



DAFTAR PUSTAKA

- Abdel-ghany, M.F., Abdel-aziz, O., dan Mohammed, Y.Y., 2015. Validation of four different spectrophotometric methods for simultaneous determination of Domperidone and Ranitidine in bulk and pharmaceutical formulation. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, **149**: 30–40.
- Akhtar, N., Singh, V., Yusuf, M., dan Khan, R.A., 2020. Non-invasive drug delivery technology: development and current status of transdermal drug delivery devices, techniques and biomedical applications. *Biomedical Engineering / Biomedizinische Technik*, **65**: 243–272.
- Akhter, S., Jain, G.K., Ahmad, F.J., Khar, R.K., Jain, N., Khan, Z.I., dkk., 2008. Investigation of Nanoemulsion System for Transdermal Delivery of Domperidone : Ex-vivo and in vivo Studies. *Current Nanoscience*, **4**: 381–390.
- Al Hanbali, O.A., Khan, H.M.S., Sarfraz, M., Arafat, M., Ijaz, S., dan Hameed, A., 2019. Transdermal patches: Design and current approaches to painless drug delivery. *Acta Pharmaceutica*, **69**: 197–215.
- Ali, M.M. dan Rajab, N.A., 2014. Preparation and Evaluation of Domperidone Transdermal Patches. *World Journal of Pharmaceutical Research*, **3**: 50–78.
- Alim, M., Karna, S., Chaturvedi, S., dan Agrawal, V.K., 2015. Validated UV spectrophotometric method for estimation of domperidone for dissolution study. *Der Pharmacia Lettre*, **7**: 53–58.
- Allen, L.V., 2010. Dosage Form Design: Pharmaceutical and Formulation Considerations, dalam: *Ansel's Pharmaceutical Dosage Forms and Drug Delivery Systems*. hal. 91–141.
- Allena, R.T., Yadav, H.K.S., Sandina, S., dan Sarat Chandra Prasad, M., 2012. Preparation and evaluation of transdermal patches of metformin hydrochloride using natural polymer for sustained release. *International Journal of Pharmacy and Pharmaceutical Sciences*, **4**: 297–302.
- Alsaqr, A., Rasouly, M., dan Musteata, F.M., 2015. Investigating Transdermal Delivery of Vitamin D3. *AAPS PharmSciTech*, **16**: 963–972.
- Ammar, H.O., Ghorab, M., El-Nahhas, S.A., dan Kamel, R., 2009. Polymeric Matrix System for Prolonged Delivery of Tramadol Hydrochloride, Part I: Physicochemical Evaluation. *AAPS PharmSciTech*, **10**: 7–20.
- Asad, A., Mmereki, B.T., dan Donaldson, D.J., 2004. Enhanced uptake of water by oxidatively processed oleic acid. *Atmospheric Chemistry and Physics*, **4**: 2083–2089.
- Banweer, J., Pandey, S., dan Pathak, A.K., 2010. Formulation, Optimization and Evaluation of Matrix type Transdermal system of Lisinopril Dihydrate Using Permeation Enhancers. *Drug Invention Today*, 134–137.
- Behera, S., Ghanty, S., Ahmad, F., Santra, S., dan Banerjee, S., 2012. UV-Visible Spectrophotometric Method Development and Validation of Assay of



- Paracetamol Tablet Formulation. *Journal of Analytical & Bioanalytical Techniques*, **3**: 1–5.
- Binarjo, A. dan Nugroho, A.K., 2014. Permeasi Transdermal Losartan In Vitro dari Larutan dengan Variasi Kadar Losartan dan Propilen Glikol. *Valensi*, **4**: 6–12.
- Bodenlenz, M., Augustin, T., Birngruber, T., Tiffner, K.I., Boulgaropoulos, B., Schwingenschuh, S., dkk., 2020. Variability of Skin Pharmacokinetic Data: Insights from a Topical Bioequivalence Study Using Dermal Open Flow Microperfusion. *Pharmaceutical Research*, **37**: 204.
- Bolton, S. dan Bon, C., 2004. *Pharmaceutical Statistics: Practical and Clinical Applications*. Marcel Dekker Inc, New York.
- British Pharmacopoeia, 2009. *British Pharmacopoeia*. The British Pharmacopoeia Commission, London.
- Chandra, A., Sharma, P., dan Irchhiaya, R., 2009. Effect of alcohols and enhancers on permeation enhancement of ketorolac. *Asian Journal of Pharmaceutics*, **3**: 37.
- Council of Europe, 2005. *European Pharmacopoeia*. Council of Europe, Strasbourg.
- Daublain, P., Feng, K.-I., Altman, M.D., Martin, I., Mukherjee, S., Nofsinger, R., dkk., 2017. Analyzing the Potential Root Causes of Variability of Pharmacokinetics in Preclinical Species. *Molecular Pharmaceutics*, **14**: 1634–1645.
- Dhawan, B., Aggarwal, G., dan Harikumar, S., 2014. Enhanced transdermal permeability of piroxicam through novel nanoemulgel formulation. *International Journal of Pharmaceutical Investigation*, **4**: 65–76.
- D'Souza, R.S. dan Hooten, W.M., 2021. Extrapyramidal Symptoms, dalam: *StatPearls*. StatPearls Publishing, Treasure Island (FL).
- EMA, 2011. Guideline on Bioanalytical Method Validation. *European Medicines Agency*, 1–23.
- Ermawati, D.E. dan Prilantari, H.U., 2019. Pengaruh Kombinasi Polimer Hidroksipropilmetselulosa dan Natrium Karboksimetilselulosa terhadap Sifat Fisik Sediaan Matrix-based Patch Ibuprofen. *Journal of Pharmaceutical Science and Clinical Research*, **02**: 109–119.
- Fatmawaty, A. dan Nisa, M., 2017. Formulasi Patch Ekstrak Etanol Daun Murbei (*Morus Alba L.*) dengan Variasi Konsentrasi Polimer Polivinil Pirolidon dan Etil Selulosa. *Journal of Pharmaceutical and Medicinal Sciences*, **2**: 17–20.
- González, A.G. dan Herrador, M.Á., 2007. A practical guide to analytical method validation, including measurement uncertainty and accuracy profiles. *Trends in Analytical Chemistry*, **26**: 227–238.
- Güngör, S. dan Bergışadi, N., 2004. Effect of penetration enhancers on in vitro percutaneous penetration of nimesulide through rat skin. *Die Pharmazie*, **59**: 39–41.
- Hakim, L., 2017. *Farmakokinetik*, 2nd ed. Bursa Ilmu, Yogyakarta.



- Haque, T. dan Talukder, M.M.U., 2018. Chemical Enhancer: A Simplistic Way to Modulate Barrier Function of the Stratum Corneum. *Advanced Pharmaceutical Bulletin*, **8**: 169–179.
- Haynes, W.M., 2010. *CRC Handbook of Chemistry and Physics*, 91st ed. CRC Press Inc., Boca Raton, FL.
- Helmy, S.A. dan El Bedaiwy, H.M., 2014. Pharmacokinetics and comparative bioavailability of domperidone suspension and tablet formulations in healthy adult subjects. *Clinical Pharmacology in Drug Development*, **3**: 126–131.
- Hendriati, L. dan Nugroho, A.K., 2009. Pengaruh campuran asam oleat-propilen glikol dan iontoporesis terhadap transpor transdermal propranolol. *Majalah Farmasi Indonesia*, **20**: 217–223.
- Hendriati, L. dan Nugroho, A.K., 2011. Prediction of Transdermal Transport Kinetics of Propranolol HCl by WinSAAM Program. *Jurnal Ilmu Kefarmasian Indonesia*, **9**: 60–66.
- Herman, A. dan Herman, A.P., 2015. Essential oils and their constituents as skin penetration enhancer for transdermal drug delivery: A review. *Journal of Pharmacy and Pharmacology*, **67**: 473–485.
- Indrati, O., 2012. 'Pengaruh asam oleat, propilen glikol dan isopropil alkohol pada formula patch transdermal kalium losartan dengan matriks hidroksipropil metilselulosa dan etil selulosa'. Universitas Gadjah Mada, Yogyakarta.
- Jantharaprapap, R. dan Stagni, G., 2007. Effects of penetration enhancers on in vitro permeability of meloxicam gels. *International Journal of Pharmaceutics*, **343**: 26–33.
- Jiang, S.J., Hwang, S.M., Choi, E.H., Elias, P.M., Ahn, S.K., dan Lee, S.H., 2000. Structural and functional effects of oleic acid and iontophoresis on hairless mouse stratum corneum. *The Journal of Investigative Dermatology*, **114**: 64–70.
- Jung, E., Young, E., Choi, H., Ban, S., Choi, S., Sun, J., dkk., 2015. Development of drug-in-adhesive patch formulations for transdermal delivery of fl uoxetine : In vitro and in vivo evaluations. *International Journal of Pharmaceutics*, **487**: 49–55.
- Karande, P. dan Mitragotri, S., 2009. Enhancement of transdermal drug delivery via synergistic action of chemicals. *Biochimica et Biophysica Acta (BBA) - Biomembranes*, **1788**: 2362–2373.
- Khan, A., Iqbal, Z., Khadra, I., Ahmad, L., Khan, A., Khan, M.I., dkk., 2016. Simultaneous determination of domperidone and Itopride in pharmaceuticals and human plasma using RP-HPLC/UV detection: Method development, validation and application of the method in in-vivo evaluation of fast dispersible tablets. *Journal of Pharmaceutical and Biomedical Analysis*, **121**: 6–12.
- Khan, I.N., Khan, M.I., Mazumder, K., Ajrin, M., Sen, N., Rashid, A., dkk., 2012. Characterization and ex-vivo skin permeation study of domperidone maleate transdermal patch. *Bulletin Pharmaceutical Research*, **2**: 15–21.
- Kumar, S., Sairam, R., Anandbabu, S., Karpagavalli, L., Maheswaran, A., dan Narayanan, N., 2012. Formulation and evaluation of transdermal patches of



- Salbutamol. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*, **3**: 1132–1139.
- Lakshmi, P.K., Samratha, K., Prasanthi, D., Veeresh, B., dan Amoolya, C., 2017. Oils As Penetration Enhancers for Improved Transdermal Drug Delivery: a Review. *International Research Journal of Pharmacy*, **8**: 9–17.
- Lane, M.E., 2013. Skin penetration enhancers. *International Journal of Pharmaceutics*, **447**: 12–21.
- Larrucea, E., Arellano, A., Santoyo, S., dan Ygartua, P., 2001. Combined effect of oleic acid and propylene glycol on the percutaneous penetration of tenoxicam and its retention in the skin. *European Journal of Pharmaceutics and Biopharmaceutics*, **52**: 113–119.
- Latha, S., Selvamani, P., Thirunavukkarasu, C., Pal, T.K., dan Ghosh, L.K., 2011. Development and Comparative Evaluation of Trans Dermal Therapeutic System for Antiemetic Therapy. *Asian Journal of Chemistry*, **23**: 5267–5270.
- Law, R.M., Ngo, M.A., dan Maibach, H.I., 2020. Twenty Clinically Pertinent Factors/Observations for Percutaneous Absorption in Humans. *American Journal of Clinical Dermatology*, **21**: 85–95.
- Levin, J. dan Maibach, H., 2012. Interindividual Variation in Transdermal and Oral Drug Deliveries. *Journal of Pharmaceutical Sciences*, **101**: 4293–4307.
- Li, N., Quan, P., Wan, X., Liu, C., Liu, X., dan Fang, L., 2017. Mechanistic insights of the enhancement effect of sorbitan monooleate on olanzapine transdermal patch both in release and percutaneous absorption processes. *European Journal of Pharmaceutical Sciences*, **107**: 138–147.
- Liu, C., Hui, M., Quan, P., dan Fang, L., 2016. Drug in adhesive patch of palonosetron: Effect of pressure sensitive adhesive on drug skin permeation and in vitro-in vivo correlation. *International Journal of Pharmaceutics*, **511**: 1088–1097.
- LoBrutto, R. dan Patel, T., 2006. Method Validation, dalam: Kazakevich, Y. dan LoBrutto, R. (Editor), *HPLC for Pharmaceutical Scientists*. John Wiley & Sons, Inc., Hoboken, NJ, USA, hal. 455–502.
- Madishetti, S.K., Palem, C.R., Gannu, R., Thatipamula, R.P., Panakanti, P.K., dan Yamsani, M.R., 2010. Development of domperidone bilayered matrix type transdermal patches: physicochemical, in vitro and ex vivo characterization. *Daru : journal of Faculty of Pharmacy, Tehran University of Medical Sciences*, **18**: 221–9.
- Marjanović-Balaban, Z., Jelić, D., Antunović, V., dan Gojković, V., 2014. Determination Of Water Content In Pharmaceutical Substances. *Journal of Hygienic Engineering and Design*, **6**: 137–141.
- Marson, B.M., Concentino, V., Junkert, A.M., Fachi, M.M., Vilhena, R.O., dan Pontarolo, R., 2020. Validation of analytical methods in a pharmaceutical quality system: an overview focused on HPLC methods. *Química Nova*, **43**: 1190–1203.
- MIMS, 2018. 'Domperidone: Indication, Dosage, Side Effect, Precaution | MIMS.com'. URL: [http://etd.repository.ugm.ac.id/](#)



- <http://www.mims.com/indonesia/drug/info/domperidone?mtype=generic>
(diakses tanggal 17/3/2018).
- Mo, L., Lu, G., Ou, X., dan Ouyang, D., 2021. Formulation and development of novel control release transdermal patches of carvedilol to improve bioavailability for the treatment of heart failure. *Saudi Journal of Biological Sciences*, S1319562X21007762.
- Mortazavi, S.A. dan Aboofazeli, R., 2003. An Investigation into the Effect of Various Penetration Enhancers on Percutaneous Absorption of Piroxicam. *Iranian Journal of Pharmaceutical Research*, **2**: 135–140.
- Muhtadi, W.K., Novitasari, L., Martien, R., dan Danarti, R., 2019. Factorial Design As The Method In The Optimization Of Timolol Maleate-Loaded Nanoparticle Prepared By Ionic Gelation Technique. *International Journal of Applied Pharmaceutics*, 66–70.
- National Center for Biotechnology Information, 2021. 'PubChem Compound Summary for CID 5255699'. URL: <https://pubchem.ncbi.nlm.nih.gov/compound/5255699> (diakses tanggal 11/3/2021).
- Nicolazzo, J.A. dan Finnin, B.C., 2008. In Vivo and In Vitro Models for Assessing Drug Absorption Across the Buccal Mucosa, dalam: *Drug Absorption Studies: In Situ, In Vitro, and In Silico Models*. AAPS Press, New York, hal. 89–111.
- Nisa, M., 2013. 'Pengaruh kadar campuran asam oleat dan isopropil alkohol terhadap sifat fisik dan profil transpor patch kalium losartan dengan matriks polivinil alkohol dan polivinilpirolidon', . Universitas Gadjah Mada, Yogyakarta.
- Nishikawa, N., Nagai, M., Tsujii, T., Iwaki, H., Yabe, H., dan Nomoto, M., 2012. Coadministration of Domperidone Increases Plasma Levodopa Concentration in Patients With Parkinson Disease: *Clinical Neuropharmacology*, **35**: 182–184.
- Notario, D., Martono, S., Ikawati, Z., Hakim, A.R., Jannah, F., dan Lukitaningsih, E., 2017. A Rapid and Simple High-Performance Liquid Chromatographic Method for Determination of Levofloxacin in Human Plasma. *Indonesian Journal of Chemistry*, **17**: 54–62.
- Nugroho, A.K., Binnarjo, A., Hakim, A.H., dan Ermawati, Y., 2014. Compartmental Modeling Approach of Losartan Transdermal Transport in Vitro. *Indonesian Journal of Pharmacy*, **25**: 31–38.
- Nugroho, A.K., Della-Pasqua, O., Danhof, M., dan Bouwstra, J.A., 2005. Compartmental Modeling of Transdermal Iontophoretic Transport II: In Vivo Model Derivation and Application. *Pharmaceutical Research*, **22**: 335–346.
- Nugroho, A.K., Pasqua, O.D., Danhof, M., dan Bouwstra, J.A., 2004. Compartmental Modeling of Transdermal Iontophoretic Transport: I. In Vitro Model Derivation and Application. *Pharmaceutical Research*, **21**: 1974–1984.
- Nuryanti, 2012. 'Pengaruh propilen glikol, asam oleat, dan isopropil alkohol pada sifat fisikokimia dan transpor in vitro formula patch transdermal kalium



losartan dengan polimer hidroksipropil metil selulosa dan eudragit RL100', . Universitas Gadjah Mada, Yogyakarta.

- Nuryanti, Nugroho, A.K., dan Martien, R., 2016. Pengaruh Propilen Glikol , Asam Oleat , Dan Isopropilalkohol Pada Formula Patch Transdermal Kalium Losartan. *Acta Pharmaciae Indonesia*, **4**: 7–14.
- Pabla, D. dan Zia, H., 2007. A Comparative Permeation/Release Study of Different Testosterone Gel Formulations. *Drug Delivery*, **14**: 389–396.
- Palem, C.R., Goda, S., Dudhipala, N.R., dan Yamsani, M.R., 2016. Development of Ultra Fast Liquid Chromatography (UFLC) Method for Fluorescence Detection of Domperidone in Human Serum and Application to Pharmacokinetic Study. *American Journal of Analytical Chemistry*, **07**: 12–21.
- Pastore, M.N., Kalia, Y.N., Horstmann, M., dan Roberts, M.S., 2015. Transdermal patches: history, development and pharmacology: History of transdermal patches. *British Journal of Pharmacology*, **172**: 2179–2209.
- Patel, D., Chaudhary, S.A., Parmar, B., dan Bhura, N., 2012. Transdermal Drug Delivery System: A Review. *Indian Journal of Research in Pharmacy and Biotechnology*, **1**: 66–75.
- Pawestri, S.A., Nugroho, A.K., Lukitaningsih, E., dan Purwantiningsih, 2021a. Evaluation and Optimization on Developed Transdermal Patch of Domperidone Formulation. *International Journal of Pharmaceutical Research*, **13**: 3345–3353.
- Pawestri, Sekar Ayu, Nugroho, A.K., Lukitaningsih, E., dan Purwantiningsih, P., 2021b. Validation and Quantification of Domperidone in Spiked Plasma Matrix Using Reversed Phase HPLC-UV Method. *Indonesian Journal of Chemistry*, .
- Pawestri, S.A, Nugroho, A.K., dan Lukitaningsih, E., 2021c. In vitro Transdermal Transport of Domperidone by Compartmental Modeling Approach. *Indonesian Journal of Pharmacy*, **32**: 10–16.
- Prabhu, P., Shah, S., dan Gundad, S., 2011. Formulation development and investigation of domperidone transdermal patches. *International Journal of Pharmaceutical Investigation*, **1**: 240–246.
- Prajapati, S.T., Patel, C.G., dan Patel, C.N., 2011. Formulation and Evaluation of Transdermal Patch of Repaglinide. *ISRN Pharmaceutics*, **2011**: 1–9.
- Prasad, A.R. dan Thireesha, B., 2018. UV-spectrophotometric method development and validation for the determination of lornoxicam in microsponges. *International Journal of Applied Pharmaceutics*, **10**: 74–78.
- Proksch, E., 2018. pH in nature, humans and skin. *The Journal of Dermatology*, **45**: 1044–1052.
- Pudyastuti, B., Nugroho, A.K., dan Martono, S., 2014. Formulasi Matriks Transdermal Pentagamavunon-0 dengan Kombinasi Polimer PVP K30 dan Hidroksipropil Metilselulosa. *Jurnal Farmasi Sains dan Komunitas*, **11**: 44–49.
- Ramadan, E., Borg, T., Abdelghani, G.M., dan Saleh, N.M., 2018. Design and in vivo pharmacokinetic study of a newly developed lamivudine transdermal patch. *Future Journal of Pharmaceutical Sciences*, **4**: 166–174.



- Rani, S., Saroha, K., Syan, N., dan Mathur, P., 2011. Transdermal Patches a successful tool in Transdermal Drug Delivery System: An overview. *Der Pharmacia Sinica*, **2**: 17–29.
- Rowe, R., Sheskey, P., dan Quinn, M., 2009. *Handbook of Pharmaceutical Excipients*, 6. ed. ed. APhA, (PhP) Pharmaceutical Press, London.
- Rutland, C.S., Cigler, P., dan Kubale, V., 2019. *Reptilian Skin and Its Special Histological Structures*, Veterinary Anatomy and Physiology. IntechOpen.
- Saleem, M.N. dan Idris, M., 2016. Formulation Design and Development of a Unani Transdermal Patch for Antiemetic Therapy and Its Pharmaceutical Evaluation. *Scientifica*, **2016**: 1–5.
- Sarath, C., Vipin, K., Augusthy, A.R., Shahin, M., dan Sabna, N.S., 2014. Effectiveness of Sodium CMC as a Polymer for the Development of Transdermal Patches Containing Paracetamol IP in Paediatric Category. *British Biomedical Bulletin*, **2**: 174–186.
- Setyawan, E.I., Rohman, A., Setyowati, E.P., dan Nugroho, A.K., 2021. The combination of simplex lattice design and chemometrics in the formulation of green tea leaves as transdermal matrix patch. *Pharmacia*, **68**: 275–282.
- Shah, S., Joshi, R., dan Prabhakar, P., 2010. Formulation and evaluation of transdermal patches of papaverine hydrochloride. *Asian Journal of Pharmaceutics*, **4**: 79.
- Shirisha, S., Joshi, G., Sahoo, S.K., dan Rao, Y.M., 2017. Preparation and Evaluation of Matrix Type Transdermal Patches of Domperidone Maleate: in vitro and ex vivo Characterization. *Indian Journal of Pharmaceutical Education and Research*, **51**: 517–524.
- Singh, I. dan Morris, A., 2011. Performance of transdermal therapeutic systems: Effects of biological factors. *International Journal of Pharmaceutical Investigation*, **1**: 4–9.
- Snyder, L.R., Kirkland, J.J., dan Dolan, J.W., 2009. *Introduction to Modern Liquid Chromatography*. John Wiley & Sons, Inc., Hoboken, NJ, USA.
- Stefanovski, D., Moate, P.J., dan Boston, R.C., 2003. WinSAAM: A windows-based compartmental modeling system. *Metabolism: Clinical and Experimental*, **52**: 1153–1166.
- Sun, Y., Fang, L., Zhu, M., Li, W., Meng, P., Li, L., dkk., 2009. A drug-in-adhesive transdermal patch for S-amlodipine free base: In vitro and in vivo characterization. *International Journal of Pharmaceutics*, **382**: 165–171.
- Touitou, E., 2002. Drug delivery across the skin. *Expert Opin. Biol. Ther.*, **2**: 723–733.
- Toutain, P.L. dan Bousquet-Melou, A., 2004. Bioavailability and its assessment. *Journal of Veterinary Pharmacology and Therapeutics*, **27**: 455–466.
- Trommer, H. dan Neubert, R.H.H., 2006. Overcoming the stratum corneum: the modulation of skin penetration. A review. *Skin Pharmacology and Physiology*, **19**: 106–121.
- Tu, M.C., Lillywhite, H.B., Menon, J.G., dan Menon, G.K., 2002. Postnatal ecdysis establishes the permeability barrier in snake skin: new insights into barrier lipid structures. *The Journal of Experimental Biology*, **205**: 3019–3030.



- USP NF, 2007. <905> Uniformity of Dosage Units, dalam: *The United States Pharmacopeia*.
- Vera Candiotti, L., De Zan, M.M., Câmara, M.S., dan Goicoechea, H.C., 2014. Experimental design and multiple response optimization. Using the desirability function in analytical methods development. *Talanta*, **124**: 123–138.
- Vijaya, R. dan Ruckmani, K., 2011. In vitro and In vivo characterization of the transdermal delivery of sertraline hydrochloride Films. *DARU Journal of Pharmaceutical Sciences*, **19**: 424–432.
- Vikram Singh, A., Nath, L.K., dan Pani, N.R., 2011. Development and validation of analytical method for the estimation of lamivudine in rabbit plasma. *Journal of Pharmaceutical Analysis*, **1**: 251–257.
- Wang, X., Qin, F., Jing, L., Zhu, Q., Li, F., dan Xiong, Z., 2012. Development and validation of UPLC-MS/MS method for determination of domperidone in human plasma and its pharmacokinetic application: UPLC-MS/MS method for determination of domperidone in human plasma. *Biomedical Chromatography*, **27**: 371–376.
- Widiastuti, R., 2012. 'Pengaruh kadar asam oleat, isopropil alkohol, dan propilen glikol terhadap karakteristik fisikokimia patch kalium losartan dengan polimer matriks hydroxypropyl methylcellulose dan polyvinil alcohol beserta profil transpor transdermal in vitro', . Universitas Gadjah Mada, Yogyakarta.
- Wu, D., Tanaka, Y., Jin, Y., Yoneto, K., Alama, T., Quan, Y., dkk., 2014. Development of a novel transdermal patch containing sumatriptan succinate for the treatment of migraine: in vitro and in vivo characterization. *Journal of Drug Delivery Science and Technology*, **24**: 695–701.
- Zayed, G.M., Rasoul, S.A.-E., Ibrahim, M.A., Saddik, M.S., dan Alshora, D.H., 2020. In vitro and in vivo characterization of domperidone-loaded fast dissolving buccal films. *Saudi Pharmaceutical Journal*, **28**: 266–273.
- Zhang, C., Luo, H., Lin, G., Zhu, Z., Zhang, F., Zhang, J., dkk., 2016. Transdermal patches for D-threo-methylphenidate (free base): Formulation aspects and in vivo pharmacokinetics. *Journal of Drug Delivery Science and Technology*, **35**: 50–57.
- Zhang, D., Chen, K., Teng, Y., Zhang, J., Liu, S., Wei, C., dkk., 2012. Determination of Domperidone in Human Plasma using Liquid Chromatography Coupled to Tandem Mass Spectrometry and its Pharmacokinetic Study. *Arzneimittelforschung*, **62**: 128–133.
- Zhang, Y., Huo, M., Zhou, J., dan Xie, S., 2010. PKSolver: An add-in program for pharmacokinetic and pharmacodynamic data analysis in Microsoft Excel. *Computer Methods and Programs in Biomedicine*, **99**: 306–314.