

DAFTAR PUSTAKA

- Akbarzadeh, A., Rezaei-Sadabady, R., Davaran, S., Joo, S. W., Zarghami, N., Hanifehpour, Y., Samiei, M., Kouhi, M., and Nejati-Koshki, K., 2013. Liposome: classification, preparation, and applications. *Nanoscale Research Letters*. Vol. 8 No. 102, pp. 1–9.
- Altaf, S., Yadav, M., Mamatha, Y., Prasanth, V. V., 2012. Liposomes: An Overview. *Journal of Pharmaceutical and Scientific Innovation*, Vol. 1 No. 1, pp. 13–21.
- Aronson, H. 1993. Correction Factor for Dissolution Profile Calculations. *Journal of Pharmaceutical Sciences*, Vol. 82, No. 11.
- Arora, A., Byrem, T. M., Nair, M. G., and Strasburg, G. M., 2000. Modulation of Liposomal Membrane Fluidity by Flavonoids and Isoflavonoids. *Archives of Biochemistry and Biophysics*, Vol. 373 No. 1, pp. 102–109.
- Ashley, J. D., Quinlan, C. J., Schroeder, V. A., Suckow, M. A., Pizzuti, V. J., Kiziltepe, T., and Bilgicer, B., 2016. Dual Carfilzomib and Doxorubicin Loaded Liposomal Nanoparticles for Synergistic Efficacy in Multiple Myeloma. *American Association for Cancer Research Journal*.
- Avanti Polar Lipids Inc. Hydro Soy PC 840058 L- α -phosphatidylcholine, hydrogenated (Soy). Diakses dari <https://avantilipids.com/product/840058>, pada tanggal 16 Januari 2019.
- Azlin, E., 2016. Obat Anti Malaria. *Sari Pediatri*, Vol. 5 No. 4, p. 150.
- Baird, J. K., 2018. Therapeutic principles of primaquine against relapse of Plasmodium vivax malaria, *IOP Conference Series: Earth and Environmental Science*, Vol. 125 No. 1.
- Basso, L. G. M., Rodrigues, R. Z., Naal, R. S. M. G., Costa-Filho, A. J., 2011. Effects of the antimalarial drug primaquine on the dynamic structure of lipid model membranes, *BBA – Biomembranes*, Vol. 1808 No. 1, pp. 55–64.
- Blanco, G. and Blanco, A. 2017. Medical Biochemistry. Academic Press: London, UK.
- Blume, Alfred, 1996. Properties of lipid vesicles: FT-IR spectroscopy and fluorescence probe studies, *Current Opinion in Colloid & Interface Science*, Vol. 1, pp. 64-77.
- Boczula, K. C., Maniewska, J., Gryniewicz, G., Szeja, W., Koll, A., Hendrich, A. B., 2012. Vibrational Spectroscopy Interaction of quercetin, genistein and its derivatives with lipid bilayers – An

- ATR IR-spectroscopic study. *Vibrational Spectroscopy*, Vol. 62, pp. 64–69.
- Braet, F., and Wisse, E., 2014. Structural and functional aspects of liver sinusoidal endothelial cell fenestrae: a review, *Comparative Hepatology*, 2002, 1.
- British National Formulary (BNF). 2016. BNF 70 September 2015-Maret 2016. British National Formulary.
- Cabral, E. C. M., Zollner, R. L., and Santana, M. H. A., 2004. Preparation and characterization of liposomes entrapping allergenic proteins. *Brazilian Journal of Chemical Engineering*, Vol. 21 No. 02, pp. 137–146.
- Centers for Disease Control and Prevention (CDC). Malaria-Parasite Biology. Diakses dari <https://www.cdc.gov/dpdx/malaria/index.html>, pada tanggal 19 Desember 2018.
- Commons, R. J. *et al.* 2018. The effect of chloroquine dose and primaquine on Plasmodium vivax recurrence: a WorldWide Antimalarial Resistance Network systematic review and individual patient pooled meta-analysis, *The Lancet Infectious Diseases*, Vol. 18 No. 9, pp. 1025–1034.
- Danaei, M., *et al.*, 2018. Impact of Particle Size and Polydispersity Index on the Clinical Applications of Lipidic Nanocarrier Systems. *Pharmaceutics*, Vol. 10, 57.
- Dash, T. R., 2014. Liposome as a potential drug delivery system : a review. *International Research Journal Of Pharmacy*, Vol. 4 No. 1.
- Domenech, O. *et al.*, 2009. Biochimica et Biophysica Acta Interactions of oritavancin , a new lipoglycopeptide derived from vancomycin , with phospholipid bilayers : Effect on membrane permeability and nanoscale lipid membrane organization. *BBA – Biomembranes*, Vol. 1788 No. 9, pp. 1832–1840.
- Egan, T. J. and Kaschula, C. H., 2007. Strategies to reverse drug resistance in malaria, *Drug Resistance in Malaria*, pp. 598–604.
- Ezer, N., Sahin, I., and Kazanci, N., 2017. Vibrational Spectroscopy Alliin interacts with DMPC model membranes to modify the membrane dynamics : FTIR and DSC Studies. *Vibrational Spectroscopy*. Vol. 89, pp. 1–8.
- Fasinu, P. S., Tekwani B. L., Avula1, B, Chaurasiya1, N. D., Nanayakkara, N. D. P., Wang, Y. H., Khan, I. A., and Walker, L. A., 2016. Pathway-specific inhibition of primaquine metabolism by chloroquine/quinine, *Malaria Journal*, Vol. 15 No. 1, pp. 1–12.

- Fernandez, D. I., Sani, M. A., Gehman, J. D., Hahm, K. S., and Separovic, F., 2011. Interactions of a synthetic Leu – Lys-rich antimicrobial peptide with phospholipid bilayers. *European Biophysical Journal*, Vol. 40, pp. 471–480.
- Fernando, D., Rodrigo, and C., Rajapakse, S., 2011. Primaquine in vivax malaria: An update and review on management issues. *Malaria Journal*, Vol. 10 No. 1, p. 351.
- Food and Drug Administration (FDA). Liposome Drug Products Guidance for Industry. Diakses dari www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm, pada tanggal 15 Januari 2018.
- Ghosh, A. K., Basu, R., and Nandy, P. 1995. Lipid perturbation of liposomal membrane of dipalmitoyl phosphatidylcholine by chloroquine sulphate – a fluorescence anisotropic study. *Colloids and Surfaces B: Biointerfaces*, Vol. 4, pp. 1–4.
- Gubernator, J., 2011. Active methods of drug loading into liposomes: recent strategies for stable drug entrapment and increased in vivo activity. *Expert Opinion Drug Delivery*, Vol. 8 No. 5, pp. 565–580.
- Gürsoy, A., Kut, E. and Özkırımlı, S., 2004. Co-encapsulation of isoniazid and rifampicin in liposomes and characterization of liposomes by derivative spectroscopy. *International Journal of Pharmaceutics*, Vol. 271, pp. 115–123.
- Hill, D. R J., Baird, K., Parise, M. E., Lewis, L. S., Ryan, E. T., and Magill, A. J., 2006. Primaquine: Report From Cdc Expert Meeting on Malaria Chemoprophylaxis I, *Am. J. Trop. Med. Hyg*, Vol. 75 No. 3, pp. 402–415.
- Hoogevest, P. Van and Wendel, A., 2014. Review Article The use of natural and synthetic phospholipids as pharmaceutical excipients. *European Journal of Lipid Science and Technology*, pp. 1088–1107.
- Ingebrigtsen, S. G., Škalko-Basnet, N., Jacobsen, C. A. C., and Holsæter, A. M., 2018. Successful co-encapsulation of benzoyl peroxide and chloramphenicol in liposomes by a novel manufacturing method - dual asymmetric centrifugation. *European Journal of Pharmaceutical Sciences*, Vol. 97, p. 192–199.
- Jacquot, A., Francius, G., Razafitianamaharavo, A., Dehghani, F., Tamayol, A., Linder, M., and Arab-Tehrany, E., 2014. Morphological and Physical Analysis of Natural Phospholipids- Based Biomembranes. *PLoS ONE*, Vol. 9 No. 9.

- Kajiya, K. and Kumazawa, S., 2008. Solid-state NMR analysis of the orientation and dynamics of epigallocatechin gallate , a green tea polyphenol , incorporated into lipid bilayers. *Magnetic Resonance in Chemistry*, Vol. 46, pp. 174–177.
- Kamila, Š. *et al.*, 2008. Biophysical Chemistry Genistein derivatives decrease liposome membrane integrity — Calcein release and molecular modeling study. *Biophysical Chemistry*, Vol. 138, pp. 78–82.
- Katzung, B. G. and Trevor, A. J. Eds. 2011. Basic and Clinical Pharmacology. 13th Ed. McGraw-Hill Education.
- Kementerian Kesehatan RI (Kemenkes RI). 2017. Buku Saku Penatalaksanaan Kasus Malaria. Jakarta: Direktorat Jendral Pencegahan dan Pengendalian Penyakit Kementerian Kesehatan RI.
- Khan, I., Elhissi, A., Shah, M., Alhnan, M. A., and Ahmed, W., 2013. *Liposome-based carrier systems and devices used for pulmonary drug delivery, Biomaterials and medical tribology : Research and development*. Woodhead Publishing Limited.
- Knobloch, J., Suhendro, D. K., Zieleniecki, J. L., Shapter, J. G., Koöper, I., 2015. Membrane – drug interactions studied using model membrane systems, *Saudi Journal of Biological Sciences*, Vol. 22, pp. 714–718.
- Kulkarni, S. B. and Betageri, G. V., 1995. Factors affecting microencapsulation of drugs in liposomes. *Journal Microencapsulation*, Vol. 12 No. 3, pp. 229–246.
- Laouini, A., Jaafar-Maalej, C., Limayem-Blouza, I., Sfar, S., Charcosset, C., and Fessi, H., 2012. Preparation, Characterization and Applications of Liposomes: State of the Art. *Journal of Colloid Science and Biotechnology*, Vol. 1 No. 2, pp. 147–168.
- Li, J., Wang, X., Zhang, T., Wang, C., Huang, Z., Luo, X., and Deng. Y., 2015. A review on phospholipids and their main applications in drug delivery systems, *Asian Journal of Pharmaceutical Sciences*. Vol. 10 No. 2, pp. 81–98.
- Li, H., Zhao, T., Sun, Z., 2017. Analytical techniques and methods for study of drug-lipid membrane interactions. *Analytical Chemistry*.
- LibreTexts. The ripple phase. Diakses dari https://phys.libretexts.org/Courses/University_of_California_Davis/UCD%3A_Biophysics_241_-_Membrane_Biology/Membrane_Phases/The_Ripple_Phase, pada tanggal 14 Januari 2019.

- Liu, W., Ye, A., Liu, C., Liu, W., and Singh, H., 2012. Structure and integrity of liposomes prepared from milk- or soybean-derived phospholipids during in vitro digestion. *Food Research International journal*, Vol. 48 No. 2, pp. 499–506.
- Maghraby, G. M. M. El, Williams, A. C., and Barry, B. W., 2005. Drug interaction and location in liposomes: correlation with polar surface areas, *International Journal of Pharmaceutics*, Vol. 292, p. 179–185.
- Mahanga, G. M. and Gathirwa, J. W., 2014. Preparation, characterization, and optimization of primaquine-loaded solid lipid nanoparticles, *International Journal of Nanomedicine*, Vol. 9 No. 1, pp. 3865–3874.
- Maherani, B., Arab-Tehrany, E., Kheirolloom, A., Geny, D., and Linder, M., 2013. Calcein release behavior from liposomal bilayer; influence of physicochemical/mechanical/structural properties of lipids. *Biochimie*, Vol. 33, pp. 1–16.
- Matteelli, A. and Castelli, F., 2015. Life cycle of malaria parasites, Institute of Infectious and Tropical Diseases University of Brescia.
- Mawson, A. R., 2013. The pathogenesis of malaria: a new perspective, *Pathogens and Global Health*, Vol. 107 No. 3, pp. 122–129.
- Miatmoko, A., Kawano, K., Yoda, H., Yonemochi, E., Hattori, Y., 2017. Tumor delivery of liposomal doxorubicin prepared with poly-L-glutamic acid as a drug-trapping agent. *Journal of Liposome Research*, Vol. 27 No. 2, p. 99-107.
- Nair, A., Abrahamsson, B., Barends, D. M., Groot, D. W., Kopp, S., Polli, J. E., Shah, V. P., and Dressman, J. B., 2012. Biowaiver Monographs for Immediate-Release Solid Oral Dosage Forms: Primaquine Phosphate, *Journal Of Pharmaceutical Sciences*, Vol. 101 No. 3, pp. 936–945.
- Nekkanti, V. and Kalepu, S., 2015. Recent Advances in Liposomal Drug Delivery: A Review. *Pharmaceutical Nanotechnology*, Vol. 3 No. 1.
- Neves, A. R., Nunes, C., Amenitsch, H., and Rei, S., 2016. Resveratrol interaction with lipid bilayers: a synchrotron X-ray scattering study. *Langmuir*.
- Omwoyo, W. N. *et al.*, 2014. Preparation, characterization, and optimization of primaquine-loaded solid lipid nanoparticles. *International Journal of Nanomedicine*, Vol. 9 No. 1, pp. 3865–3874.

- Owuor, J. J. *et al.*, 2017. Optimization and characterization of primaquine-loaded solid lipid nanoparticles (SLN) for liver schinonticide targeting by freeze drying. *MOJ Drug Design Development & Therapy*, Vol. 1 No. 3, pp. 104–112.
- Pattni, B. S., Chupin, V. V., and Torchilin, V. P., 2015. New Developments in Liposomal Drug Delivery. *Chemical Reviews*, Vol. 115, p. 10938–10966.
- Pawłęga, B. P. *et al.*, 2014. Characteristics of quercetin interactions with liposomal and vacuolar membranes. *Biochimica et Biophysica Acta* 1838, 254–265.
- Pentak, D., 2014. Alternative methods of determining phase transition temperatures of phospholipids that constitute liposomes on the example of DPPC and DMPC, *Thermochimica Acta*.
- Popovska, O., Simonovskal, J., Kavrakovski, Z., and Rafajlovska, V., 2013. An Overview : Methods for Preparation and Characterization of Liposomes as Drug Delivery Systems. *International Journal of Pharmaceutical and Phytopharmacological Research*, Vol. 3 No. 3, p. 182-189.
- Kim S, Chen J, Cheng T, Gindulyte A, He J, He S, Li Q, Shoemaker BA, Thiessen PA, Yu B, Zaslavsky L, Zhang J, Bolton EE. PubChem 2019 update: improved access to chemical data. *Nucleic Acids Res.* 2019 Jan 8; 47(D1):D1102-1109.
- Pusdatin Kemenkes RI. 2016. *Malaria*. Pusat Data dan Informasi Kementerian Kesehatan RI.
- Raphemot, R., Posfai, D., and Derbyshire, E. R., 2016. Current therapies and future possibilities for drug development against liver-stage malaria, *Journal of Clinical Investigation*, Vol. 126 No. 6, pp. 2013–2020.
- Roberts, K. E., O’Keeffe, A. K., Lloyd, C. J., and Clarke, D. J., 2003. Selective Dequenching by Photobleaching Increases Fluorescence Probe Visibility, *Journal of Fluorescence*, Vol. 13 No. 6, pp. 513–517.
- Rudra, A., Deepa, R M., Ghosh., M K., Ghosh., S., Mukherjee, B., 2010. Doxorubicin-loaded phosphatidylethanolamine conjugated nanoliposomes: in vitro characterization and their accumulation in liver, kidneys, and lungs in rats, *International Journal of Nanomedicine*, Vo. 5, pp. 811-823.
- Sarfraz, M. *et al.*, 2018. Development of Dual Drug Loaded Nanosized Liposomal Formulation by A Reengineered Ethanolic Injection Method and Its Pre-Clinical Pharmacokinetic Studies, *Pharmaceutics*, Vol. 10 No. 151, pp. 1–22.

- Salim, R. H. dan Zahro, S. M., 2018. Pengaruh Kombinasi Primakuin dan Klorokuin terhadap Karakteristik dan pelepasan Obat dari Sediaan Liposom. Surabaya: Fakultas Farmasi Universitas Airlangga Departemen Farmasetika.
- Sercombe, L., Veerati, T., Moheimani, F., Wu, S. Y., Sood, A. K., and Hua1, S., 2015. Advances and challenges of liposome assisted drug delivery. *Frontiers in Pharmacology*, pp. 1–13.
- Shimanouchi, T., Ishii, H., Yoshimotob, N., Umakoshia, H., and Kuboia, R., 2009. Calcein permeation across phosphatidylcholine bilayer membrane: Effects of membrane fluidity, liposome size, and immobilization, *Colloids and Surfaces B: Biointerfaces*, Vol. 73, pp. 156 – 160.
- Stensrud, G., Sande, S. A., Kristensen, S., Smistad, G., 2000. Formulation and characterisation of primaquine loaded liposomes prepared by a pH gradient using experimental design, *International Journal of Pharmaceutics*, Vol. 198, pp. 213–228.
- Sweetman, S. C. Eds. 2009. Martindale The Complete Drug Reference. 36th Ed. London: Pharmaceutical Press.
- Takechi-haraya, Y., Sakai-kato, K. and Goda, Y., 2016. Membrane Rigidity Determined by Atomic Force Microscopy Is a Parameter of the Permeability of Liposomal Membranes to the Hydrophilic Compound Calcein, *American Association of Pharmaceutical Scientists*, Vol. 8.
- Tsuchiya, H., Nagayama, M., Tanaka, T., Furusawa, M., Kashimata, M., and Takeuchi, H., 2003. Membrane-rigidifying effects of anti-cancer dietary factors. *BioFactors*, Vol. 16, pp. 45–56.
- Verbeeck, R., Junginger, H. E., Midha, K. K., Shah, V. P., and Barends, D. M., 2017. Biowaiver Monographs for Immediate Release Solid Oral Dosage Forms Based on Biopharmaceutics Classification System (BCS) Literature Data: Chloroquine Phosphate , Chloroquine Sulfate , and Chloroquine Hydrochloride. *Journal Of Pharmaceutical Sciences*, Vol. 94 No. 7.
- Wang, R., Xiao, R., Zeng, Z., Xu, L., and Wang, J., Xu, L., 2012. Application of poly (ethylene glycol)–distearoylphosphatidylethanolamine (PEG-DSPE) block copolymers and their derivatives as nanomaterials in drug delivery, *International Journal of Nanomedicine*, pp. 4185–4198.

- Warschawski, D. E., Arnold, A. A., Beaugrand, M., Gravel, A., Chartrand, E., and Marcotte, I., 2011. Choosing membrane mimetics for NMR structural studies of transmembrane proteins. ***BBA - Biomembranes***. Vol. 1808 No. 8, pp. 1957–1974.
- Were, L.M., Bruce, B. D., Davidson, P. M., and Weiss, J., 2003. Size, Stability, and Entrapment Efficiency of Phospholipid Nanocapsules Containing Polypeptide Antimicrobials. ***Journal Agriculture and Food Chemistry***, Vol. 51 No. 27, pp. 8073–8079.
- Wu, H., Sheng, Y., and Tsao, H., 2014. Phase behaviors and membrane properties of model liposomes : Temperature effect. ***The Journal of Chemical Physics***, Vol. 141, 124906.
- Wu, T. *et al.*, 2013. A structure – activity relationship study of flavonoids as inhibitors of *E . coli* by membrane interaction effect, ***BBA – Biomembranes***, Vol. 1828 No. 11, pp. 2751–2756.
- World Health Organization (WHO). 2013. ***World Malaria Report 2013***. World Health Organization.
- World Health Organization (WHO). 2016. ***Malaria-International Travel and Health***. World Health Organization.
- World Health Organization (WHO). 2018. ***World Malaria Report 2018***. World Health Organization.
- Yokota, D., Moraes, M., and Pinho, S. C. 2012. Characterization of Lyophilized Liposomes Produced with Non-Purified Soy Lecithin: A Case Study of Casein Hydrolysate Microencapsulation. ***Brazilian journal of Chemical Engineering***, Vol. 29, No. 02, pp. 325-335.
- Yusuf, H., *et. al.* 2017. Phase Behavior of Dried-DDA Liposomal Formulation Dispersed in HPMC Matrix in the presence of Saccharides. ***International Journal of PharmTech Research***, Vol. 1, No. 1, pp. 50-56.