

DAFTAR PUSTAKA

Adhim Z, Lin X, Huang W, *et.al.*, 2012. E10A, an adenovirus-carrying endostatin gene, dramatically increased the tumor drug concentration of metronomic chemotherapy with low-dose cisplatin in a xenograft mouse model for head and neck squamous-cell carcinoma. *Cancer Gene Therapy*. 19:144-52.

Albaayit SFA, Abba Y, Abdullah R and Abdullah N (2014). Research Article: Evaluation of Antioxidant Activity and Acute Toxicity of *Clausena excavata* Leaves Extract. Volume 2014, Article ID 975450, 10 pages.

Andas ARJ, Abdul AB, Rahman HS *et.al.*, 2015. Dentatin from *Clausena excavata* Induces Apoptosis in HepG2 Cells via Mitochondrial Mediated Signaling. *Asian Pacific Journal of Cancer Prevention*, Vol 16, 2015.

Arbab IA, Abdul AB, Aspollah M, *et.al.*, 2011. "Clausena excavata Burm. f. (Rutaceae): a review of its traditional uses, pharmacological and phytochemical properties," *Journal of Medicinal Plants Research*, Vol 5(33): 7177–7184.

Arbab IA, Looi CY, Abdul AB, *et.al.*, 2012. Dentatin Induces Apoptosis in Prostate Cancer Cells via Bcl-2, Bcl-xL, Survivin Downregulation, Caspase-9, -3/7 Activation, and NF- κ B Inhibition. *Evidence-Based Complementary Alternative Medicine*. Volume: 2012, Article ID:856029, 15 pages.

Arbab IA, Abdul AB, Sukari MA, *et.al.*, 2013. Dentatin isolated from *Clausena excavata* induces apoptosis in MCF-7 cells through the intrinsic pathway with involvement of NF- κ B signalling and G0/G1 cell cycle arrest: a bioassay-guided approach. *Journal of Ethnopharmacology* 145 (2013) 343-54.

Arbab IA, Sani NA, Ibrahim MY, Abdalla B. 2015. Research Article. Dentatin from *Clausena excavata* induces apoptosis and reduces the tumors size of La-7 induced mammary carcinogenesis in Sprague Dawley rats. *International Journal of Advanced Multidisciplinary Research (IJAMR)* 2(1): (2015): 67–73.

Archana M; Bastian, Yogesh, TP, Kumaraswamy KL. 2013. Various methods available for detection of apoptotic cells—a review. *Indian Cancer*. 2013 Jul-Sep;50(3):274-83. doi: 10.4103/0019-509X.118720.

Arwansyah, Ambarsari L, Sumaryada TI. 2014. Simulasi Docking Senyawa Kurkumin dan Analognya Sebagai Inhibitor Reseptor Androgen pada Kanker Prostat. *Current Biochemistry*. Vol. 1 (1): 11-19.

Barthomeuf C, Grassi J, Demeule M, Fournier C, Boivin D, Béliveau R. 2005. Inhibition of P-glycoprotein transport function and reversion of MDR1 multidrug resistance by cniadiadin. *Cancer Chemother Pharmacol*. 56:173-81.

Basu D, Nguyen TT, Montone KT, *et.al.*, 2010. Evidence for mesenchymal-like subpopulations within squamous cell carcinomas possessing chemoresistance and phenotypic plasticity. *Oncogene*. 29:4170-82.

Baumeister P, Reiter M, Schwenk-Zieger S, Harréus U. 2010. Transforming growth factor alpha stimulation of mucosal tissue cultures from head and neck squamous cell carcinoma patients increases chemoresistance to cisplatin. *Chemotherapy*. 56:268-74.

Baykul T, Yilmaz HH, Aydin U, Aydin MA, Aksoy M, Yildirim D. 2010. Early diagnosis of oral cancer. *J Int Med Res*. 2010 May-Jun;38(3):737-49.

Beevi SSS, Rasheed AMH, Geetha A. 2004. Evaluation of Oxidative Stress and Nitric Oxide Levels in Patients with Oral Cavity Cancer. *Japanese Journal of Clinical Oncology*, Volume 34, Issue 7, 1 July 2004, Pages 379–385,

Berg JM, Tymoczko JL, Stryer L. 2004. *Biochemistry*, 5th edition. W.H. Freeman and Company and Sumanas Inc. 0-7167-4385-X.

Bernardes VF, Gleber-Netto FO, Sousa SF, Silva TA, Aguiar. 2010. Clinical significance of EGFR, Her-2 and EGF in oral squamous cell carcinoma: a case control study. *J Exp Clin Cancer* 2010; 29(1): 40.

Bisso A, Collavin L, and Sal GD. 2011. p73 as a Pharmaceutical Target for Cancer Therapy. *Curr Pharm Des*. 2011 Feb; 17(6): 578–590.

Blandino G and Dobbelstein M. 2004. Review: Spotlight on p53. P73 and p63, Why do we still need them? *Cell cycle* 3:7, 886-894, July 2004.

Boeckx C, Baay M, Wouters A, Specenier P, Vermorken JB, Peeters M, Lardon F. 2013. Anti-Epidermal Growth Factor Receptor Therapy in Head and Neck Squamous Cell Carcinoma: Focus on Potential Molecular Mechanisms of Drug Resistance. *Oncologist*. 2013 Jul; 18(7): 850–864.

Brambilla E and Gazdar A. 2009. Pathogenesis of lung cancer signaling pathways: roadmap for therapies. *Eur. Respir J*. 2009 Jun; 33(6): 1485-1497.

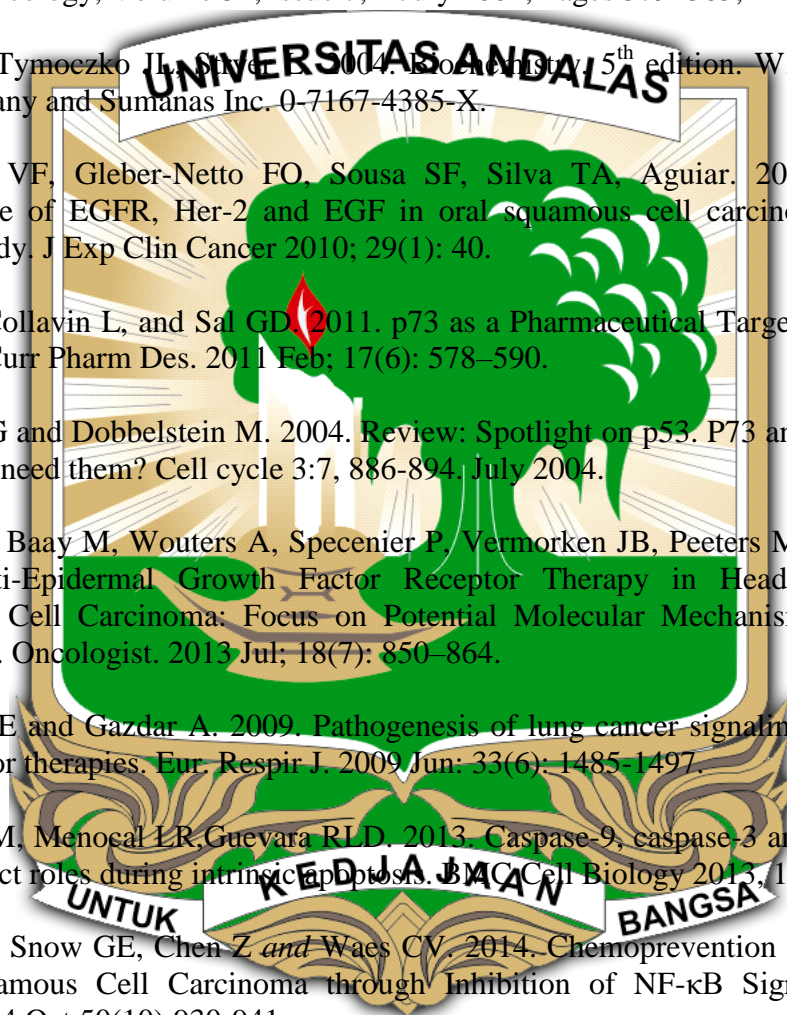
Brentnall M, Menocal LR, Guevara RLD. 2013. Caspase-9, caspase-3 and caspase-7 have distinct roles during intrinsic apoptosis. *JMC Cell Biology* 2013, 14:32.

Broek RV, Snow GE, Chen Z, and Waes CV. 2014. Chemoprevention of Head and Neck Squamous Cell Carcinoma through Inhibition of NF-κB Signaling. *Oral Oncol*. 2014 Oct 50(10):930-941.

Bruice P, 2003. *Organic Chemistry* (4th ed). New Jersey: Prentice Hall, 982-994.

Bundela S, Sharma A, and Bisen PS., 2014. Potential Therapeutic Targets for Oral Cancer: ADM, TP53, EGFR, LYN, CTLA4, SKIL, CTGF, CD70. *PLoS One*. 2014; 9(7).

Bruton, L., Lazo, J. S., and Parker, K. L., 2005, *Goodman & Gilman's The Pharmacological Basis of Therapeutics*, 11th Edition, McGrawHill, Lange.



Califano J, van der Riet P, Westra W, *et.al.*, 1996. Genetic progression model for head and neck cancer: implications for field cancerization. *Cancer Res.* 1996 Jun 1;56(11):2488-92.

Cawson RA and Odell EW. 2002. *Cawson's Essentials of Oral Pathology and Oral Medicine.* 7th edition. Spain: Elsevier.

Chaturvedi MM, Sung B, Yadav VR, Kannappan R and Aggarwal BB. 2011. NF- κ B addiction and its role in cancer: 'one size does not fit all'. *Oncogene.* 2011 Apr 7; 30(14): 1615-1630.

Chen J-j, Constantinou M, Mikelis, Yaqin Zhang, *et.al.* 2013. TRAIL induces apoptosis in oral squamous carcinoma cells. A Ras-stalk with oncogenic Ras regulated cell surface expression of death receptor 5. *Oncotarget.* 2013 Feb; 4(2): 206–217.

Chen H-C, Kanai M, Inoue-Yamauchi A, *et.al.* 2015. An Interconnected Hierarchical Model of Cell Death Regulation by the BCL-2 Family. *Nat. Cell. Biol.* 2015 Oct; 17(10): 1270-1281.

Cheng K-y, Wang Z-l, Gu Q-y, and Hao M. 2016. Survivin Overexpression Is Associated with Aggressive Clinicopathological Features in Cervical Carcinoma: A Meta-Analysis. *PlosOne.* 2016; 11(10): e165117.

Choi S and Myers JN. 2008. Molecular pathogenesis of oral squamous cell carcinoma: implications for therapy. *J Dent Res.* 2008 Jan;87(1):14-32.

Chu Y-H, Tzeng S-L, Lin C-W, Chien M-H, Chen M-K, Yang S-F. 2012. Impacts of MicroRNA Gene Polymorphisms on the Susceptibility of Environmental Factors Leading to Carcinogenesis in Oral Cancer. *PLOSone.* Published: June 28, 2012.

Correia C, Lee S-H, Meng XW, *et.al.*, 2015. Emerging Understanding of Bcl-2 Biology: Implications for Neoplastic Progression and Treatment. *Biochim Biophys Acta.* 2015 Jul; 1853 (7): 1658-1671.

Crowley LC, Chojnowski G and Nigel J. Waterhouse NJ. 2016. Measuring the DNA Content of Cells in Apoptosis and at Different Cell-Cycle Stages by Propidium Iodide Staining and Flow Cytometry. *Cold Spring Harbor Protocols*, 2016 (10), 905-910.

D'Ambrosio SM, Han C, Pan L, Kinghorn AD, and Ding H. 2011. Aliphatic acetogenin constituents of avocado fruits inhibit human oral cancer cell proliferation by targeting the EGFR/RAS/RAF/MEK/ERK1/2 pathway. *Biochem Biophys Res Commun.* 2011 Jun 10; 409(3): 465–469.

Darzynkiewicz Z, Bedner E & Smolewski P. 2001. Flowcytometry in analysis of cell cycle and apoptosis. *Seminars in Hematology*, 38(2), 179-193.



Deshpande AM *and* Wong DT. 2008. Molecular Mechanisms of Head and Neck Cancer. *Expert Rev Anticancer Ther.* 2008 May; 8(5): 799–809.

Ding Y, Yao H, Yao Y, Fai LY, and Zhang Z. 2013. Protection of Dietary Polyphenols against Oral Cancer. *Nutrients.* 2013 Jun; 5(6): 2173–2191.

Dornfeld K, Madden M, Skildum A, Wallace KB. 2015. Aspartate facilitates mitochondrial function, growth arrest and survival during doxorubicin exposure. *Cell Cycle.* 2015; 14(20): 3282-3291.

Du L, Ma S, Wen X, Chai J, and Zhou D. 2017. Oral squamous cell carcinoma cells are resistant to doxorubicin through upregulation of miR-221. *Mol Med Rep.* 2017 Sep; 16(3): 2659–2667.

Du X, Li Y, Xia Y-L, Ai S-M, Jing Liang, Sang P, Ji X-L, and Liu S-Q. 2016. Insights into Protein–Ligand Interactions: Mechanisms, Models, and Methods. *Int J Mol Sci.* 2016 Feb; 17(2): 144.

Dunnick JK and Nyska A. 2013. The Toxicity and Pathology of Selected Dietary Herbal Medicines. *Toxicologic Pathology*, 41: 374-386, 2013. ISSN: 0192-6233 print / 1533-1601 online.

Ethayathulla AS, Tse P-W, Monti P, *et.al.*, 2012. Structure of p73 DNA-binding domain tetramer modulates p73 transactivation. *Proc Natl Acad Sci U S A.* 2012 Apr 17; 109(16): 6066-6071.

Elmore S, 2007. Apoptosis: a review of programmed cell death. *Toxicologic Pathology*, 35 (4), 495-516.

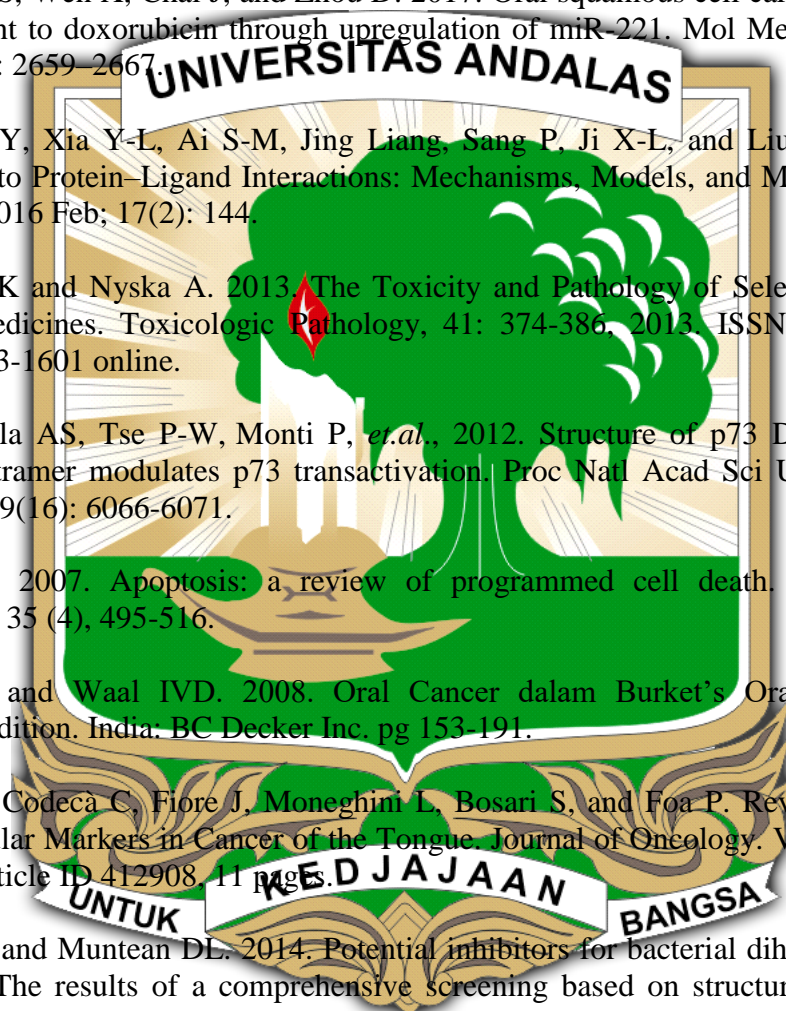
Epstein J and Waal IVD. 2008. Oral Cancer dalam Burket's Oral Medicine. Eleventh edition. India. BC Decker Inc. pg 153-191.

Ferrari D, Codeca C, Fiore J, Moneghini L, Bosari S, and Foa P. Review Article: Biomolecular Markers in Cancer of the Tongue. *Journal of Oncology.* Volume 2009 (2009), Article ID 412908, 11 pgs.

Ferencz L and Muntean DL. 2014. Potential inhibitors for bacterial dihydropteroate synthase. The results of a comprehensive screening based on structural similarity with p -Amino-Benzoic Acid and docking simulation on the surface of enzyme. *Rev. Roum. Chim.* 2014, 59(9), 733-738.

Fiandalo MV *and* Kyprianou N. 2012. Caspase Control: Protagonist of Cancer Cell Apoptosis. *Exp Oncol.* 2012 Oct; 34(3): 165–175.

Finn NA, Findley HW, and Kemp ML. 2011. A Switching Mechanism in Doxorubicin Bioactivation Can Be Exploited to Control Doxorubicin Toxicity. *PLoS Comput Biol.* 2011 Sep; 7(9): e1002151.



Florou D, Patsis C, Ardavanis A and Scorilas A. 2013. Effect of doxorubicin, oxaliplatin, and methotrexate administration on the transcriptional activity of *BCL-2* family gene members in stomach cancer cells. *Cancer Biol Ther*. 2013 Jul 1; 14(7): 587-596.

Follis AV, Llambi F, Merritt P, Chipuk JE, Green DR, Kriwacki R. 2015. Pin1-induced proline isomerization in cytosolic p53 mediates BAX activation and apoptosis. *Mol Cell*. 2015 Aug 20; 59(4): 677-684.

Foo JB, Yazan LS, Tor YS, *et.al.*, 2014. Induction of cell cycle arrest and apoptosis in caspase-3 deficient MCF-7 cells by *Dillenia suffruticosa* root extract via multiple signaling pathways. *BMC Complementary and Alternative Medicine* 2014, 14:197.

Fouad YA and Aanei C. 2017. Revisiting the hallmarks of cancer. *Am J Cancer Res*. 2017; 7(5): 1016–1036.

Freshney R. 2000. *Culture of animal cells: A Manual of Basic Technique*, fourth ed. A. John Wiley and Sons, Inc:USA.

Fuchs JE, von Grafenstein S, Huber RG, Wallnoefer HG, and Klaus R Liedl KR. Specificity of a protein–protein interface: Local dynamics direct substrate recognition of effector caspases. *Proteins*. 2014 Apr; 82(4): 546–555.

Gasche JA, and Goel A. 2012. Epigenetic mechanisms in oral carcinogenesis. *Future Oncol*. 2012 Nov; 8(11): 1407–1425.

Gali-Muhtasib H., Roessner, A., Schneider-Stock, R. 2006. Thymoquinone A promising anti-cancer drug from natural sources. *The International Journal of Biochemistry and Cell Biology*, 38, 1249–1253.

Gewirtz DA. 1999. A critical evaluation of the mechanisms of action proposed for the antitumor effects of the anthracycline antibiotics adriamycin and daunorubicin. *Biochem Pharmacol*. 1999 Apr 1; 57(7):727-41.

Girija CR, Karimakar P, Poojar CS, Begum AS, Syed AA. 2010. Molecular Docking Studies of Curcumin Derivatives with Multiple Protein Targets for Procarcinogen Activating Enzyme Inhibition. *J Proteomics Bioinform* 3: 200-203. doi: 10.4172/jpb.1000140

Golubovskaya VM and Cance W. 2010. Focal Adhesion Kinase and p53 signal transduction pathways in cancer. *Front Biosci*. 2010 Jun 1; 15: 901-912.

Gomes CC, Bernardes VF, Diniz MG, De Marco L,3 and Gomez RS. 2012. Anti-apoptotic gene transcription signature of salivary gland neoplasms. *BMC Cancer*. 2012; 12: 61.

Guedes IA, de Magalhães CS and Dardenne LE. 2014. Receptor–ligand molecular docking. *Biophys Rev*. 2014 Mar; 6(1): 75–87. Published online 2013 Dec 21. doi: 10.1007/s12551-013-0130-2. PMID: PMC5425711.



Gupta SC, Sundaram C, Reuter S and Aggarwal BB. 2010. Inhibiting NF- κ B Activation by Small Molecules As a Therapeutic Strategy. *Biochim Biophys Acta*. 2010 Oct-Dec; 1799(10-12): 775-787.

Haferkamp B, Zhang H, Lin Y, Yeap X, Bunce A, Sharpe J and Xiang J. 2012. Bax Δ 2 Is a Novel Bax Isoform Unique to Microsatellite Unstable Tumors. *J Biol Chem*. 2012 Oct 5; 287(41): 34722-34729.

Harmita, Harahap Y & Hayun. 2006. *Buku Ajar Kimia Medisinal*. Depok: Departemen Farmasi FMIPA UI, 53.

Hassan M, Watari H, Almaaty AA, Ohba Y, and Sakuragi N. 2014. Apoptosis and Molecular Targeting Therapy in Cancer. *Biomed Res Int* 2014; 2014: 150845.

Hasima N and Aggarwal BB. 2012. Cancer-linked targets modulated by curcumin. *Int J Biochem Mol Biol*. 2012; 3(4): 328–351.

Hirano H, Maeda H, Yamaguchi T, Yokota S, Mori M and Sakoda S. 2015. Survivin expression in lung cancer: Association with smoking, histological types and pathological stages. *Oncol Lett*. 2015 Sept; 10(3): 1456-1462.

Hsu S, Baldev Singh B, George Schuster G. 2003. Review: Induction of apoptosis in oral cancer cells: agents and mechanisms for potential therapy and prevention. *Oral Oncology* (2003) 0 1–13.

Huang Y, Jeong JS, Okamura J, *et.al.*, 2012. Global tumor protein p53/p63 interactome: making a case for cisplatin chemoresistance. *Cell Cycle*. 11:2367-79.

Ichwan SJA, Yamada S, Sunrejkanchanakij P, Ibrahim-Auerkari E, Eto K and Ikeda MA. 2006. Defect in serine 46 phosphorylation of p53 contributes to acquisition of p53 resistance in oral squamous cell carcinoma cells. *Oncogene* (2006) 25, 1216-1224.

Ichwan SJA., Taher M, Ohtani K, Ikeda MA. 2012. "Therapeutic Targeting of p53-mediated Apoptosis Pathway in Head and Neck Squamous Cell Carcinomas: Current Progress and Challenges. In book: *Tumor Suppressor Genes*. DOI: 10.5772/27968. Source: InTech. Book edited by Yue Cheng, ISBN 978-953-307-879-3. Pg 129-144.

Iranshahi M, Barthomeuf C, Bayet-Robert M, *et.al.*, 2014. Drimane-Type Sesquiterpene Coumarins from *Ferula gummosa* Fruits Enhance Doxorubicin Uptake in Doxorubicin Resistant Human Breast Cancer Cell Line. *J Tradit Complement Med*. 4: 118–125.

Isabella A. GuedesIA, de Magalhães CS, and Dardenne LE. 2014. Receptor–ligand molecular docking. *Biophys Rev*. 2014 Mar; 6(1): 75–87.

Jafari A, Najafi SH, Moradi F, Kharazifard MJ, and Khami MR. 2013. Delay in the Diagnosis and Treatment of Oral Cancer. *J Dent (Shiraz)*. 2013 Sep; 14(3): 146–150.

Jaiswal PK, Goel A, and Mittal RD. 2015. Survivin: A molecular biomarker in cancer. *Indian J Med Res.* 2015 Apr; 141(4): 389–397.

Jiang F, Zhao W, Zhou L, Liu Z, Li W and Yu D. 2014. Article: MiR-222 Targeted PUMA to Improve Sensitization of UM1 Cells to Cisplatin. *Int. J. Mol. Sci.* 2014, 15, 22128-22141.

Joerger AC. 2009. Structural Evolution of p53, p63, and p73: Implication of Heterotetramer Formation. *Proc. Natl. Acad. Sci. USA* 106: 17705-17710.

Jurel SK, Gupta DS, Singh RD, Singh M, and Srivastava S. 2014. Genes and oral cancer. *Indian J Hum Genet.* 2014 Jan-Mar; 20(1): 4–9.

Kastritis PL and Bonvin AMJJ. 2012. On the binding affinity of macromolecular interactions: daring to ask why proteins interact. *Journal of The Royal Society Interface* 10: 20120835.

Karthik D. 2014. Prediction on binding affinity of some selected Coumarin and Anthraquinone derivatives on cysteine rich C1 domain of kinase suppressor of RAS-1 (KSR-1) of MAPK signaling pathway. *Journal of Computational Methods in Molecular Design.* 2014, 4 (4):131-139.

Kawai S, Y. Tomono, K. Ogawa *et.al.* 2001. Antiproliferative effect of isopentenylated coumarins on several cancer cell lines. *Anticancer Res.* 21:1905–1911.

Kholoussi NM, El-Nabi SHE, Esmail NN, El-Bary NMA and El-Kased, AF. 2014. Evaluation of Bax and Bak Gene Mutations and Expression in Breast Cancer. *Biomed Res Int.* 2014; 2014: 249372.

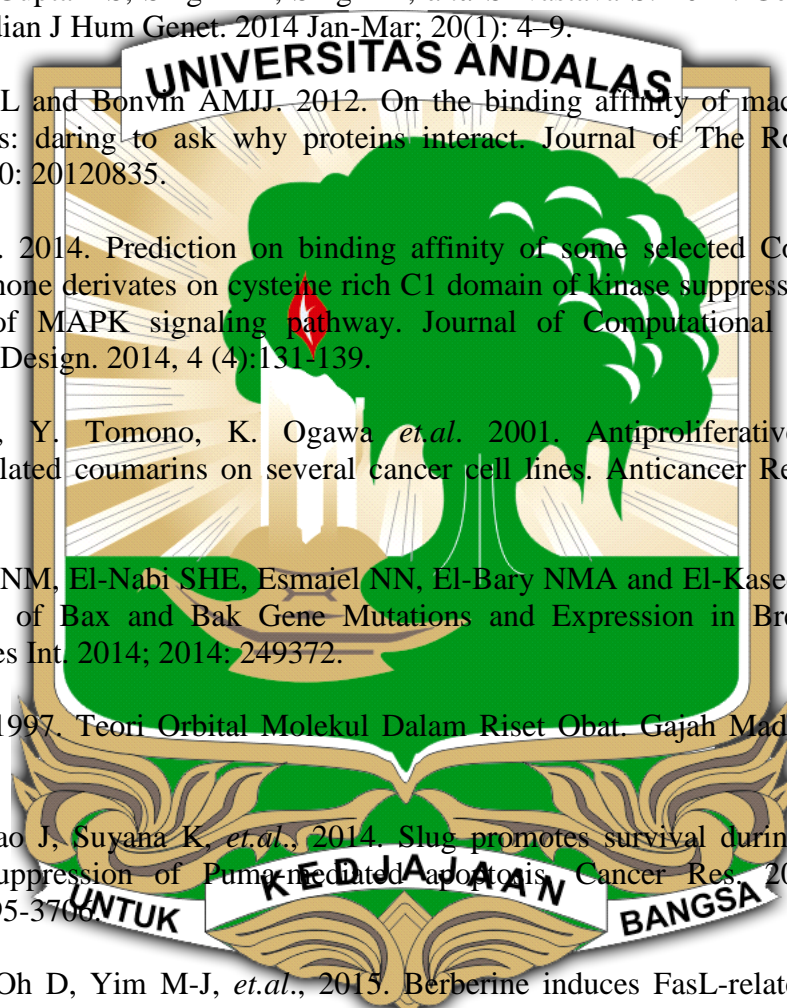
Kier LB. 1997. *Teori Orbital Molekul Dalam Riset Obat.* Gajah Mada University Press.

Kim S, Yao J, Suyana K, *et.al.*, 2014. Slug promotes survival during metastasis through suppression of Puma-mediated apoptosis. *Cancer Res.* 2014 Jul 15; 74(14):3695-3700.

Kim J-S, Oh D, Yim M-J, *et.al.*, 2015. Berberine induces FasL-related apoptosis through p38 activation in KB human oral cancer cells. *Oncol Rep.* 2015 Apr; 33(4): 1775–1782.

Kim D-C and Ryu J-K. 2016. In silico analysis and molecular docking comparison of Curcumin and Bisdemethoxycurcumin on Transthyretin. *American Journal of Pharmacological Sciences.* 2016, vol.4, No. 2, 28-30.

Kitazumi I & Tsukahara M. 2011. Regulation of DNA Fragmentation: The Role of caspases and phosphorylation. *Federation of European Biochemical Societies Journal*, 278(3), 427-441.



Klanrit P, Taebunpakul P, Flinterman MB, et.al., 2009. PML involvement in the p73-mediated E1A-induced suppression of EGFR and induction of apoptosis in head and neck cancers. *Oncogene*. 2009 October 1; 28(39): 3499-3512.

Klenkar J and Molnar M. 2015. Review Article: Natural and synthetic coumarins as potential anticancer agents. *Journal of Chemical and Pharmaceutical Research*, 2015, 7(7):1223-1238.

Kresno SB, 2007. *Imunologi: Diagnosis dan Prosedur Laboratorium*. Edisi IV. Jakarta: FKUI.

Kumar S and Pandey AK. 2013. Chemistry and Biological Activities of Flavonoids: An Overview. *Scientific World Journal* 3: 101-109.

Kurokawa M and Kornbluth S. 2009. Caspases and Kinases in a Death Grip. *Cell*. 2009 Sep 4; 138(5): 838–854.

Kuwana T, Olson NH, Kiosses WB, Peters B and Newmeyer DD. 2016. Pro-apoptotic Bax molecules densely populate the edges of membrane pores. *Sci Rep*. 2016; 6: 27299.

Lakhani SA, Masud A, Kuida K, Porter GA Jr, Booth CJ, Mehal WZ, Inayat I, Flavell RA. 2006. Caspases 3 and 7: key mediators of mitochondrial events of apoptosis. *Science*. 311(5762):847-51.

Leite AFSdA, Bernardo VG, Buexm LA, *et.al.* 2016. Immunoexpression of cleaved caspase-3 shows lower apoptotic area indices in lip carcinomas than in intraoral cancer. *J Appl Oral Sci*. 2016 Jul-Aug; 24(4): 359–365.

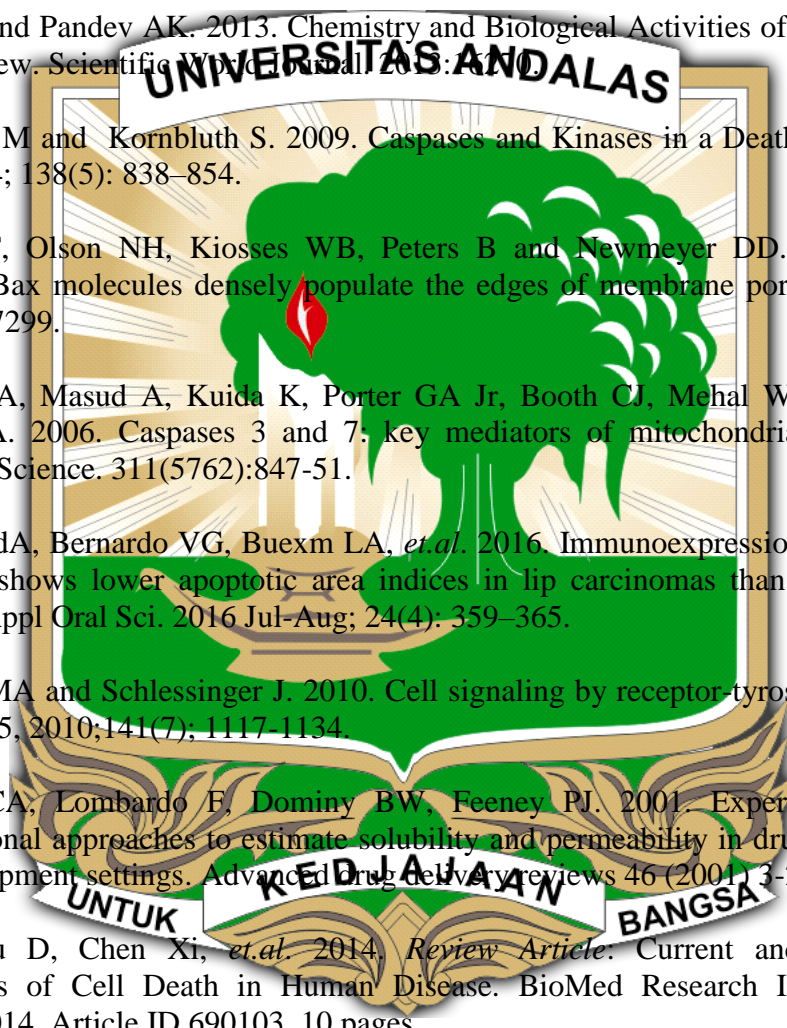
Lemmon MA and Schlessinger J. 2010. Cell signaling by receptor-tyrosine kinases. *Cell*. Jun 25, 2010;141(7); 1117-1134.

Lipinski CA, Lombardo F, Dominy BW, Feeney PJ. 2001. Experimental and computational approaches to estimate solubility and permeability in drug discovery and development settings. *Advanced drug delivery reviews* 46 (2001) 3-26.

Li K, Wu D, Chen Xi, *et.al.* 2014. *Review Article*. Current and Emerging Biomarkers of Cell Death in Human Disease. *BioMed Research International*. Volume 2014, Article ID 690103, 10 pages.

Li C, Wang L, Su J, Zhang R, Fu L, and Zhou Y. 2013. mRNA expression and Hypermethylation of tumor suppressor genes apoptosis protease activating factor-1 and death-associated protein kinase in oral squamous cell carcinoma. *Oncology Letters* 6: 280-286, 2013.

Lim SV, Rahman MBA, Tejo, BA. 2011. Structure-based and ligand-based virtual screening of novel methyltransferase inhibitors of the dengue virus. *BMC Bioinformatics* 2011, 12(Suppl 13):S24



Lin C-W, Hsieh Y-S, Hsin C-H, *et.al.*2012. Effects of *NFKB1* and *NFKBIA* Gene Polymorphisms on Susceptibility to Environmental Factors and the Clinicopathologic Development of Oral Cancer. *PloS One*, 2012; 7(4): e35078.

Liu J, Uematsu H, Tsuchida N, Ikeda MA. 2009. Association of caspase-8 mutation with chemoresistance to cisplatin in HOC313 head and neck squamous cell carcinoma cells. *Biochemistry Biophysic Research Communication*. 390:989-94.

Liu Q-Q, Zhang F-F,Wang F, *et.al.*, 2015. Research Article: TIPE2 Inhibits Lung Cancer Growth Attributing to Promotion of Apoptosis by Regulating Some Apoptotic Molecules Expression. *PLOsone*. Published: May 6, 2015

Lo W-Y and Chang N-W. 2013. A Novel Inhibitor, Indirubin-39-Monoxime Suppresses Oral Cancer Tumorigenesis through the Downregulation of Survivin. *PLoS ONE* 8(8): e70198. <https://doi.org/10.1371/journal.pone.0070198>.

Lo Muzio L Pannone G, Staibano S, Mignogna MD, Rubini C, Mariggì MA, Procaccini M, Ferrari F, De Rosa G, and Altieri DC. 2003. Survivin expression in oral squamous cell carcinoma. *Br J Cancer*. 2003 Dec 15; 89(12): 2244–2248.

Lodish H, Berk A, Zipursky SL, Matsudaira P, Baltimore D, and Darnell J. 2000. *Molecular Cell Biology*, 4th edition. New York: W. H. Freeman; 2000. ISBN-10: 0-7167-3136-3.

Maji S, Samal SK, Pattanaik L, *et.al.*, 2015. Mcl-1 is an important therapeutic target for oral squamous cell carcinomas. *Oncotarget*, vol.6, No. 18.

Maksimenko A, Dosio F, Mougin J, *et.al.*, 2014. A unique squalenoylated and nonpegylated doxorubicin nanomedicine with systemic long-circulating properties and anticancer activity. *Proc Natl Acad Sci U S A*. 2014 Jan 14; 111(2): E217–E226.

Marczyk G, DeMatteo D, Festinger D. 2005. *Essentials of Research Design and Methodology*. John Wiley & Sons, Inc: New Jersey.

Markovic A and Chung CH. 2011. Current role of EGF receptor monoclonal antibodies and tyrosine kinase inhibitors in the management of head and neck squamous cell carcinoma. *Expert Rev Anticancer Ther*. 2012 Sep; 12(9): 1149-1159.

Maseki S, Ijichi K, Tanaka H, *et.al.*, 2012. Acquisition of EMT phenotype in the gefitinib-resistant cells of a head and neck squamous cell carcinoma cell line through Akt/GSK-3 β /snail signalling pathway. *British Journal of Cancer*. 106:1196-204.

Mascolo M, Siano M, Ilardi G, *et.al.* 2012. Epigenetic dysregulation in oral cancer. *Int. J. Mol. Sci*. 2012. 13, 2331-2353.

McDonald 3rd, E.R. & El-Deiry W.S. 2000. Cell cycle control as a basis for cancer drug development (Review). *International Journal of Oncology*, 16(5), 871-886.

McLean GW, Carragher NO, Avizienyte E, Evans J, Brunton VG and Frame MC. 2005. The Role of Focal-Adhesion Kinase in Cancer: A New Therapeutic Opportunity. *Nature Reviews Cancer*. Vol. 5, July 2005.

McIlwain DR, Berger T, and Mak TW. 2013. Caspase Functions in Cell Death and Disease. *Cold Spring Harb Perspect Biol*. 2013 Apr; 5(4): a008656.

Mendez-Catala CF, Gretton S, Vostrov A, *et.al.* 2013. A Novel Mechanism for CTCF in the Epigenetic Regulation of *Bax* in Breast Cancer Cells. *Neoplasia*. 2013 Aug; 15(8): 898–912.

Meyer EE, Rosenberg KJ and Israelachvili J. 2006. Recent progress in understanding hydrophobic interactions. *NAS* 2006 October, 103 (43) 15739-15746.

Min A, Zhu C, Peng S, Rajthala S, Costea DE, and Sapkota D. 2015. MicroRNAs as Important Players and Biomarkers in Oral Carcinogenesis. *Biomed Res Int*. 2015; 2015: 186904.

Minotti, G., Menna, P., Salvatorelli, E., Cairo, G., and Gianni, L. 2004. Anthracyclins: Molecular Advances and Pharmacologic Developments in Antitumor Activity and Cardiotoxicity. *Pharmacol Rev.*, 56:185-228.

Mishra R. (2010). Glycogen synthase kinase 3 beta: can it be a target for oral cancer. *Mol Cancer*. 2010; 9: 144.

Moazami-Goudarzi M, Farshdousti-Hagh M, Hoseinpour-Feizi A, *et.al.* 2016. The acute lymphoblastic leukemia prognostic scoring whether it is possible by BCL-2, BAX gene promoter genotyping. *Caspian J Intern Med*. 2016 Spring; 7(2): 105-113.

Mobahat M, Narendran A and Riabowol K. 2014. Survivin as a Preferential Target for Cancer Therapy. *Int J. Mol. Sci*. 2014 Feb; 15(2): 2494-2516.

Molinolo AA, Amornphimotham P, Squarize CH, *et.al.*, 2009. Dysregulated Molecular Networks in Head and Neck Carcinogenesis. *Oral Oncol*. 2009;45(4-5): 324-334.

Moscoso NB, Solorzano GC, Benavides JCR, and Orellana MIR, 2017. Natural Compounds as Modulators of Cell Cycle Arrest: Application for Anticancer Chemotherapies. *Curr Genomics*. 2017 Apr; 18(2): 106–131.

Muller PAJ and Vousden KH. 2014. Mutant p53 in Cancer: New Functions and Therapeutic Opportunities. *Cancer Cell*. Mar 17, 2014; 25(3): 304–317.

Murray R *et.al.*, (2003) *Biokimia Harper*. Edisi ke 25. Jakarta: penerbit buku kedokteran EGC, 45-58.



Nie C, Luo Y, Zhao X, Tong A, Liu X, Yuan Z, Wang C and Wei Y. 2014. Caspase-9 mediates Puma activation in UCN-01-induced apoptosis. *Cell Death Dis.* 2014Oct; 5(10): e1495.

Noguti J, De Moura CFG, De Jesus GPP, Da Silva VHP, *et.al.* 2012. Review. Metastasis from oral cancer: An overview. *Cancer Genomics & Proteomics* 9: 329-336 (2012).

Olsson M and Zhivotovsky B. 2011. Caspases and cancer. *Cell Death Differ.* 2011 Sep; 18(9): 1441–1449.

Ozaki T and Nakagawara A, 2011. Review: Role of p53 in Cell Death and Human Cancers. *Cancers*, 2011, 2, 194.

Parrish AB, Freel CD, and Kornbluth S. 2013. Cellular Mechanisms Controlling Caspase Activation and Function. *Cold Spring Harb Perspect Biol* 2013;5:a008672.

Peh TH, Lim GK, Taufiq-Yap YH, Ee GCL, Rahman M, Sukari MA. 2013. *Research Article: A New Cytotoxic Carbazole Alkaloid Isolated from the Stem Bark of Malaysian Clausena Excavata.* *Canadian Chemical Transactions Year 2013.* Volume 1. Issue 3. Page 165-172.

Peltonen JK, Helppi H, and Vahakangas KH. 2010. P53 in head and neck cancer: Functional consequences and environmental implications of TP53 mutations. *Head and Neck Oncology.* December 2010.

Peng C-H., Liao C-T, Peng S-C, *et.al.*, 2011. A Novel Molecular Signature Identified by Systems Genetics Approach Predicts Prognosis in Oral Squamous Cell Carcinoma. *Plos One.* Vol: 6, issue 8. August 2011.

Peng WW, Zeng GZ, Song WW, Tan NH. 2013. A new cytotoxic carbazole alkaloid and two new other alkaloids from *Clausena excavata*. *Chem Biodivers.* 10:1317-21.

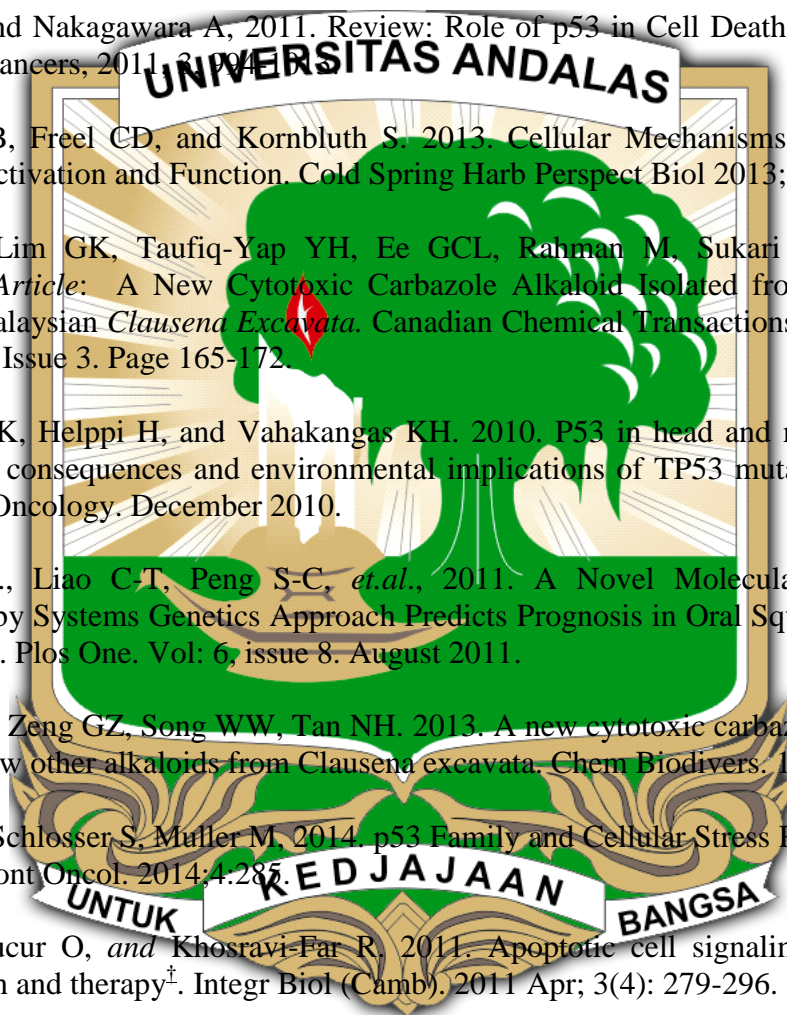
Pflaum J, Schlosser S, Muller M. 2014. p53 Family and Cellular Stress Responses in Cancer. *Front Oncol.* 2014;4:285.

Plati J, Bucur O, and Khosravi-Far R. 2011. Apoptotic cell signaling in cancer progression and therapy[†]. *Integr Biol (Camb).* 2011 Apr; 3(4): 279-296.

Pucci B, Kasten M, and Giordano A. 2000. Cell Cycle and Apoptosis. *Neoplasia.* 2000 Jul; 2(4): 291–299.

Rahman MA, Amin ARM, and Shin DM. 2010. Chemopreventive potential of natural compounds in head and neck cancer. *Nutr Cancer.* 2010 ; 62(7): 973–987.

Ramshankar V and Krishnamurthy A. 2014. Chemoprevention of oral cancer: Green tea experience. *J Nat Sci Biol Med.* 2014 Jan-Jun; 5(1): 3–7.



Rang H., M. Dole, Ritter *and* Moore. 2003. Pharmacology. 5th ed. Churchill Livingstone: New York.

Riccardi C & Nicoletti I. 2006. Analysis of apoptosis by propidium iodide staining and flow cytometry. *Nature Protocols*, 1(3), 1458-1461.

Rikiishi H. 2012. Autophagic action of new targeting agents in head and neck oncology. *Cancer Biol Ther.* 2012 Sep 1; 13(11):978-991.

Rivera C. 2015. Essentials of oral cancer. *J Clin Exp Pathol.* 2015; 8(9): 11884–11894.

Ruddon, RW. 2007. *Cancer Biology, Fourth Edition*. Oxford University Press: New York.

Rufini A, Agostini M, Grespi F, *et.al.*, 2011. p73 in *Cancer. Genes & Cancer* / vol 2 no 4 (2011).

Ryoo HD *and* Bergmann A. 2012. The Role of Apoptosis-Induced Proliferation for Regeneration and Cancer. *Cold Spring Harb Perspect Biol* 2012;4:a008797 3.

Sakagami H. 2010. Review article: Apoptosis-inducing activity and tumor-specificity of antitumor agents against oral squamous cell carcinoma. *Japanese Dental Science Review*. Volume 46, Issue 2, August 2010, Pages 173-187.

Sanhueza C, Wehinger S, Bennett JC, Valenzuela M, Owen GI *and* Quest AFG. The twisted survivin connection to angiogenesis. *Mol Cancer.* 2015; 14:198.

Sato K-I, 2013. Cellular Functions Regulated by Phosphorylation of EGFR on Tyr845. *Int J Mol Sci*, 2013. Jun; 14(6): 10761–10790.

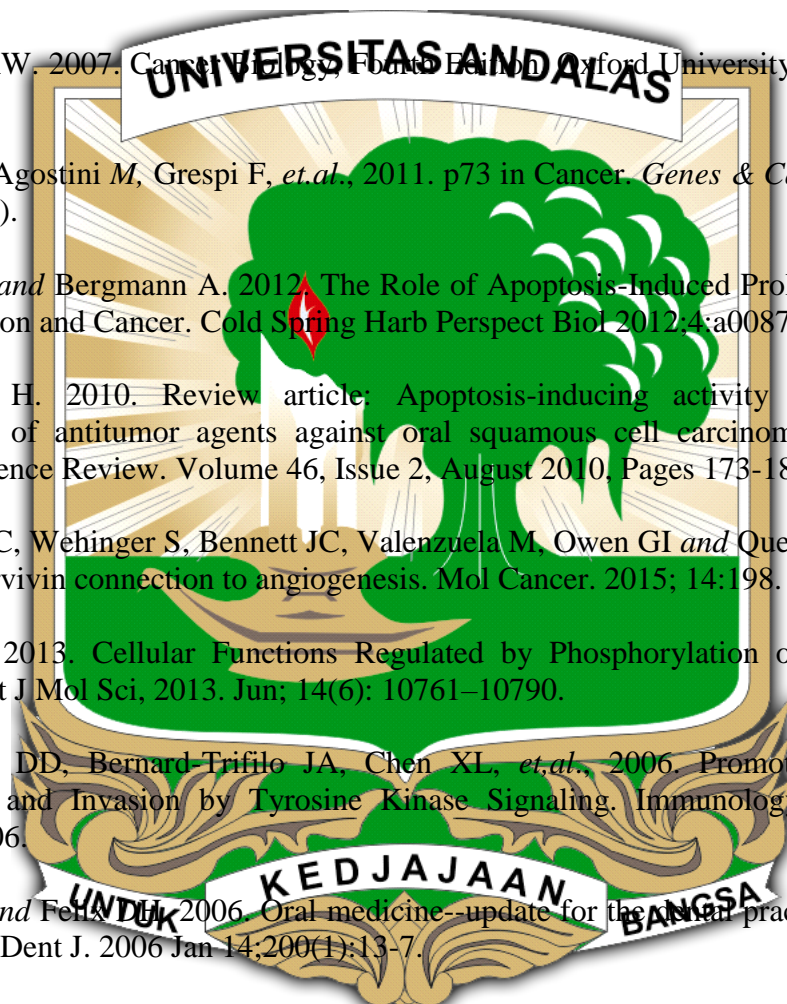
Schlaepfer DD, Bernard-Trifilo JA, Chen XL, *et.al.*, 2006. Promotion of Cell Migration and Invasion by Tyrosine Kinase Signaling. *Immunology. Scientific Report* 2006.

Scully C *and* Felix U. 2006. Oral medicine--update for the general practitioner oral cancer. *Br Dent J.* 2006 Jan 14;200(1):13-7.

Senese S, Lo YC, Huang D, *et.al.*, 2014. Chemical dissection of the cell cycle: probes for cell biology and anti-cancer drug development. *Cell Death Dis.* 2014 Oct; 5(10): e1462.

Seshacharyulu P, Ponnusamy MP, Haridas D, Jain M, Ganti A, and Batra SK. 2012. Targeting the EGFR signaling pathway in cancer therapy. *Expert Opin Ther Targets.* 2012 Jan; 16(1): 15–31.

Setiawati A, SB, Z & Suyatna F. 2005. Pengantar Farmakologi. Dalam: Farmakologi dan Terapi. Edisi ke-4. Jakarta: Bagian Farmakologi UI. 14-19.



Shamas-Din A, Kale J, Leber B, *et.al.* 2013. Mechanisms of action of Bcl-2 family proteins. *Cold Spring Harb Perspect Biol*, 5, 008714.

Shukla S, Chen Zhe-Seng, and Ambudkar SV. Tyrosine kinase inhibitors as modulators of ABC transporter-mediated drug resistance. *Drug Resistance Updates*. Feb 2012;15(1-2):70-80.

Sliwoski G, Kothiwale S, Jens Meiler J, and Lowe EW. 2014. Computational Methods in Drug Discovery. *Pharmacol Rev*. 2014 Jan; 66(1): 334–395.

Sripisut T, Cheenpracha S., Ritthiwigrom T. 2012. Chemical Constituents from the Roots of *Clausena excavata* and Their Cytotoxicity. *Rec. Nat. Prod.* 6:4 (2012) 386-389.

Su CR, Yeh SF, Liu CM, *et.al.*, 2009. Anti-HBV and cytotoxic activities of pyranocoumarin derivatives. *Bioorg Med Chem*. 17:6137-43.

Sudiono J. 2008. *Pemeriksaan Patologi untuk Diagnosis Neoplasma Mulut*. Jakarta: EGC.2008.

Sun Q, Sakaida T, Yue W, Gollin SM, Yu J. 2007. Chemosensitization of head and neck cancer cells by PUMA. *Molecular Cancer Therapy*. 6:3180-8.

Sun Q, Ming L, Thoma SM, *et.al*, 2009. PUMA mediates EGFR tyrosine kinase inhibitor-induced apoptosis in head and neck cancer cells. *Oncogen*, 2009 Jun 18; 28(24): 2348-2357.

Sung B, Prasad S, Yadav VR, Aggarwal BB., 2012. Cancer cell signaling pathways targeted by spice-derived nutraceuticals. *Nutr. Cancer*, 2012; 64 (2);193-197

Syafriadi M.2008. Pathogenesis Of Oral Cancer. *Indonesian Journal of Dentistry* 2008;15(2):104-110.

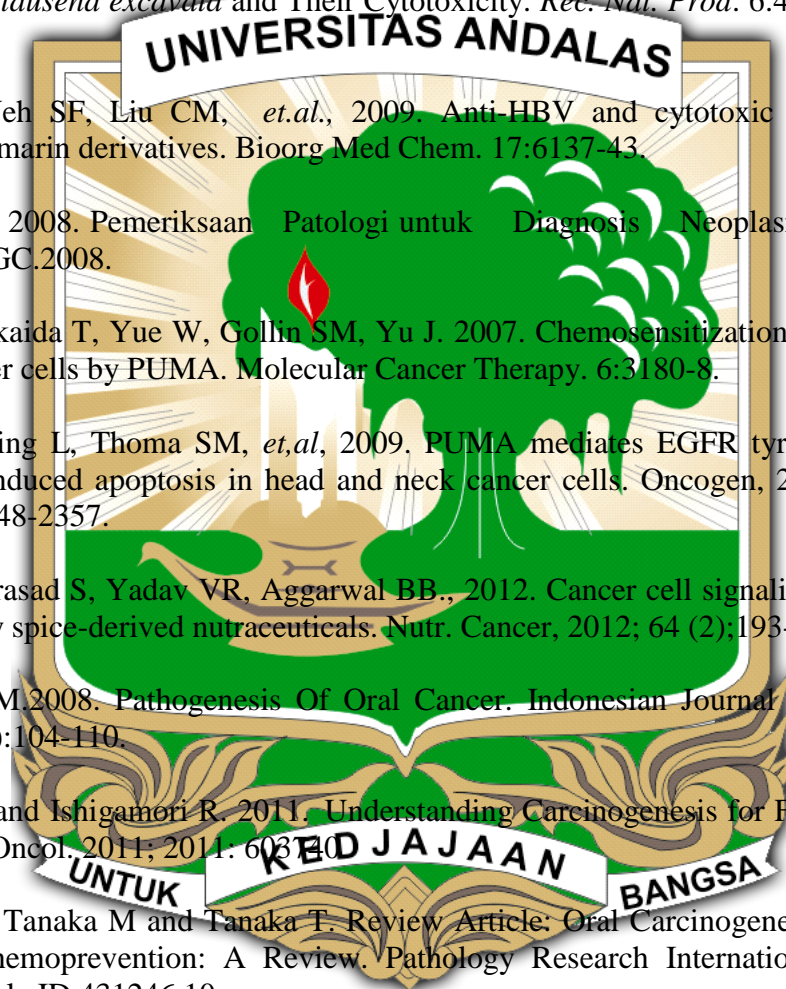
Tanaka T and Ishigamori R. 2011. Understanding Carcinogenesis for Fighting Oral Cancer. *J Oncol*. 2011; 2011: 631-640.

Tanaka T, Tanaka M and Tanaka T. Review Article: Oral Carcinogenesis and Oral Cancer Chemoprevention: A Review. *Pathology Research International* Volume 2011, Article ID 431246,10.

Taufiq-Yap Y, Peh TH, Ee GC, *et.al.*, 2007. A new cytotoxic carbazole alkaloid from *Clausena excavata*. *Nat Prod Res*. 21:810-3.

Trapero JC, Sancez JC, Sanchez BP, *et.al.* 2008. Review: Update on Molecular Pathology in Oral Cancer and Precancer. *Anticancer Research* 28: 1197-1206.

Tripathi A and Bankaitis VA. 2017. Molecular Docking: From Lock and Key to Combination Lock. *J Mol Med Clin Appl*. 2017; 2(1): 10.16966/2575-0305.106.



Trott O & Olson AJ. 2010. AutoDock Vina: improving the speed and accuracy of docking with a new scoring function, efficient optimization and multithreading. *Journal of Computational Chemistry* 31 (2010).

Vance NR, Gakhar L, and Spies MA. 2017. Allosteric Tuning of Caspase-7: A Fragment-Based Drug Discovery Approach. *Angew Chem Int Ed Engl.* 2017 Nov 13; 56(46): 14443–14447.

Végran F, Boidot R, Eric Solary E, and Lizard-Naco S. 2011. A Short Caspase-3 Isoform Inhibits Chemotherapy-Induced Apoptosis by Blocking Apoptosome Assembly. *PLoS One.* 2011; 6(12): e29058.

Vigneswaran N and Williams TD. 2014. Epidemiological Trends in Head and Neck Cancer and Aids in Diagnosis. *Oral Maxillofac Surg Clin North Am.* 2014 May; 26(2): 123–141.

Vilen ST, Salo T, Sorsa T., *et.al.* 2013. Fluctuating Roles of Matrix Metalloproteinase-9 in Oral Squamous Cell Carcinoma. *Scientific World Journal.* 2013;920595.

Vilgelm A, El-Rivai W, and Zaika A. 2008. Therapeutic prospects for p73 and p63: Rising from the shadow of p53. *Drug Resist Updat.* 2008; 11(4-5): 152-163.

Vinod BS, Maliekal TT, Anto RJ. 2013. Phytochemicals As Chemosensitizers: From Molecular Mechanism to Clinical Significance. *Antioxidant and Redox Signalling.* 18:1307-48.

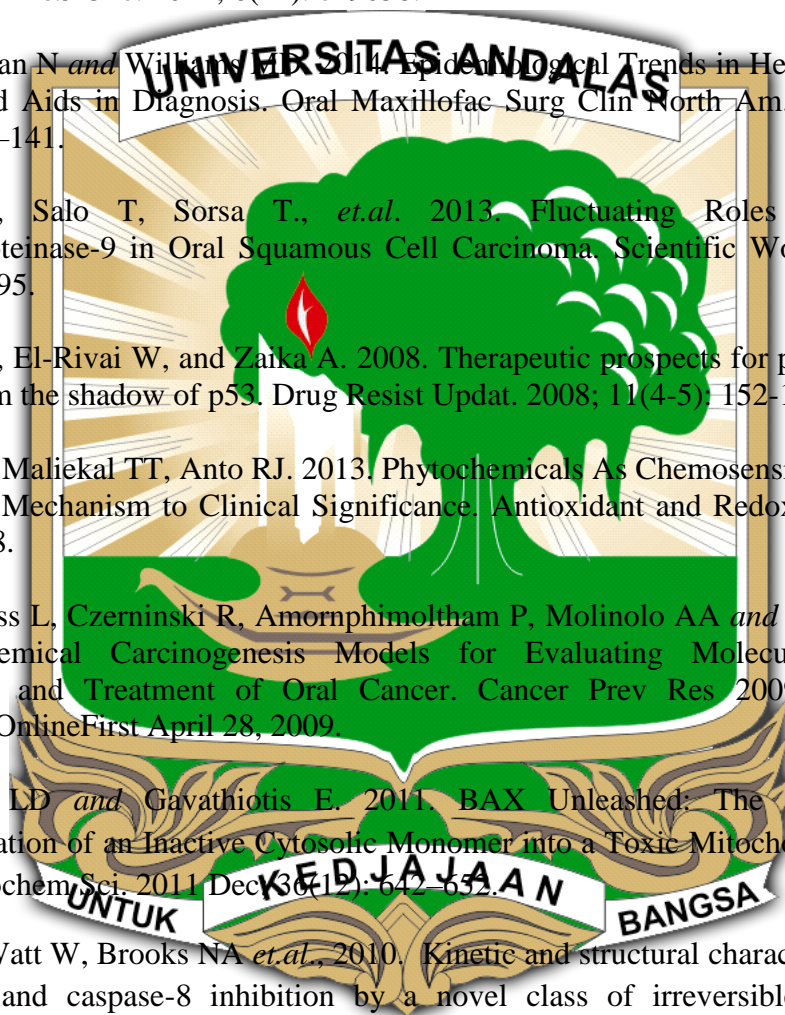
Vitale-Cross L, Czerninski R, Amornphimoltham P, Molinolo AA and Gutkind JS.. 2009. Chemical Carcinogenesis Models for Evaluating Molecular-Targeted Prevention and Treatment of Oral Cancer. *Cancer Prev Res* 2009;2:419-422. Published OnlineFirst April 28, 2009.

Walensky LD and Gavathiotis E. 2011. BAX Unleashed: The Biochemical Transformation of an Inactive Cytosolic Monomer into a Toxic Mitochondrial Pore. *Trends Biochem Sci.* 2011 Dec; 36(12): 642–652.

Wang Z, Watt W, Brooks NA *et.al.*, 2010. Kinetic and structural characterization of caspase-3 and caspase-8 inhibition by a novel class of irreversible inhibitors. *Biochim Biophys Acta.* 2010 Sep;1804(9):1817-31.

Wang SJ and Bourguignon LY. 2011. Role of hyaluronan-mediated CD44 signaling in head and neck squamous cell carcinoma progression and chemoresistance. *American Journal of Pathology.* 178:956-63.

Wang ZM, Liu J, Liu HB, Ye M, Zhang YF, and Yang DS. 2014. Abnormal COX2 Protein Expression May Be Correlated with Poor Prognosis in Oral Cancer: A Meta-Analysis. *Biomed Res Int.* 2014; 2014: 364207.



Wang C, Liu XQ, Hou JS, Wang JN, Huang HZ. 2016. Molecular Mechanisms of Chemoresistance in Oral Cancer. *Chin J Dent Res*. 2016 Mar;19(1):25-33. doi: 10.3290/j.cjdr.a35694.

Wei L, Surma M, Gough G, Shi S, Lambert-Cheatham N, Chang J, and Shi J. 2015. Dissecting the Mechanisms of Doxorubicin and Oxidative Stress-Induced Cytotoxicity: The Involvement of Actin Cytoskeleton and ROCK1. *PLoS One*. 2015; 10(7): e0131763.

Westphal D, Kluck RM and Dewson G. 2014. Building blocks of the apoptotic pore: how Bax and Bak are activated and oligomerize during apoptosis. *Cell Death Differ*. 2014 Feb; 21 (2): 196-205.

Wiedemuth R, Klink B, Topfer K, *et.al.* 2014. Survivin safeguards chromosome numbers and protects from aneuploidy independently from p53. *Mol Cancer*. 2014;13:107.

Wikner J., Grobe A., Klaus P., Riethdorf S. 2014. Squamous cell carcinoma of the oral cavity and circulating tumor cells. *World J Clin Oncol* 2014 May 10; 5(2):114-124.

Wise-Draper TM, Draper DJ, Gutkind JS, Molinolo AA, Wikenheiser-Brokamp KA, Wells SI. 2012. Future directions and treatment strategies for head and neck squamous cell carcinomas. *Translational Research*. 160:167-77.

Wu H and Leng RP. 2015. MDM2 mediates p73 ubiquitination: a new molecular mechanism for suppression of p73 function. *Oncotarget*, Vol. 6, No. 25.

Xiao G and Fu J. 2011. NF- κ B and cancer: a paradigm of Yin-Yang. *Am J Cancer Res*. 2011; 1(2): 192-221.

Yan B, Chen G, Saigal K, *et.al.* 2008. Systems biology-defined NF- κ B regulons, interacting signal pathways and networks are implicated in the malignant phenotype of head and neck cancer cell lines differing in p53 status. *Genome Biol*. 2008;9(3): R53.

Kai Yang K, Fu-Jun Zhang F-J, Hong Tang H, *et.al.*, 2011. In-vivo imaging of oral squamous cell carcinoma by EGFR monoclonal antibody conjugated near-infrared quantum dots in mice. *Int J Nanomedicine*. 2011; 6: 1739–1745.

Yapjakis C, Serefoglou Z, Villiotis A, *et.al.*, 2009. Association of polymorphisms in tumor necrosis factor alpha and beta genes with increased risk for oral cancer. *Anticancer research* 29;2379-2386.

Yoon M-K, Ha J-H, Lee M-S, Chi S-W. 2015. Structure and apoptotic function of p73. *BMB Reports*. 2015: 48(2) : 81-90.

Yu J and Zhang L. 2008. PUMA, a potent killer with or without p53. *Oncogene*. 2008 Dec; 27(Suppl 1): S71–S83.



Yu CC, Chen YW, Chiou GY, *et.al.*, 2011. MicroRNA let-7a represses chemoresistance and tumorigenicity in head and neck cancer via stem-like properties ablation. *Oral Oncology*. 47:202-10.

Zaika E, Wei J, Yin D, *et.al.* 2011. p73 protein regulates DNA damage repair. *FASEB J*.2011 Dec; 25(12): 4406-4414.

Zawacka-Pankau J, KostECKA A, Sznarkowska A, Hedström E & Kawiak A. 2010. p73 tumor suppressor protein: A close relative of p53 not only in structure but also in anti-cancer approach? *Cell Cycle* 9:4, 720-728; February 15, 2010.

Zhao G, Zhu Y, Eno CO, *et.al.* 2014. Activation of the Proapoptotic Bcl-2 Protein Bax by a Small Molecule Induces Tumor Cell Apoptosis. *Mol Cell Biol*. 2014 Apr; 34(7): 1198–1207.

Zhen L, Fan D, Yi X, Cao X, Chen D, Wang L. 2014. Curcumin inhibits oral squamous cell carcinoma proliferation and invasion via EGFR signaling pathways. *Int J Clin Exp Pathol* .2014; 7(10): 6438–6446.

