



DAFTAR PUSTAKA

- Adyanti, V. V., Bestari, A. N. dan Sulaiman, T. N. S., 2016 “Optimization of Famotidine Floating Tablet Formula with Combination of Hydroxy Propyl Methyl Cellulose K100M and Ethyl Cellulose Polymer,” *Majalah Farmaseutik*, Vol 12 . No . 2 2016, 12(2), hal. 466–479.
- Agustin, R. dan Ratih, H., 2015 “Profil Disolusi Tablet Sustained Release Natrium Diklofenak dengan Menggunakan Matriks Metolose 90 SH 4000,” *Jurnal Sains Farmasi & Klinis*, 1(2), hal. 176–183. doi: 10.29208/jsfk.2015.1.2.33.
- Ainurofiq, A. dan Azizah, N., 2016 “Perbandingan Penggunaan Bahan Penghancur Secara Intragranular, Ekstragranular, dan Kombinasinya,” *Journal of Pharmaceutical Science and Clinical Research*, 01(01), hal. 1–9. doi: 10.20961/jpscr.v1i1.682.
- Almquist, J., Bendrioua, L. dan Adiels, C. B., 2015 “A nonlinear mixed effects approach for modeling the cell-to-cell variability of Mig1 dynamics in yeast,” *PLoS ONE*, 10(4), hal. 1–32. doi: 10.1371/journal.pone.0124050.
- Almuksiti, F., Astuti, ika Y. dan Setiawan, D., 2010 “Profil Disolusi In Vitro Tablet LEvofloksasin Generik dan Levofloksasin Non Generik,” *Pharmacy*, 07(1), hal. 35–45.
- Anindita, M. M., 2019 *Optimasi Formula Tablet Gastroretentif Mucoadhesive Levofloksasin Mengggunakan Kombinasi Matriks HPMC K100M dan Natrium Alginat*. Skripsi, Universitas Gadjah Mada, Yogyakarta.
- Chavda, H. V., Patel, C. N. dan Anand, I. S., 2010 “Biopharmaceutics classification system,” *Systematic Reviews in Pharmacy*, 1(1), hal. 62–69. doi: 10.4103/0975-8453.59514.
- Departemen Kesehatan, 2014 *Farmakope Indonesia*. Edisi v. Departemen Kesehatan Republik Indonesia, Jakarta.
- Elisabeth, V., Yamlean, P. V. Y. dan Supriati, H. S., 2018 “Formulasi Sediaan Granul dengan Bahan Pengikat Pati Kulit Pisang Goroho (*Musa acuminata* L.) Dan Pengaruhnya Pada Sifat Fisik Granul,” *Pharmacon Jurnal Ilmiah Farmasi*, 7(4), hal. 1–11.
- Enderle, J. D., 2012 *Compartmental Modeling*. 3 ed, Elsevier. 3 ed. Elsevier Inc. doi: 10.1016/B978-0-12-374979-6.00007-1.
- Fahmy, R. dan Martinez, M. N., 2019 “Primer on the science of in vitro dissolution testing of oral dosage forms and factors influencing its biological relevance,” *Dissolution Technologies*, 26(1), hal. 14–26. doi: 10.14227/DT260119P14.



- Fatmawati, D. A., Widjaja, B. dan Setyawan, D., 2017 “Optimasi Tablet Levofloksasin yang Mengandung Bahan Pengikat PVP K-30 dan Disintegrant Vivasol,” *Jurnal Sains Farmasi & Klinis*, 4(2), hal. 9–15. doi: 10.29208/jsfk.2017.4.1.155.
- Fidler, M., Wilkins, J. J. dan Hooijmaijers, R., 2019 “Nonlinear Mixed-Effects Model Development and Simulation Using nlmixr and Related R Open-Source Packages,” *CPT: Pharmacometrics and Systems Pharmacology*, 8(9), hal. 621–633. doi: 10.1002/psp4.12445.
- Grillon, A., Schramm, F. dan Kleinberg, M., 2016 “Comparative activity of ciprofloxacin, levofloxacin and moxifloxacin against Klebsiella pneumoniae, Pseudomonas aeruginosa and Stenotrophomonas maltophilia assessed by minimum inhibitory concentrations and time-kill studies,” *PLoS ONE*, 11(6), hal. 1–10. doi: 10.1371/journal.pone.0156690.
- Hadi, M., Mufrod dan Ikasari, E. D., 2014 “Optimasi Suhu dan Waktu Pengeringan Granul Tablet Kunyah Bee Polen,” *Majalah Farmaseutik*, 10(1), hal. 176–181.
- Halim, A., Hariyani, R. dan Octavia, M. D., 2010 “Profil Disolusi Parasetamol Mukoadhesif Menggunakan Kombinasi Polimer Natrium Karboksimetilselulosa dan Gom Arab,” *Jurnal Farmasi Higea*, 2(1), hal. 51–62.
- Hassan, H. A., Charoo, N. A. dan Ali, A. A., 2015 “Establishment of a bioequivalence- indicating dissolution specification for candesartan cilexetil tablets using a convolution model,” *Dissolution Technologies*, 22(1), hal. 36–43. doi: 10.14227/DT220115P36.
- Khan, A. B., Mahamana, R. dan Pal, E., 2014 “Review on Mucoadhesive Drug Delivery System: Novel Approaches in Modern Era,” *Rajiv Gandhi University of Health Sciences Journal of Pharmaceutical Sciences*, 4(4), hal. 128–141. doi: 10.5530/rjps.2014.4.2.
- Koeppe, M. O., Cristofoletti, R. dan Fernandes, E. F., 2011 “Biowaiver Monographs for Immediate Release Solid Oral Dosage Forms: Levofloxacini,” *Journal of pharmaceutical sciences*, 100(5), hal. 1628–1636. doi: 10.1002/jps.22413.
- Laili, N., Komala, A. M. dan Maulida, H., 2019 “Optimasi Konsentrasi Amylum Sagu (*Metroxylon rumphii*) sebagai Co-Processed pada Pembuatan Tablet Teofilin,” *Pharmacon: Jurnal Farmasi Indonesia*, 14(2), hal. 72–80. doi: 10.23917/pharmacon.v14i2.6422.
- Laínez-Aguirre, J. M., Blau, G. E. dan Reklaitis, G. V., 2014 “Postulating Compartmental Models Using a Flexible Approach,” *Computer Aided Chemical Engineering*. Elsevier, 33(2011), hal. 1171–1176. doi: 10.1016/B978-0-444-63455-9.50030-1.



- Leblond, D., Altan, S. dan Novick, S., 2016 “In vitro dissolution curve comparisons: A critique of current practice,” *Dissolution Technologies*, 23(1), hal. 14–23. doi: 10.14227/DT230116P14.
- Madgulkar, A., Kadam, S. dan Pokharkar, V., 2008 “Studies on formulation development of mucoadhesive sustained release itraconazole tablet using response surface methodology,” *AAPS PharmSciTech*, 9(3), hal. 998–1005. doi: 10.1208/s12249-008-9119-8.
- Moghimipour, E., Aghel, N. dan Adelpour, A., 2012 “Formulation and characterization of oral mucoadhesive chlorhexidine tablets using cordia myxa mucilage,” *Jundishapur Journal of Natural Pharmaceutical Products*, 7(4), hal. 129–133. doi: 10.5812/jjnpp.3388.
- Mould, D. R. dan Upton, R. N., 2012 “Basic concepts in population modeling, simulation, and model-based drug development,” *Pharmacometrics and Systems Pharmacology*, 1(1), hal. 1–14. doi: 10.1038/psp.2012.4.
- Mulyati, A. H., Sutanto dan Apriyani, D., 2011 “Validasi metode analisis kadar Ambroksol Hidroklorida dalam sediaan tablet cystelis® secara kromatografi cair kinerja tinggi,” *Ekologia*, 11(2), hal. 36–45.
- Noel, G. J., 2009 “A Review of Levofloxacin for the Treatment of Bacterial Infections,” *Clinical Medicine. Therapeutics*, 1, hal. CMT.S28. doi: 10.4137/cmt.s28.
- Notario, D., 2018 “Pemodelan Farmakokinetika Berbasis Populasi dengan R: Model Dua Kompartemen Ekstravaskuler,” *Jurnal Farmasi Galenika (Galenika Journal of Pharmacy)*, 4(1), hal. 26. doi: 10.22487/j24428744.2018.v4.i1.9777.
- Novotny, J. A., Greif, P. dan Boston, R. C., 2003 “WinSAAM: Application and Explanation of Use,” in *Mathematical Modelling in Nutrition and the Health Sciences*. New York: Kluwer Academic/Plenum Publishers, hal. 343–351.
- Nugroho, A. K., Hakim, A. R. dan Hakim, L., 2017 “Population-based approach to analyze sparse sampling data in biopharmaceutic and pharmacokinetic studies using nonmem and Monolix,” *Indonesian Journal of Pharmacy*, 28(4), hal. 205–212. doi: 10.14499/indonesianjpharm28iss4pp205.
- Putri, A. N. dan Fitriah, R., 2019 “Formulation and Optimization of Bisoprolol Fumarate Orally Fast Dissolving Film with Combination of HPMC E15 and Maltodextrin as Matrix,” *Indonesian Journal of Pharmaceutical Science and Technology*, 1(1), hal. 42–51.
- Qureshi, S. A., 2006 “Developing Discriminatory Drug Dissolution Tests and Profiles: Some Thoughts for Consideration on the Concept and Its Interpretation,” *Dissolution Technologies*, hal. 18–23. doi: dx.doi.org/10.14227/DT130406P18.



- Rahmawatie, L. S., Sulaiman, T. N. S. dan M, O. R., 2010 “Perbandingan Profil Disolusi Tablet Metoklopramid Hidroklorida Generik Berlogo dan Bermerek,” *Majalah Farmaseutik*. Yogyakarta, 6, hal. 49–55. doi: <https://doi.org/10.22146>.
- Reddy, B. V. dan Sekar, M., 2015 “Formulation and Evaluation of Mucoadhesive Tablets of Metoprolol Tartarate,” *Asian Journal of Medical and Pharmaceutical Sciences*, 3(2), hal. 255–262.
- Saccone, C. D., Tessore, J. dan Olivera, S. A., 2004 “Statistical properties of the dissolution test of USP,” *Dissolution Technologies*, 11(3), hal. 25–28. doi: 10.14227/DT110304P25.
- Schoemaker, R., Fidler, M. dan Laveille, C., 2019 “Performance of the SAEM and FOCEI Algorithms in the Open-Source, Nonlinear Mixed Effect Modeling Tool nlmixr,” *CPT: Pharmacometrics and Systems Pharmacology*, 8(12), hal. 923–930. doi: 10.1002/psp4.12471.
- Shaikh, R., Raj Singh, T. dan Garland, M., 2011 “Mucoadhesive drug delivery systems,” *Journal of Pharmacy and Bioallied Sciences*, 3(1), hal. 89–100. doi: 10.4103/0975-7406.76478.
- Stefanovski, D., Moate, P. J. dan Boston, R. C., 2003 “WinSAAM: A windows-based compartmental modeling system,” *Metabolism: Clinical and Experimental*, 52(9), hal. 1153–1166. doi: 10.1016/S0026-0495(03)00144-6.
- Thakkar, V. T., Shah, P. A. dan Soni, T. G., 2008 “Fabrication and evaluation of levofloxacin hemihydrate floating tablet,” *Research in Pharmaceutical Sciences*, 3(2), hal. 1–8.
- Tornøe, C. W., Agersø, H. dan Jonsson, E. N., 2004 “Non-linear mixed-effects pharmacokinetic/pharmacodynamic modelling in NLME using differential equations,” *Computer Methods and Programs in Biomedicine*, 76(1), hal. 31–40. doi: 10.1016/j.cmpb.2004.01.001.
- Wastney, M. E., Patterson, B. H. dan Linares, O. A., 2012 *Strategies and Software, Investigating Biological Systems Using Modeling*. London: Academic Press. doi: 10.1016/C2009-0-02060-1.
- Wisudyaningsih, B., 2012 “Studi preformulasi: validasi metode spektrofotometri ofloksasin dalam larutan dapar fosfat,” *Stomatognatic*, 9(2), hal. 77–81.
- Yanuar, R. F., Sulaiman, T. N. S. dan Kuncahyo, I., 2015 “Optimasi Formulasi Tablet Sustained- Release Nifedipin Kombinasi Natrium Alginat Dan Hpmc K15M Sebagai Matriks Mukoadhesif Secara Simplex Lattice,” *Majalah Farmaseutik*, 11(3), hal. 353–361. doi: 10.1038/nature02259.
- Zhang, J., Xu, J. F. dan Liu, Y. Bin, 2009 “Population pharmacokinetics of oral levofloxacin 500 mg once-daily dosage in community-acquired lower respiratory tract infections: Results of a prospective multicenter study in



UNIVERSITAS
GADJAH MADA

Aplikasi Pendekatan Berbasis Populasi Menggunakan Perangkat Lunak NLMIXR dalam Analisis Profil

Disolusi Tablet Mucoadhesive Levofloksasin

SYURYATI RAMADHANIA, Prof. Dr. apt. Akhmad Kharis N., M.Si.; Prof. Dr. apt. Djoko Wahyono, S.U.

Universitas Gadjah Mada, 2020 | Diunduh dari <http://etd.repository.ugm.ac.id/>

China," *Journal of Infection and Chemotherapy*. Elsevier, 15(5), hal. 293–300. doi: 10.1007/s10156-009-0714-8.