

## DAFTAR PUSTAKA

- Alache, J.M. and Devissaquet, J. P. 1993. *Farmasetika 2. Biofarmasi Edisi ke-2*. Surabaya: Airlangga University Press.
- Anselmi, C., Bocchinfuso, G., De Santis, P. and Fuà, M. A. Scipioni, M. Savino. 1998. Statistical Thermodynamic Approach for Evaluating the Writhe Transformations in Circular DNAs. *The Journal of Physical Chemistry B*. 5704-5714.
- Barre, J., Houin, G., Rosenbaum, J., Zini, R., Dhumeaux, D., Tillement, J. P. 1984. Decreased Alpha-1-Acid Glycoprotein in Liver Cirrhosis: Consequences for Drug Protein Binding. *Br. Journal Clinical Pharmacology*. 18: 652-653.
- Bedard, J., Wong, S. and Bryan, L.E. 1987. *Accumulation of Enoxacin by Escherichia coli and Bacillus Subtilis*. Antimicrobial Agents and Chemotherapy. 31: 1348-1354.
- Brauser, A., Schroeder, I., Gutschmann, T., Cosentino, C. and Moroni, A., Hansen, U.P. 2012. Modulation of Enrofloxacin Binding in OmpF by Mg<sup>2+</sup> as Revealed by the Analysis of Fast Flickering Single-Porin Current. *The Journal of General Physiology*. 69-82.
- Bryan, L.E. and Bedard, J. 1991. Impermeability to Quinolones in Gram-Positive and Gram-Negative Bacteria. *Ropean Journal of Clinical Microbiology & Infectious Diseases*. 10: 232-239.
- Cester, C.C. and Toutain, P.L. 1997. A Comprehensive Model for Enrofloxacin to Ciprofloxacin Transformation and Disposition in Dog. *Journal of Pharmaceutical Sciences*. 86: 1148-1155.
- Chong, S., Chen, C., Ge, H. and Xie, X.S. 2014. *Mechanism of Transcriptional Bursting in Bacteria Cell*, USA: Blackwell Publishing. 314-326.
- Cinquina, A.L., Roberti, P., Giannetti, L., Longo, F., Draisci, R., Fagiolo, A. 2003. Determination of Enrofloxacin and Its Metabolite Ciprofloxacin in Goat Milk by High-Performance Liquid Chromatography with Diode-Array Detection: Optimization and Validation. *Journal of Chromatography A*. 987: 221-226.
- Coulet, M., Morello, C., Cox, P. and Lohuis, J. 2005. Pharmacokinetics of Ibafloxacin in Healthy Cats. *Journal of Veterinary Pharmacology and Therapeutics*. 28: 37-44.

- Danilchanka, O., Pavlenok, M. and Niederweis, M. 2008. Role of Porins for Uptake of Antibiotics by Mycobacterium Segmatis. *Journal Antimicrobial Agents and Chemotherapy*. 52: 3127-3134.
- Dautrey, S., Felice, K., Petiet, A., Lacour, B., Carbon, C. and Farinotti, R. 1999. Active Intestinal Elimination of Ciprofloxacin in Rats: Modulation by Different Substrates. *British Journal of Pharmacology*. 127: 1728-1734.
- Drlica, K., Malik, M., Kerns, R.J., Zhao, X. 2008. Quinolone-Mediated Bacterial Death, Antimicrob. *Journal Antimicrobial Agents and Chemotherapy*. 52: 385-392.
- Estridge, B.H., Reynolds, A.P., Walters, N.J. 2000. *Basic Medical Laboratory Technique 4th Edition*. USA: Blackwell Publishing.
- Fauchier, N. 2013. *Med'Vet, le recueil des spécialités à usage vétérinaire. 2014th Edition*, Med'com, Paris.
- Gellert, M., Mizuuchi, K., O'Dea, M.H. and Nash, H.A. 1976. DNA Gyrase: An Enzyme that Introduces Superhelical Turns into DNA. *Proceedings of the National Academy of Sciences of the United States of America*, 73: 3872-3876.
- George, S., McBurney, A., Wood, J. 1984. The Protein Binding of Timegadine Determined by Equilibrium Dialysis. *Br. Journal Clinical Pharmacology*. 18: 785-790.
- Gocke, E. 1991. Mechanism of Quinolone Mutagenicity in Bacteria. *Proceedings of Mutation Research/Fundamental and Molecular Mechanisms of Mutagenesis*. 135-143.
- González, C., Moreno, L., Fumuso, E., García, J., Rivulgo, M., Confalonieri, A. 2009. Enrofloxacin-Based Therapeutic Strategy for the Prevention of Endometritis in Susceptible Mares. *Journal of Veterinary Pharmacology and Therapeutics*. 33: 287-294.
- Grohe, K., Zeiler, H.J., Metzger, K.G. and Grohe, K. 1987. 7-Amino-1-Cyclopropyl-4-Oxo-1, 4-Dihydro-Quinoline and Naphthyridine-3-Carboxylic Acids and Antibacterial Agents Containing These Compounds. US4670444 (A).
- Gubaev, A. and Klostermeier, D. 2014. The Mechanism of Negative DNA Supercoiling: A Cascade of DNA-Induced Conformational Changes Prepares Gyrase for Strand Passage. *Journal DNA Repair*. 16: 23-34.

- Horowitz, D.S. and Wang, J.C. 1987. Mapping the Active Site Tyrosine of Escherichia coli DNA Gyrase. *The Journal of Biological Chemistry*. 5339-5344.
- Kampranis, S.C. and Maxwell, A. 1998a. The DNA Gyrase-Quinolone Complex ATP Hydrolysis and the Mechanism of DNA Cleavage. *The Journal of Biological Chemistry*. 22615-22626.
- Kampranis, S.C. and Maxwell, A. 1998b. Conformational Changes in DNA Gyrase Revealed by Limited Proteolysis. *The Journal of Biological Chemistry*. 22606-22614.
- Kato, J., Nishimura, Y., Imamura, R., Niki, H., Hiraga, S. and Suzuki, H. 1990. *New Topoisomerase Essential for Chromosome Segregation in E. coli. Cell*. 63: 393-404.
- Kelley W.L. 2006. *Lex Marks the Spot: The Virulent Side of SOS and a Closer Look at the LexA Regulon*. USA: Molecular Microbiology Publishing. 62: 1228-1238.
- Kristensen, C. G. 1983. Imipramine Serum Protein Binding in Healthy Subjects. *Journal Clinical Pharmacology. Ther.* 34: 689-694.
- Lambert, P.A. 2002. Cellular Impermeability and Uptake of Biocides and Antibiotics in Gram-Positive Bacteria and Mycobacteria. *Journal of Applied Microbiology*. 92: 46-54.
- Leo, E., Gould, K.A., Pan, X.-S., Capranico, G., Sanderson, M.R., Palumbo, M. 2005. Novel Symmetric and Asymmetric DNA Scission Determinants for Streptococcus Pneumoniae Topoisomerase IV and Gyrase Are Clustered at the DNA Breakage Site. *The Journal of Biological Chemistry*. 14252-14263.
- Levine, C., Hiasa, H. and Marians, K.J. 1998. DNA Gyrase and Topoisomerase IV: Biochemical Activities, Physiological Roles during Chromosome Replication, and Drug Sensitivities. Biochimica et Biophysica Acta (BBA)-Gene Structure and Expression. *Journal Biochimica Expression*. 29-43.
- Lima, J.J., Boudoulas, H., Blanford, M., 1981. Concentration-Dependence of Disopyramide Binding to Plasma Protein and Its Influence on Kinetics and Dynamics. *Journal Pharmacology. exp. Ther.* 219: 741-747.

- Lockshon, D. and Morris, D.R. 1985. Sites of Reaction of Escherichia coli DNA Gyrase on pBR322 in Vivo as Re-vealed by Oxolinic Acid-Induced Plasmid Linearization. *Journal of Molecular Biology*. 181: 63-74.
- Maguin, E., Lutkenhaus, J. and D'Ari, R. 1986. Reversibility of SOS-Associated Division Inhibition in Escherichia coli. *Journal of Bacteriology*. 166: 733-738
- Malik, M., Zhao, X. and Drlica, K. 2006. Lethal Fragmentation of Bacterial Chromosomes Mediated by DNA Gyrase and Quinolones. *Journal of Molecular Microbiology*. 61: 810-825.
- Martinez, M., McDermott, P. and Walker, R. 2006. Pharmacology of the Fluoroquinolones: A Perspective for the Use in Domestic Animals. *The Veterinary Journal*. 172: 10-28.
- Martini, F.H., Nath, J.L., Bartholomew, E.F. 2012. *Fundamentals of Anatomy and Physiology ninth edition*. San Francisco: Pearson Education.
- Naveen, R., Akshata, K., Pimple, S., and Chaudhari, P. 2016. A Review on Albumin as Drug Carrier in Treating Different Diseases and Disorders. *Der Pharmacia Sinica*. 1: 11-15
- Nielsen, P. and Gyrd-Hansen, N. 1997. Bioavailability of Enrofloxacin after Oral Administration to Fed and Fasted Pigs. *Journal of Pharmacology & Pharmaceutical Medicine*. 80: 246-250.
- Nouws, J.F.M., Mevius, D.J., Vree, T.B., Baars, A.M. and Laurensen, J. 1988. Pharmacokinetics, Renal Clearance and Metabolism of Ciprofloxacin Following Intravenous and Oral Administration to Calves and Pigs. *Journal of Veterinary Quarterly*. 10: 156-163.
- Ogino, T., Mizuno, Y., Ogata, T. and Takahashi, Y. 2005. Pharmacokinetic Interactions of Flunixin Meglumine and Enrofloxacin in Dogs. *American Journal of Veterinary Research*. 66: 1209-1213.
- Peng, H. and Mariani, K.J. 1993. Decatenation Activity of Topoisomerase IV during oriC and pBR322 DNA Replication in Vitro. *Proceedings of the National Academy of Sciences of the United States of America*. 90: 8571-8575.
- Peng, H. and Mariani, K.J. 1995. The Interaction of Escherichia coli Topoisomerase IV with DNA. *The Journal of Biological Chemistry*. 270: 25286-25290.

- Pike, E., Kierulf, D., Skuterud, B., Bredesen, J. E., Lunde, P. K. M. 1983. Drug Binding in Sera Deficient in Lipoproteins, Albumin or Orosomucoid. *Br. Journal Clinical Pharmacology*. 16: 233-239.
- Riviere, J.E., and Papich, M.G. 2013. *Veterinary Pharmacology and Therapeutics*. John Wiley & Sons, Hoboken.
- Routledge, P.A. 1986. The Plasma Protein Binding of Basic Drugs. *Br. Journal Clinical Pharmacology*. 22: 499-506.
- Salasia, S.I.O and Hariono, B. 2014. *Patologi Klinik Veteriner*. Yogyakarta: Penerbit Samudra Biru.
- Sarkozy, G. 2001. *Quinolones: A Class of Antimicrobial Agents*. Praha: Veterinární Medicína. 257-274.
- Scalon, V.C. dan Sanders, T. 2007. *Anatomy and Physiology Fifth Edition*. Philadelphia: F.A Davis Company.
- Steinman, A., Britzi, M., Levi, O., Lavy, E., Lichter, A. and Soback, S. 2006. Lack of Effect of Diet on the Pharmacokinetics of Enrofloxacin in Horses. *Journal of Veterinary Pharmacology and Therapeutics*. 29: 67-70.
- Tjay, T.H. and Rahardja, K. 2007. *Obat-Obat Penting Kasiat, Penggunaan dan Efek-Efek Sampingnya Edisi Ke-6*. Jakarta: PT. Elex Media Komputindo
- Trouchon, T. and Lefebvre, S. 2016. A Review of Enrofloxacin for Veterinary Use. *Journal of Veterinary Medicine*. 6: 40-58.
- Tse, Y.C., Kirkegaard, K. and Wang, J.C. 1980. Covalent Bonds between Protein and DNA. Formation of Phosphotyrosine Linkage between Certain DNA Topoisomerases and DNA. *The Journal of Biological Chemistry*. 255: 5560-5565.
- Tyczkowska, K., Hedeon, K.M., Aucoin, D.P. and Aronson, A.L. 1989. High Performance Liquid Chromatographic Method for the Simultaneous Determination of Enrofloxacin and Its Primary Metabolite Ciprofloxacin in Canine Se-rum and Prostatic Tissue. *Journal of Chromatography B: Biomedical Sciences and Applications*. 493: 337-346.
- van der Sluijs, P. and Meijer, D. K. F. 1985. Binding of Drugs with a Quaternary Ammonium Group to Alpha-1-Acid Glycoprotein and Asialo Alpha-1-Acid Glycoprotein. *Journal Pharmacist. exp. Ther.* 234: 703-707.

- Vancutsem, P., Babish, J. and Schwark, W. 1990. *The Fluoroquinolone Antimicrobials: Structure, Antimicrobial Activity, Pharmacokinetics, Clinical Use in Domestic Animals and Toxicity*. The Cornell Veterinarian. 80: 173-186.
- Wang, J.C. 1998. Moving One DNA Double Helix through Another by a Type II DNA Topoisomerase: The Story of a Simple Molecular Machine. *Jorunal Quarterly Reviews of Biophysics*. 31: 107-144.
- Wentzell, L.M. and Maxwell, A. 2000. The Complex of DNA Gyrase and Quinolone Drugs on DNA Forms a Barrier to the T7 DNA Polymerase Replication Complex. *Journal of Molecular Biology*. 304: 779-791.
- Wiuuff, C., Lykkesfeldt, J., Aarestrup, F.M. and Svendsen, O. 2002. Distribution of Enrofloxacin in Intestinal Tissue and Contents of Healthy Pigs after Oral and Intramuscular Administrations. *Journal of Veterinary Pharmacology and Therapeutics*. 25: 335-342.
- Wright, D.H., Brown, G.H., Peterson, M.L. and Rotschafer, J.C. 2000. Application of Fluoroquinolone Pharmacody-namics. *Journal of Antimicrobial Chemotherapy*. 46: 669-683.
- Yamano, Y., Nishikawa, T. and Komatsu, Y. 1999. Outer Membrane Proteins Responsible for the Penetration of  $\beta$ -Lactams and Quinolones in Pseudomonas Aeruginosa. *Journal of Antimicrobial Chemotherapy*. 26: 175-184.
- Yu, F., Yu, S., Yu, L., Li, Y., Wu, Y., Zhang, H. 2014. Determination of Residual Enrofloxacin in Food Sam-ples by a Sensitive Method of Chemiluminescence Enzyme Immunoassay. *Journal of Food Chemistry*. 149: 71-75.
- Zechiedrich, E.L. and Cozzarelli, N.R. 1995. Roles of Topoisomerase IV and DNA Gyrase in DNA Unlinking during Replication in Escherichia coli. *Journal of Genes & Development*. 9: 2859-2869.
- Ziółkowski, H., Jaroszewski, J.J., Maślanka, T., Grabowski, T., Katolik, K., Pawęska, J. 2014. Influence of Oral Co-Administration of a Preparation Containing Calcium and Magnesium and Food on Enrofloxacin Pharmacokinetics. *Journal of Research in Veterinary Science*. 97: 99-104.