil. 2008. Towards the development of universal, fast and highly accurate docking/skoring method: along way to go. *Br J Pharmaol.* 153: 7-26.
- Morris, G. M., R. Huey, W. Lindstrom, M.F. Sanner, R.K. Belew, D.S. Goodsell, dan A.J. Olson. 2009. AutoDock4 and AutoDockTools4: Automated docking with selective receptor flexibility. *Journal of computational chemistry* 30 (16) : 2785-2791.
- Morris, G.M., D.S. Goodsell, M.E. Pique, W. Lindstrom, R. Huey, S. Forli, W.E. Hart, S. Halliday, R. Belew, dan A.J. Olson. User Guide AutoDock version 4.2. Automated Docking of Flexible Ligands to Flexible Receptors. 2010. [http://autodock.scripps.edu/faqs-help/manual/autodock-4-2-user-guide/AutoDock4.2\\_UserGuide.pdf](http://autodock.scripps.edu/faqs-help/manual/autodock-4-2-user-guide/AutoDock4.2_UserGuide.pdf). [3 Desember 2020].
- Muchtaridi dan Yusuf, M. 2018. *Teori dan Praktek Penambatan Molekul (Moleculer Docking)*. Universitas Padjajaran Press : Bandung.
- Mulliner, D., F. Schmidt, M., Stolte, H. P. Spirkl, A. Czich, dan A. Amberg. 2016. Computational models for human and animal hepatotoxicity with a global

- application scope. *Chemical research in toxicology* 29(5): 757-767.
- Mustika, W. 2005. Studi Hubungan Antara Sifat Lipofilik (F Rekker), Elektronik (Hammett), Dan Sterik (B1 Verloop) Dengan Aktivitas Antibakteri Terhadap *Pseudomonas Aeruginosa* Atcc 9027 Dari Beberapa Turunan N Benzoilsefaleksin. Dissertasi. Universitas Airlangga (UNAIR). Surabaya
- Muttaqin, A. 2012. *Buku Ajar Asuhan Keperawatan Klien Dengan Gangguan. Sistem Pernafasan*. Jakarta : Salemba Medika.
- Nindita, L.D. dan I.G.M. Sanjaya. 2014. Modeling Hubungan Kuantitatif Struktur Dan Aktivitas (HKSA) Pinocembrin Dan Turunannya Sebagai Anti Kanker. *Journal Of Chemistry* 3 : 26-34.
- Nursamsiar, N., A. T.Toding, dan A.Awaluddin. 2016. Studi In Silico Senyawa Turunan Analog Kalkon dan Pirimidin sebagai Antiinflamasi: Prediksi Absorpsi, Distribusi, dan Toksisitas. *PHARMACY: Jurnal Farmasi Indonesia (Pharmaceutical Journal of Indonesia)* 13(1): 92-100.
- Ostapowicz, G., Fontana, R. J., Schiødt, F. V., Larson, A., Davern, T. J., Han, S. H., T.M. McCashland, A.O. Shakil, J.E.Hay, L.Hynan, J.S. Crippin, A.T. Blei, G.Samuel, J. Reisch, dan W.M. Lee. 2002. Results of A Prospective Study of Acute Liver Failure at 17 Tertiary Care Centers in The United States. *Annals of internal medicine* 137 (12): 947-954.
- Patrick, G. 2001. *Instant Notes in Medicinal Chemistry*. Oxford : BIOS Scientific Publisher.
- Patrick, G. L. 2013. *An introduction to medicinal chemistry*. Oxford university press.
- Pedretti, A., A. Mazzolari, dan G. Vistoli. 2004. VEGA ZZ: a versatile toolkit for drug design and protein modelling. *J Comput Chem* 25 (13) : 1605-1612.
- Pires, D. E., T. L. Blundell, dan D. B. Ascher. 2015. pkCSM: predicting small-molecule pharmacokinetic and toxicity properties using graph-based signatures. *Journal of Medicinal Chemistry* 58(9): 4066-4072.
- Purnomo, H. 2011. *Kimia Komputasi*. Yogyakarta : Penerbit Buku Pustaka Pelajar.
- Qasaymeh, R. M., D. Rotondo, C.B. Oosthuizen, N. Lall, dan V. Seidel. 2019. Predictive Binding Affinity of Plant-Derived Natural Products Towards The Protein Kinase G Enzyme of *Mycobacterium tuberculosis* (MtPknG). *Plants* 8(11): 477.
- Rettie, A. E. dan J.P. Jones. 2005. Clinical and toxicological relevance of CYP2C9: drug-drug interactions and pharmacogenetics. *Annu. Rev. Pharmacol. Toxicol* 45: 477-494.

- Reustle, A., dan M. Torzewski. 2018. Role of p38 MAPK in Atherosclerosis and Aortic Valve Sclerosis. *International journal of molecular sciences* 19 (12) : 3761.
- Richard, A. M., R. S. Judson, K. A. Houck, C. M. Grulke, P. Volarath, I. Thillainadarajah, C. Yang, J.F Rathman, M.T.Martin, J.F. Wambaugh, T.B. Knudsen, J.Kancherla, K.Mansouri, G.Y. Patlewicz, A.J. Williams, S.B. Little, K.M. Crofton, dan R.S. Thomas. 2016. ToxCast chemical landscape: paving the road to 21st century toxicology. *Chemical research in toxicology* 29(8): 1225-1251.
- Rieck, B., Degiacomi, G., Zimmermann, M., Cascioferro, A., Boldrin, F., Lazar-Adler, N. R., dan O'Hare, H. M. 2017. PknG senses amino acid availability to control metabolism and virulence of Mycobacterium tuberculosis. *PLoS pathogens* 13(5).
- Rollando. 2017. *Pengantar Kimia Medisinal*. Malang : CV.Seribu Bintang.
- Sanguinetti, M. C. dan J. S. Mitcheson. 2005. Predicting drug–hERG channel interactions that cause acquired long QT syndrome. *Trends in pharmacological sciences* 26(3): 119-124.
- Santhi, N., dan Aishwarya, S. 2011. Insights from the molecular docking of withanolide derivatives to the target protein PknG from Mycobacterium tuberculosis. *Bioinformation* 7(1): 1.
- Sharma, D., M. Soni, S. Kumar, dan G. D. Gupta. 2009. Solubility enhancement–eminent role in poorly soluble drugs. *Research Journal of Pharmacy and Technology* 2(2): 220-224.
- Scherr, N., S. Honnappa, G. Kunz, P. Mueller, R. Jayachandran, F. Winkler, dan, M.O. Steinmetz. 2007. Structural Basis for The Specific Inhibition of Protein Kinase G, A Virulence Factor of Mycobacterium Tuberculosis. *Proceedings of the National Academy of Sciences of the United States of America* 104 (29) : 12151–12156.
- Seo, S.W., D.Lee, H.Minematsu, A.D.Kim, M.Shin, S.K.Cho, D.W.Kim, J.Yang, dan F.Y.Lee. 2010. Targeting Extracellular Signal-Regulated Kinase (ERK) Signaling Has Therapeutic Implications for Inflammatory Osteolysis. *Bone* 46 (3) : 695-702.
- Setiawati, A., 2007, Interaksi Obat dalam Gunawan, S.G, 2007, *Farmakologi dan Terapi*, Edisi 5, hal 862-873, Bagian Farmakologi dan Terapeutik Fakultas Kedokteran UI, Jakarta.
- Shin, H. K., Y. M. Kang, dan K. T. No. 2017. Predicting ADME properties of chemicals. *Handbook of Computational Chemistry, Springer, Cham*: 2265-2301.
- Siddiqui, B.S., H.A. Bhatti, S. Begum, dan S. Perwaiz. 2012. Evaluation of the

- antimycobacterium activity of the constituents from *Ocimum basilicum* against *Mycobacterium tuberculosis*. *Journal of Ethnopharmacology*, 144 (1) : 220–222.
- Silvani, H. dan S. Enok. 2016. Hubungan Peran Aktif Keluarga Sebagai Pengawasan Minum Obat (PMO) Dengan Angka Kesembuhan TB Paru Di Ruang Seruni RSUD Abdul Wahab Sjahranie Samarinda. *Jurnal Ilmu Kesehatan*.
- Stierand, K. dan M. Rarey. 2010. Drawing the PDB: protein– ligand complexes in two dimensions. *ACS medicinal chemistry letters* 1(9) : 540-545.
- Sumara, G., M. Belwal, dan R. Ricci. 2005. “Jnking” atherosclerosis. *Cellular and Molecular Life Sciences CMLS* 62 (21) : 2487-2494.
- Syahputra, G., Ambarsari, T.Sumaryada. 2014. Simulasi Docking Kurkumin Enol, Bisdemetoksikurkumin dan Analognya Sebagai Inhibitor Enzim 1,2-Lipoksigenase. *Jurnal Biofisika* 10: 55-56.
- Syamsudin dan S.A. Keban. 2013. *Buku Ajar Farmakoterapi Gangguan Saluran Pernapasan*. Satelit Merdeka : Jakarta.
- Syihabuddin, M. 2011. Penetapan parameter farmakokinetika gendarusin A dalam urin subyek pria setelah pemberian sediaan ekstrak etanol daun *Justicia gendarussa* Burm. F. *Jurnal Medika Planta* 4:59-68.
- Tapiory, A. A., K. O. Pertiwi, K. Fadilla, D. Reyhanditya, dan F. Fatchiyah. 2020. In-Silico Analysis of Methoxyl Pectin Compounds from Banana Peels as HMG-CoA Reductase Inhibitor Complexes. *Journal of Smart Bioprospecting and Technology P-ISSN*, 2686, 0805.
- Thorn, C. F., E.Aklillu, T.E.Klein, dan R.B.Altman. 2012. PharmGKB summary: very important pharmacogene information for CYP1A2. *Pharmacogenetics and genomics* 22(1): 73.
- Ventura, T. L. B., Calixto, S. D., Abraham-Vieira, B. D. A., Souza, A. M. T. D., Mello, M. V. P., Rodrigues, C. R., dan Muzitano, M. F. 2015. Antimycobacterial and anti-inflammatory activities of substituted chalcones focusing on an anti-tuberculosis dual treatment approach. *Molecules* 20(5): 8072-8093.
- Vieth, M., M. G. Siegel, R. E. Higgs, I. A. Watson, D. H. Robertson, K. A. Savin, G.L. Durst, dan P. A. Hipskind. 2004. Characteristic physical properties and structural fragments of marketed oral drugs. *Journal of Medicinal Chemistry* 47(1): 224-232.
- Vinukonda, V.P., S.K. Palakeerti, B.C. Nalukurthi, dan J.D Palleti. 2012. In Silico Studies Of *Usticia Adhatoda*, *Ocimum Sanctum* Plant Compounds As *Mycobacterium Tuberculosis* Ftsz Inhibitors. *International Journal of Bioassays (IJB)*.

- Wang, B., L. P. Yang, X. Z. Zhang, S. Q. Huang, M. Bartlam, dan S. F. Zhou. 2009. New insights into the structural characteristics and functional relevance of the human cytochrome P450 2D6 enzyme. *Drug metabolism reviews* 41(4): 573-643.
- Wang, Y., Q. Xiao, P. Chen, dan B. Wang. 2019. In silico prediction of drug-induced liver injury based on ensemble classifier method. *International Journal of Molecular Sciences* 20(17): 4106.
- Widoyono. 2011. *Penyakit Tropis Epidemiologi, Penularan, Pencegahan & Pemberantasannya Edisi Kedua*. Semarang: Erlangga.
- Wu, D., Y. Kong, C.Han, J.Chen, L.Hu, H.Jiang, dan X.Shen. 2008. D-Alanine: D-Alanine Ligase as a New Target for the Flavonoids Quercetin and Apigenin. *International journal of antimicrobial agents* 32(5):421-426.
- Xie, Z. Q. 2010. Exploiting Pubchem For Virtual Screening NIH Public Access.
- Yan, A., Z. Wang, dan Z. Cai. 2008. Prediction of human intestinal absorption by GA feature selection and support vector machine regression. *International Journal of Molecular Sciences* 9 (10) : 1961-1976.
- Yang, C.S., D.M. Shin, H.M. Lee, J.W. Son, S.J. Lee, S.Akira, G. Marie-Anne, E. Jamel, H. Ichijo, dan E.K. Jo. 2008. ASK1-p38 MAPK-p47phox Activation is Essential for Inflammatory Responses During Tuberculosis via TLR2-ROS signalling. *Cellular microbiology* 10(3):741-754.
- Ye, M. dan Bian, L.F. 2018. Association of Serum Leptin Levels and Pulmonary Tuberculosis: A Meta-Analysis. *Journal of thoracic disease* 10 (2) : 1027-2014.
- Zahra, S. dan Y. Iskandar. 2017. Review Artikel: Kandungan Senyawa Kimia Dan Bioaktivitas Ocimum Basilicum L. *Farmaka* 15(3): 143-152.
- Zhuang, W. R., Y. Wang, P.F. Cui, L. Xing, J. Lee, D. Kim, H.L. Jiang, Y.K. Oh. 2018. Applications of  $\pi$ - $\pi$  stacking interactions in the design of drug-delivery systems. *Journal of Controlled Release* 294: 311-326.
- Zuñiga, J., D. Torres-García, T. Santos-Mendoza, T.S. Rodriguez-Reyna, J. Granados, dan E.J. Yunis. 2012. Cellular and humoral mechanisms involved in the control of tuberculosis. *Clinical and Developmental Immunology*