

DAFTAR PUSTAKA

- Abbas, A. dan Litchman, A., 2005. *Cellular and Molecular Immunology*. Elsevir Saunders, Philadelphia.
- Anonim, 2013. *Asean Guideline on Stability Study of Drug Product*, Version 6. ed. Food and Drug Administration.
- Azeem, A., Rizwan, M., Ahmad, F.J., Iqbal, Z., Khar, R.K., Aqil, M., dkk., 2009. Nanoemulsion Components Screening and Selection: a Technical Note. *The American Association of Pharmaceutical Scientists*, **10**: 69–76.
- Badan Pengawas Obat dan Makanan, 2014. *Peraturan Kepala Badan Pengawas Obat dan Makanan Nomor 7 Tahun 2014 Tentang Pedoma Uji Toksisitas Nonklinik Secara In Vivo*. BPOM RI, Jakarta.
- Bahuguna, A., Khan, I., Bajpai, V.K., dan Kang, S.C., 2017. MTT assay to evaluate the cytotoxic potential of a drug. *Bangladesh Journal of Pharmacology*, **12**: 8.
- Bajaj, S., Singla, D., dan Sakhuja, N., 2012. Stability Testing of Pharmaceutical Products. *Journal of Applied Pharmaceutical Science*, **2**: 129-138.
- Balazs, T., 1970. *Measurment of acute toxicity*, In: Paget G. E, editor ."Methods in Toxicology". Blackwell scientific, Oxford.
- Brusewitz, C., Schendler, A., Funke, A., Wagner, T., dan Lipp, R., 2007. Novel poloxamer-based nanoemulsions to enhance the intestinal absorption of active compounds. *International Journal of Pharmaceutics*, **329**: 173–181.
- Brzustewicz, E. dan Bryl, E., 2015. The role of cytokines in the pathogenesis of rheumatoid arthritis - Practical and potential application of cytokines as biomarkers and targets of personalized therapy. *Cytokine*, **76**: 527–536.

- Cherniakov, I., Domb, A.J., dan Hoffman, A., 2015. Self-nano-emulsifying drug delivery systems: an update of the biopharmaceutical aspects. *Expert Opinion on Drug Delivery*, **12**: 1121–1133.
- DiPiro, J.T., 2011. *Pharmacotherapy: A Pathophysiologic Approach Eighth Edition*. The McGraw-Hill Companies, Inc, New York.
- Elnaggar, Y.S.R., El-Massik, M.A., dan Abdallah, O.Y., 2009. Self-nanoemulsifying drug delivery systems of tamoxifen citrate: Design and optimization. *International Journal of Pharmaceutics*, **380**: 133–141.
- Gremeaux, V., Durand, S., Benaim, C., Hérisson, C., Monleaud, J., Hansel, S., dkk., 2013. Evaluation of various ways to deliver information concerning non-steroidal anti-inflammatory drugs to osteoarthritis patients. *Annals of Physical and Rehabilitation Medicine*, **56**: 14–29.
- Gutiérrez, J.M., González, C., Maestro, A., Solè, I., Pey, C.M., dan Nolla, J., 2008. Nano-emulsions: New applications and optimization of their preparation. *Current Opinion in Colloid & Interface Science*, **13**: 245–251.
- Halim, S.A., 2015. Attempt to Explore the Binding Mechanism of IL-1 β Inhibitors via Molecular Docking Studies. *Medicinal Chemistry*, **5**: 452–457.
- Hardini, I., Ikawati, Z., dan Yuniarti, N., 2009. *Activity of Gamavuton-0 on Inflammation and Arthritic Index in Arthritis Rats Induced by Complete Freund's Adjuvant*. Dipresentasikan pada *The 1st International Seminar on Science and Technology 2009 (ISSTEC 2009)*, diselenggarakan oleh FMIPA UII Yogyakarta.
- Hodgson, E. dan Levi, P., 2000. *A Textbook of Modern Toxicology 2nd Ed.* McGraw-Hill Higher Education, Singapore.

Hopade, A., Ayyad, F., dan Ore, Y., 2015. Molecular Docking Studies of Phytocompounds from the Phyllanthus Species as Potential Chronic Pain Modulators. *Scientia Pharmaceutica*, **83**.

ICH, 2013. *Guidance for Industry Q1A(R2) Stability Testing of New Drug Substances and Products*. ICH Steering Committee.

Ikawati, Z., Ismail, H., dan Martien, R., 2013. Pengembangan Nano-GVT-0 dengan teknik SNEDDS (Self-Nano Emulsifying Drug Delivery System) sebagai obat anti arthritis rematoid, kajian toksisitas, farmakokinetik, dan mekanisme aksi molekulernya. *Penelitian Hibah Kompetensi*. Yogyakarta.

Ikawati, Z., Yuniarti, N., dan Margono, S.A., 2014. The Analgesic Effect of a Curcumin Analogue 1,5-bis(4'-hydroxy-3'-methoxyphenyl)-1,4-pentadien-3-on (Gamavuton-0) in acute and persistent pain. *Journal of Pharmaceutical Sciences.*, **4**: 048–051.

Ikawati, Z., Yuniarti, N., dan Margono, S.A., 2014. Acute Toxicity and Suppressive Effects of a Curcumin Analogue Gamavuton-0 (GVT-0) On CFA -Induced Arthritis in rats. *Journal of Pharmaceutical Sciences.*, **4**: 019–023.

Jain, N., Jain, R., Thakur, N., Gupta, B.P., Jain, D.K., dan Jain, S., 2010. Nanotechnology : A Safe And Effective Drug Delivery System. *Asian Journal of Pharmaceutical and Clinical Research*, **3**: 159–165.

Jeevana Jyothi, B. dan Sreelakshmi, K., 2011. Design and Evaluation of Self-Nanoemulsifying Drug Delivery System of Flutamide. *Journal of Young Pharmacists*, **3**: 4–8.

Jin, S. dan Ye, K., 2007. Nanoparticle-Mediated Drug Delivery and Gene Therapy. *Biotechnology Progress*, **23**: 32–41.

Kyatanwar, A.U., 2010. Self micro-emulsifying drug delivery system (SMEDDS) : Review. *Journal of Pharmacy Research*, **3**: 75-83.

- Li, Y.R. dan Kauffman, J.M., 2014. Molecular Medicine of Rheumatoid Arthritis: From Molecular Path Physiology to Novel Therapeutics and Evidence-Based Practice 10. *Annals of Orthopedics & Rheumatology*, **2**: 1-10.
- Lu, C., 1995. Toksikologi *Dasar : Asas, Organ Sasaran, Dan Penilaian Resiko*. UI Press, Jakarta.
- Mahmoud, H., 2013. Design and optimization of self-nanoemulsifying drug delivery systems of simvastatin aiming dissolution enhancement. *African Journal of Pharmacy and Pharmacology*, **7**: 1482–1500.
- Malek, S.N.A., Phang, C.W., Ibrahim, H., Abdul Wahab, N., dan Sim, K.S., 2011. Phytochemical and Cytotoxic Investigations of *Alpinia mutica* Rhizomes. *Molecules*, **16**: 583–589.
- Margono, S.A. dan Zendrato, R.N., 2006. Sintesis diasetil gamavuton-0 dengan menggunakan asetil klorida sebagai *acylating agent*. *Majalah Farmasi Indonesia*, **17**: 25–31.
- Mateen, S., Zafar, A., Moin, S., Khan, A.Q., dan Zubair, S., 2016. Understanding the role of cytokines in the pathogenesis of rheumatoid arthritis. *Clinica Chimica Acta*, **455**: 161–171.
- McColl, G., 2004. Experimental and clinical pharmacology: Tumour necrosis factor alpha inhibitors for the treatment of adult rheumatoid arthritis. *Australian Prescriber*, **27**: 43–46.
- McInnes, I.B. dan Schett, G., 2011. The Pathogenesis of Rheumatoid Arthritis. *New England Journal of Medicine*, **365**: 2205–2219.
- Mohamed, O., Salah, H., Abolkheir, E., dan Eid, A., 2017. Effect of Early Treatment with Disease-Modifying Anti-Rheumatic Drugs and Treatment Adherence on Disease Outcome in Rheumatoid Arthritis Patients. *The Egyptian Rheumatologist*, **39**: 69–74.

- Mudjaddid, E., Puspitasari, M., Setyohadi, B., dan Dewiasty, E., 2017. Hubungan Derajat Aktivitas Penyakit dengan Depresi pada Pasien Arthritis Reumatoid. *Jurnal Penyakit Dalam Indonesia*, **4**: 194.
- Nasr, A., Gardouh, A., Ghonaim, H., Abdelghany, E., Dan Ghorab, M., 2016. Effect Of Oils, Surfactants And Cosurfactants On Phase Behavior And Physicochemical Properties Of Self-Nanoemulsifying Drug Delivery System (Snedds) For Irbesartan And Olmesartan. *International Journal of Applied Pharmaceutics*, **8**: 13-24.
- Nugroho, A.E., Yuniarti, N., Istyastono, E.P., Supardjan, dan Hakim, L., 2007. Penghambatan Reaksi Anafilaksis Kutaneus Aktif oleh Kalium Gamavuton-0 (K-Gvt-0). *Majalah Farmasi Indonesia*, **18**: 63–70.
- OECD, 2001. *OECD Guidelines for Testing of Chemicals. Test No. 423: Acute Oral Toxicity—Acute Toxic Class Method*. OECD, Paris.
- Patel, J., Kevin, G., Patel, A., Raval, M., dan Sheth, N., 2011. Design and development of a self-nanoemulsifying drug delivery system for telmisartan for oral drug delivery. *International Journal of Pharmaceutical Investigation*, **1**: 112–118.
- Pawade, R.B., Bhalerao, P.P., Kunkulol, R.R., dan Kute, N.S., 2015. Disease-Modifying Anti-Rheumatic Drugs (DMARDs) used for Rheumatoid Arthritis- A review. *Indian Journal of Basic and Applied Medical Research*, **4**: 272-288.
- Pratiwi, R.D., Ikawati, Z., dan Yuniarti, N., 2009. *Effect Of Gamavuton-0 on Cartilage Destruction of Rheumatoid Arthritis Wistar Female Rats Induced by Complete Freund's Adjuvant*. dipresentasikan pada The 1st International Seminar on Science and Technology 2009 (ISSTEC 2009), diselenggarakan oleh FMIPA UII Yogyakarta.

- Rao, S.V.R. dan Shao, J., 2008. Self-nanoemulsifying drug delivery systems (SNEDDS) for oral delivery of protein drugs: I. Formulation development. *International Journal of Pharmaceutics*, **362**: 2–9.
- Rawat, M., Singh, D., Saraf, S., dan Saraf, Swarnlata, 2006. Nanocarriers: promising vehicle for bioactive drugs. *Biological & Pharmaceutical Bulletin*, **29**: 1790–1798.
- Rui-lin, J., Xu, S., Yu-fei, G., Zhong-qiong, Y., Fei, L., Juan, X., Qiu-yan, L., Ren-yong, J., Yuan-feng, Z., Li-zi, Y., Chang-liang, H., Xiao-xia, L., Gui-zhou, Y., 2017. Acute and subchronic toxicity as well as evaluation of safety pharmacology of modified pulsatilla granules. *Journal of Integrative Agriculture*, **16**: 671–678.
- Sardjiman, Reksohadiprojo, M.S., dan Hakim, L., 1997. 1,5-diphenyl-1,4-Pentadiene-3-One and Cyclic Analogues as Antioxydant Agent. Syntesis and Structure Relationship. *European Journal of Medicinal Chemistry*, **32**: 625–630.
- Sawant, Krutika, K., Gupta, S., dan Chavhan, S., 2011. Self-Nanoemulsifying Drug Delivery System for Adenovir Dipivoxil: Design, Charachterization, In Vitro and Ex vivo Evaluation. *colloids surfaces a physicochemical engineering aspects*, **392**: 145–155.
- Senthilraja, P. dan Kathiresan, K., 2015. In vitro cytotoxicity MTT assay in Vero, HepG2 and MCF -7 cell lines study of Marine Yeast. *Journal of Applied Pharmaceutical Science*, **5**: 080–084.
- Shafiq-un-Nabi, S., Shakeel, F., Talegaonkar, S., Ali, J., Baboota, S., Ahuja, A., dkk., 2007. Formulation development and optimization using nanoemulsion technique: A technical note. *The American Association of Pharmaceutical Scientists*, **8**: E12–E17.
- Shah, P., Bhalodia, D., dan Shelat, P., 2010. Nanoemulsion: A pharmaceutical review. *Systematic Reviews in Pharmacy*, **1**: 24.

- Sharma, R.A., Gescher, A.J., dan Steward, W.P., 2005. Curcumin: the story so far. *European Journal of Cancer (Oxford, England: 1990)*, **41**: 1955–1968.
- Singh, B., Khurana, L., Bandyopadhyay, S., Kapil, R., dan Katare, O.O.P., 2011. Development of optimized self-nano-emulsifying drug delivery systems (SNEDDS) of carvedilol with enhanced bioavailability potential. *Drug Delivery*, **18**: 599–612.
- Singh, R. dan Lillard, J.W., 2009. Nanoparticle-based targeted drug delivery. *Experimental and Molecular Pathology*, **86**: 215–223.
- Smit, 2000. 'Picrorhiza scrophulariiflora from Traditional Use to Immunomodulatory', Disertasi, Dr., Utrecht :Rijkuniversiteit Utrech.
- Taylor, P.C. dan Narayan, N., 2018. Aetiopathology of rheumatoid arthritis. *Medicine*, 207 - 210.
- Tiwari, G., Tiwari, R., Bannerjee, S., Bhati, L., Pandey, S., Pandey, P., dkk., 2012. Drug delivery systems: An updated review. *International Journal of Pharmaceutical Investigation*, **2**: 2.
- United Nations, 2011. *Globally Harmonized System Classification and Labelling of Chemicals (GHS)*. United Nations, New York.
- Velavan, P., Karuppusamy, C., dan Venkatesan, P., 2015. Nanoparticles as Drug Delivery Systems. *Journal of Pharmaceutical Sciences.*, **7**: 5.
- Wasserman, A.M.Y.M., 2011. Diagnosis and Management of Rheumatoid Arthritis. *American Academy of Family Physician*, 1245–1252.
- Yuan, C.L., Xu, Z.Z., Fan, M.X., Liu, H.Y., Xie, Y.H., dan Zhu, T., 2014. Study on characteristics and harm of surfactants. *Journal of Chemical and Pharmaceutical Research*, **6**: 2233-2237.

Zhao, Y., Wang, C., Chow, A.H.L., Ren, K., Gong, T., Zhang, Z., dkk., 2010. Self-nanoemulsifying drug delivery system (SNEDDS) for oral delivery of Zedoary essential oil: Formulation and bioavailability studies. *International Journal of Pharmaceutics*, **383**: 170–177.

Zheng, Y., Sun, L., Jiang, T., Zhang, D., He, D., Nie, H., 2014. TNF- α Promotes Th17 Cell Differentiation through IL-6 and IL-1 β Produced by Monocytes in Rheumatoid Arthritis. *Journal of Immunology Research*, **2014**: 1-12.