

## DAFTAR PUSTAKA

- Adams, B.K., Ferstl, E.M., Davis, M.C., Herold, M., Kurtkaya, S., Camalier, R.F., Hollingshead, M.G., Kaur, G., Sausville, E.A., Rickles, F.R., Snyder, J.P., Liottab, D.C., dan Shojja, M., 2004, Synthesis and Biological Evaluation of Novel Curcumin Analogs as Anti-cancer and Anti-angiogenesis Agent, *Bioorg. Med. Chem.*, **12**,3871-3883
- Albert, B., Bray, D., Lewis, J., Rarr, M., Roberts, K. dan Watson, J.o., 1994, Molecular biology of the cell, 3rd Ed., Garland Publishing, Inc., New York
- Anggarwal, B.B., Kunnumakkara, A.B., dan Guha S., 2009, Curcuman Colorectal Cancer, Add, Spice to Your Life, *Current Colorectal Cancer Reports*, **5**: 5-14.
- Anggarwal, B.B., Bhatt, I.D., Ichikawa, H., Ahn, K.S., Sethi, G., Sandur, S.K., Natarajan, C., Seeram, N., dan Shishoida, S., 2006, Curcumin-Biological and Medicinal Properties, 297-368, tersedia online <http://chakrinternasional.com/pdfs/article13pdf>, diakses pada 11 Mei 2017.
- Annis, M.G., Yethon, J.A., Leber, B., dan Andrews, D.W., 2004. Ther is More to Life and Death than Mitochondria : Bcl-2 Proteins at the Endoplasmic Reticulum. Review. *Biochem. Biophys. Acta.* **1644** : 115-123.
- Anonim, 2001, Laporan Penelitian Proyek MOLNAS I, Kerjasama Fakultas Farmasi Universitas Gadjah Mada Yogyakarta, P.T. Indofarma Tbk. Jakarta, dan P.T. Kalbe Farma Tbk. Jakarta. cit. Yuwono, T., dan Oetari, R.A., 2004, Stabilitas PGV-0 (Pentagmavunon-0) sebagai Obat Antiinflamasi dalam Bentuk Sediaan Larutan Cair, *Majalah Farmasi Indonesia*, **15(1)**: 20-25.
- Anonim, 2012, Tahap Perkembangan Kanker Usus <http://www.asiancancer.com/indonesian/cancer-topics/new-colon/>, diakses pada 29 Juni 2017.
- Anonim, 2016, *Section of Cancer Surveillance*, [http://globocan.iarc.fr/Pages/fact\\_sheets\\_population.aspx](http://globocan.iarc.fr/Pages/fact_sheets_population.aspx), diakses pada 27 November 2016.
- Anton, N., dan Vandamme, T., 2009, The Universality of Low Energy Nanoemulsification, *Int. J. Pharm.*, **377(1)**, 142-147.

- Arjan, 2012, Cancer Invation and Metastasis. <http://www.angiogenesis.nl/presentations/Metastasis%20college%202012.pdf> , diakses pada 27 November 2016.
- Archer, M.C., 1992, Chemical Carcinogenesis, dalam Tannock J.F., Hill R.P., (Eds.), *The Basic Science of Oncology*, 2nd Ed., 17-102, Mc Graw-Hill, New York cit. Kartawiguna, E., 2001, Faktor-faktor yang Berpengaruh pada Karsinogenesis, *J. Kedokter. Trisakti.*, **20(1)**. 16-26.
- Avunduk, C. 2002. Cirrhosis and Its Complication. Dalam *Manual of Gastroenterology: Diagnosis and Therapy*, Penerbit Lippincot Williams & Wilkins.
- Biradar, S., Dhumal, R., dan Paradkar, A., 2009, Rheological Investigation of Self-emulsification Process: Effect Co-Surfactant, *J. Pharm. Pharmaceut.Sci.*, **12 (2)**: 164-174.
- Brattain, G.M., Stevens, S.J., Fine, D., Webb, M., dan Sarrif, A.M., 1980, Establishment of Mouse Colonie Carcinoma Cell Lines with Different Metastatic Properties, <http://cancerres.aacrjournals.org/content/canres/40/7/2142.full.pdf> , diakses pada 11 Mei 2017.
- Briwn, J.M. dan Attardi, L.D., 2005, The role of apoptosis in cancer development and treatment response., <https://www.ncbi.nlm.nih.gov/pubmed/15738985>, diakses pada 11 Mei 2017.
- Calvert, P.M., dan Frucht, H., 2002, The Genetics of Colorectal Cancer, *Ann. Intern. Med.*, **137**:603-612
- Cannon, Joseph P., William D. Perreault, dan E. Jerome. McCarthy. 2008. Pemasaran Dasar-pendekatan manajemen global. Jakarta: Salemba empat.
- Castle, J.C., Kreiter, S., Diekmann, J., Lower, M., van de Roemer, N., de Graaf, J., Selmi, A., Diken, M., Boegel, S., Paret, C., Koslowski, M., Kuhn, A.N., Britten, C.M., Huber, C., Türeci, O., dan Sahin, U., 2014, Exploiting the mutanome for tumor vaccination. *Cancer Res.*, **72**: 1081-1091.
- Chan, T.A., Morin, P.J., Vogelstein, B., dan Kinzler, K.W., 1998, Mechanism, Underlying Nonsteroidal Antiinflammatory Drug-Mediated Apoptosis, *Proc. Natl. Acad. Sci*, **95**,681-686.

- Costa, J., Lucas, E., Queiros, Y., dan Mansur, C., 2012, Evaluation of nanoemulsions in the cleaning of polymeric resins, *Colloids Surf. A Physicochem. Eng. Asp.*, **415** (2012), 112-118.
- Crofford, L.J., 1997, COX-1 and COX-2 Tissue Culture for Medical Research, 402-4407, John Wiley and Sons, New York.
- Date, A.A., Desai N., Dixit., dan Nagarsenker, M., 2010, Self-nanoemulsifying Drug Delivery System Formulation Insight, Application and Advances, *Nanomed.*, **5(10)**: 1595-1616.
- Da'i, M., Meiyanto, E., Supardjan, A.M., Anggara, U.J., Kawaichi, M., 2007, Potensi Antiproliferatif Analog Kurkumin Pentagamavunon terhadap Sel Kanker Payudara T47D, *Artocarpus*, **7(1)**: 14-20.
- Deiningner, M.W.N., 1998. Selective induction of leukemia-associated fusion genes by high dose ionizing radiation. *Cancer. Res.* 1998; **58** : 421-500.
- DeVita, V.T., M.D, V.T.D., Jr, Lawrence, T.S., dan Rosenberg, S.A., 2011. *Cancer: Principles & Practice of Oncology : Primer of the Molecular Biology of Cancer*. Lippincott Williams & Wilkins.
- Diaz-Moralli, S., Tarrado-Castellarnau, M., Miranda, A., dan Cascante, M., 2013. Targeting cell cycle regulation in cancer therapy. *Pharmacol. Ther.*, **138**: 255–271.
- Devarajan V. dan Ravichandran V., 2011, Nanoemulsions: as Modified Drug Delivery Tool, *Int. J. Compre. Pharm.*, **2(4)**: 1-6.
- Doyle, A., dan Griffiths, J.B. 2000. *Cell and Tissue Culture for Medical Research*. New York : Jhon Willey and Sons Ltd.
- Dubois, R.N., Abramson, S.B., Draffod, L., Gupta, R.A., Simon, L.S., Van De Putte, L.B., dan Lipsky, P.E., 1998, Cyclooxygenase in Biology and Disease, *FASEB J.*, **12**: 1063-1073.
- Galvao, J., Davis, B., Tilley, M., Normando, E., Duchen, M.R., dan Cordiero, M.F., 2013, Unexpected low-dose toxicity of the universal solvent DMSO, *FASEB J.*, vol. 28, **3**: 1317-1330.
- Greenwald, P., Kellof, G.J., Boone, C.W., dan McDonald, S.S., 1995, Genetic and Cellular Changes in Colorectal Cancer, Proposed Target of Chemopreventive Agents, *Cancer Epidemiol. Biomarkers Prev.* **4** : 691-702.
- Gerl, R., dan Vaux, D.L., 2005, Apoptosis in the Development and Treatment of Cancer, *Carcinogenesis*, **26(2)**: 263-270.

- Grigoryev, Y., 2013, Cell Counting with a Hemocytometer: Easy as 1, 2, 3, <http://bitesizebio.com/13687/cell-counting-with-a-hemocytometer-easy-as-1-2-3/>, diakses pada 16 Mei 2017.
- Han, J., Sun, M., Guo, X., Li, Z, Yang, J., dan Zhang, Y., 2011, Design, Preparation, and In-vitro Evaluation of Paclitaxel-loaded Self-nanoemulsifying Drug Delivery System, *Asian J.Pharm. Sci.*, **6(1)**: 18-25.
- Hanahan, D. dan Weinberg, R.A., 2011. *Hallmarks of Cancer: The Next Generation. Cell*, **144**: 646–674.
- Hammond EC, 1975. *The Epidemiological Approach to the Etiology of Cancer*. In: Kruse LC, Reese JL, Hart LK, editors. *Cancer pathophysiology, etiology and management*. 4th ed. St Louis: The C.V. Mosby Co.; 1975. p. 45-6.
- Heriady Y., 2002, *Kanker Usus Besar Kolon dan Rektum*, Pontianak Post., Kalimantan Barat.
- Hetz, C.A., Torres, V. dan Quest, A.V.G., 2005, Beyond Apoptosis: Nanopoptotic Cell Death in Physiology and Disease, *Biochem. Cell Biol.*, **83** : 579-588.
- Hsieh, C.-Y., Tsai, P.-C., Chu, C.-L., Chang, F.-R., Chang, L.-S., dan Wu, Y.-C, 2013. Brazilein suppresses migration and invasion of MDA-MB-231 breast cancer cells. *Chem. Bio. Interact.*, **204**: 105–115.
- Ireson, C.R., Orr, S., Jones, D.J.L. Coughtrie, M.W.H., Boocock, D.J., Williams, M.L., Farmer, P.B., Steward, W.P., dan Gescher, A.J., 2002, Metabolism of the Caner Chemoprventive Agent Curcumin in Human and Rat Intestine, *Cancer Epidem. Biomar.*, **11**:105-111.
- Jain, N.K., 2004, *Progress in Controlled and Novel Drug Delivery System*, CBS, Publisher and Distributor, New Delhi.
- Jemal, A., Siegel, R., Ward, E., Murray, T., Xu, J., Smigal, C. dan Thun, M.J., 2006, Cancer Statistics 2006, *CA: Cancer J. Clin*, **56 (2)** : 106-130.
- Junedy, S., 2005, Isolasi dan Uji Sitotoksisitas Senyawa Alkaloid dari Spon Koleksi no MD-02 Cyang, Skripsi, Fakultas Farmasi, Universitas Gadjah Mada.
- Kee, J.L. dan Heyes, E.R., 1996, *Farmakologi : Pendekatan Proses Keperawatan*, EGC, Jakarta.
- King, R.J.B., 2000, *Cancer Biology, 2nd edition, Pearson Education Limited*, London.

- Kinoshita, T., Takashi, Y., Sakashita, T., Tanabe, T., dan Yashimoto, T., 1999, Growth Stimulation and Induction of Epidermal Growth Factor Receptor by Over-ekspreption of Cyclooxygenase 1 and 2 in Human Colon Carcinoma Cell, *Biochim. Biophys. Acta*, **1438(1)**:120-130.
- Kumar, V., Abbas, dan A.K., Fausto, N., Aster, J.C., 2007. *Robbins dan Cotran Pathologic Basis of Disease*. 7th edition. Saunders.
- Liang, G., Shao, L., Wang, Y., Zhao, C., Chu, Y., Xiao, J., Zhao, Y., Li, X., dan Yang, S., 2009, Exploration and Synthesis of Curcumin Analogue with Improved Structural Stablity Both *in vitro* and *in vivo* as Cytotoxic Agent, *Bioorg. Med. Chem.*, **17**: 2623-2631.
- Lin, J., dan Lin-Shau, S., 2009, Turmeric (Curcumin), In : Anggarwal BB, Kunnumakara AB, eds. *Molecular Targets and Therapeutic Uses of Spices : Modern Uses for Ancient Medicine*, *World Scientific*, Singapore.
- Liu, H.C., Chen, G.G., Vlantis, A.C., Leung, B.C.S., Tong, M.C.E., dan van Hasselt, C.a., 2006, 5 Fluorouracil Mediates Apoptosis and G1/S Arrest in Laryngeal Squamous Cell Carcinoma via a p53-independent Pathway, *Cancer.*, **12(6)**: 482-493.
- Lupulescu, A.P., 1996, Control of Precancer Cell Transformation into Cancer Cells, Its Relevance to Cancer Prevention, *Cancer Detect. Prev.*, **20(6)**: 634-637.
- Lovelyn, C. dan Attama, A.A., 2011, Current State of Nanoemulsions in Drug Delivery, *J. Biomater. Nanobiotechnol.*, **2**, 626-639.
- Makadia, H., Bhatt, A., Parmar, R., Paun, J., dan Tank, H., 2013, Self-nanoemulsifying drug delivery system (SNEDDS): Future Aspect, *Asian J. Pharm. Res.*, **3 (1)**: 21-27.
- Manson, M.M., Holloway, K.A., Howells, L.M., Hudson, S.M. Plummer, S.M., Squires, M.S., dan Prigent, S.A., 2000, Modulation of Signaling Pathways by Chemopreventive Agent, *Biochem. Soc. Trans.*, **28(2)**:7-12.
- Marcu, M.G., Jung, Y.J., Lee, S., Chung E.J., Lee, M.J., dan Trepel, J., 2006, Curcumin is an inhibitor of p300 histone acetyltransferas, *Med. Chem.*, **2(2)**: 169-174.
- Mason, T.G., Graves, S., Wilking, J., dan Lin, M.Y., 2006, Extreme Emulsification: Formation and Structure of Nanoemulsions, *J. Phys: Condens. Matter*, **9(1)**: 193-199.

- McGahon, A.J., Martin, S.J., Bissonnette, R.P., Mahboubi, M., Shi, Y., Mogil R.J., Nishioka, W.K., dan Green, D.R., 1995, The End of the (Cell) Line : Method s for the Study of Apoptosis *in vitro*, in: Schwartz, L.M., Osborne, B.A., Cell Death, *Methods in Cell Biology*, Vol.46, Academic Press, San Diego.
- Mehta, K., Pantazis, P., McQueen, T., dan Aggarwal, B.B., 1997, Antiproliferative effect of curcumin (diferuloylmethane) against human breast tumor cell lines, *Anticancer Drugs*, **5**: 470-81.
- Meiyanto, E., 1999, Kurkumin Sebagai Obat Anti kanker, Menelusuri Mekanisme Aksinya, *Majalah Farmasi Indonesia*, **10(4)**: 224-236.
- Notarbartolo, M., Poma, P., Perri, D., Dusonchet, L., Cervello, M. dan D'Alessandro, N., 2005, Antitumor Effect of Curcumin, Alone or in Combination with Cisplatin or Doxorubicin, on Human Hepatic Cancer Cells, Analysis of Their Possible Relationship to Changes in NF-kB Activation Levels and in IAP Gene Expression, *Cancer Lett.*, **224**: 53-65
- Padanilam, B.J., 2003, Cell Death Induced by Acute Renal Injury : A Perspective on The Contribution of Apoptosis and necrosis, *An J Renal Physiol*, **284**, 608-627.
- 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, *Int. J. Pharm. Investig.*, **1 (2)**, 112-118.
- Phelan, K., dan May, K.M., 2007. Basic Techniques in Mammalian Cell Tissues Culture, Published online September 2007 in Wiley Interscience ([www.interscience.wiley.com](http://www.interscience.wiley.com)).
- Price, S.A. dan Wilson, L.M., 2006. *Patofisiologi Konsep Klinis Proses Penyakit*. EGC: Jakarta.
- Pusztai, L., dan Lewis, E., 1996. *Cell Proliferation in Cance, Regulatory Mechanism of Neoplastic Cell Growth*. New York: Oxford University Press.
- Rao, C.V., Rivenson, A., Simi, B., dan Redd, B.S., 1995, Chemoprevention of Colon Carcinogenesis by Dietary Curcumin, a Naturally Occuring Plant Phenolic Compound, *Cancer Res.*, **5**, 259-266.
- Ries, L.A.G., Melbert, D., Krapcho, M. Stinchomb, D.G., Howldar, N. Horner, M.J., Mariotte, A., Miller, B.A., feuer, E.J., Altekruese, S.F., Lewis, D.R., Clegg, L., Eisner, M.P., Reichman, M. dan Edward N.K., 2007, *SEER Cancer Statistics Review, 1975-2005*, National Cancer Institute, Bethesda. [http://seer.cancer.gov/csr/1975\\_2005](http://seer.cancer.gov/csr/1975_2005), based on November 2007 SEER data submission, posted to the SEER web site, 6 2008.

- Robinson, T.P., Ehler, T., Hubbard, R.B., IV, Bai, X., Arbiser J.L., Goldsmith D.J., dan Bowen J.P., 2003, Design, synthesis and biological evaluation of angiogenesis inhibitors: Aromatic enone and dienone analogues of curcumin, *Bioor. & Med. Chem. Lett.*, **13**, 115-117.
- Rodriguez, L.G., Wu X., dan Guan J.L. 2005. Wound-Healing Assay, *Mol Biol* **294**: 23-9.
- Ryser HJP, 1975 Chemical carcinogenesis. In: Kruse LC, Reese JL, Hart LK, editors. Cancer pathophysiology, etiology and management. 4th ed. St. Louis: The C.V. Mosby Co.; 1975. p. 47-55.
- Sandhu, P.S., Beg, S., Mehta, F., Singh, B., dan Trivedi, P., 2015, Novel dietary lipid based self-nanoemulsifying drug delivery system of paclitaxel with p-gp inhibitor: implications on cytotoxicity bipharmaceutical performance, *Expert Opinion on Drug Delivery*.
- Schuler, M., dan Greenm D.R., 2001, Mechanism of p53-Dependent Apoptosis, *Biochem. Society Transaction*, **29**(6):684-688.
- Schwartz, G.K. dan Shah, M.A., 2005, Targeting the cell Cycle :A New Approach to Cancer Therapy, *J. Clin. Oncol.*, **2**:9408-9421.
- Shah, M.A., dan Schwartz, G.K., 2001, Cell Cycle-mediated Drug Resistance : an Emerging Concept in cancer Therapy, *Clin. Can. Res.*, **7**:2168-2181.
- Shang, L., Nienhaus, K., dan Nienhaus, G.U., 2014, Enginered nanoparticle interacting with cells : size matters, *J. nanobiotechnology*, **12**: 5, 1-11.
- Sheng, H., Shao, J., Morrow, J.D., Beauchamp, R.D., dan Dubois, R.N., 1998, Modulation of Apoptosis and Bcl-2 Expression by Prostaglandin E2 in Human Colon Cancer Cells, *Cancer Res.*, **58**(2); 362-368.
- Simstein, R., Burrow, M., Parker A., Weldon, C., dan Beckman, B, B. 2003. Apoptosis, Chmoresistance, and Breast Cancer : Insight From the MCF-7 Cell Model System, *Exp. Biol. Med.*, **228**:995-1003.
- Thomas, N., Mullertz, A., Graf, A., dan Rades, T., 2012, Influence of Lipid Composition and Drug Load on the In vitro Performance of Self-Nanoemulsifying Drug Delivery System, *J. Pharm. Sci.*, **101**(5), 1721-1731.
- Tsuji, M., dan DuBois, R.N., 1995, Alteration in Cellular Adhesion and Apoptosis in Epithelial Cells Overexpressing Prostaglandin EndoPeroxide Synthase 2, *Cell*, **83**(3), 493-501.

- Tsuji, M., Kawano, S., Tsuji, S., Sawaoka, H., Hori, M. dan Dubois, R.N., 1998, Cyclooxygenase Regulates Angiogenesis Induced by Colon Cancer Cells, *Cell*, **93**:705-716.
- Tonnesen, H.H., dan Karlsen, J., 1985, Studies of curcumin and curcuminoids, VI: Kinetics of Curcumin degradation in Aqueous Solution, Original Paper, *Z. Lebensm. Unters. Fosch*, 402-404.
- Turini ME dan Dubois RN. 2002. Cyclooxygenase-2: A therapeutic target. *Annual Review of Medicine*. **53**:35-57.
- van der Goot H, 1997, The chemistry and qualitative structure-activity relationships of curcumin, in *Recent Development in Curcumin Pharmacology*, Proceedings of The International Symposium of Curcumin Pharmacology (ISCP), August 29-31, 1995, disunting oleh Suwijyo Pramono, Aditya Media, Yogyakarta, Indonesia.
- van Engeland, M., Frans, C.S., Ramaekers, Schutte, B., dan Chris, P.M., 1996, A Novel Assay to Measure Loss of Plasma Membrane Asymmetry During Apoptosis of Adherent Cells in Culture, *Willey-Liss, Inc*, **24**:131-139.
- Wahlang, B., Pawar, Y.B., dan Bansal, A.K., 2011, Identification of permeability-related hurdles in oral delivery of curcumin using the Caco-2 cell model, *Eur J Pharm Biopharm.*, **77(2)**, 275-82.
- Wyllie, A., Donahue, V., Fischer, B., Hill, D., Keeseey, J., dan Manzow, S., 2000, *Cell Death Apoptosis and Necrosis*, Rosche Diagnostic Corporation.
- Yuwono, T. dan Oetari, R.A., 2004, Stabilitas PGV-0 (pentagamavunon-0) sebagai Obat Antiinflamasi dalam Bentuk Sediaan Larutan Cair, *Majalah Farmasi Indonesia*, **15(1)**, 20-25.
- Zain, L.H., Siregar, G.A., Sembiring, J., Sihombing, M., Marpaung, B., Sutadi, S., Nababan, A., dan Tarigan, P., 1999., Diagnostik & Terapi ERCP pada Penderita Ikterus Obstruktif di RSUP H. Adam Malik Medan. *Konas IX PGI, PEGI & PPHI X*, 25-28 November 1999. Jakarta.
- Zeiss, C.J. 2003. The Apoptosis-Necrosis Continuum : Insight from Genetically Altered, *Mice.Vet.Pathol.* **40** :481-495.
- Zhang, F., Abtorki, N.K., Mestre., J.R., Subbaramaiah, K., dan Dannenber, H.J., 1999, Curcumin Inhibits Cyclooxygenase-2 Transcription in Bile Acid dan Phorbol Ester treated Human Gastrointestinal Epithelial Cells, *Carcinogenesis*, **20(3)**, 445-451.

Zhang, WX, dan Thompson, Cb. 2004. Necrotic Death as a Cell Fate, *Genes Dev.*, **20**: 1-15.

