

## DAFTAR PUSTAKA

- Achanta G., Modzelewska A., Feng L., Khan S. R. & Huang, P. (2006). A boronic-chalcone derivative exhibits potent anticancer activity through inhibition of the proteasome. *Mol Pharm.*, 70: 426-433.
- Aggarwal B.B & Shishodia, S. (2006). Molecular targets of dietary agents for prevention & therapy of cancer. *Biochem. Pharm.* 71: 1397-1421.
- Amarante MGP., Naekyung KC., Liu L. (1998). Bcr-Abl exerts its antiapoptotic effect against diverse apoptotic stimuli through blockage of mitochondrial release of cytochrome C and activation of caspase-3. *Blood*, 91:1700-1705.
- Amos TA, Lewis JL, Grand FH, Gooding RP, Goldman JM, Gordon MY. (1995). Apoptosis in chronic myeloid leukaemia: normal responses by progenitor cells to growth factor deprivation, X-irradiation and glucocorticoids. *Br J Haematol.*, 91:387-393.
- Anand P, Kunnumakkara A.B, Newman R.A, & Aggarwal B.B. (2007). Bioavailability of curcumin : problem & promises. *Mol Pharm.* 4:807-818 and management. *Am J Hematol.* 2014;89(5):547-556.
- Arber D.A, Orazi A., Hasserjian R., Thiele J., Borowitz M.J, Le Beau MM., Bloomfield C., Cazzola M & Vardiman J.W.(2016).The 2016 revision to the World Health Organization (WHO) classification of myeloid neoplasms and acute leukemia. *Blood* ; doi: <https://doi.org/10.1182/blood-2016-03-643544>
- Arceci, R.J. (1995). Mechanism of resistance to therapy & tumor survival. *Curr.Opin.Hematol.*,2:268-74
- Arianingrum, R., Sunarminingsih, R., Meiyanto, E. & Mubarika, S. (2012). Potential of a chalcone derivate compound as cancer chemoprevention in breast cancer. *Int Proceed Of Chem, Bio & Env Eng*, 38:
- Armstrong SA, Kung AL, Mabon ME, et al. (2003). Inhibition of FLT3 in MLL.Validation of a therapeutic target identified by gene expression based classification Cancer. *Cell.* 3:173 ^ 83. PubMed doi:10.1016/S1535-6108(03)00003-5.
- Aryapour, H., Riazi, G. H., Ahmadian, S., Foroumadi, A., Mahdavi, M. & Emami, S. (2012). Induction of apoptosis through tubulin inhibition in human cancer cells by new chromene-based chalcones. *Pharm Biology*, 50: 1551-1560.
- Au, W. Y., Caguioa, P. B., Chuah, C., Hsu, S. C., Jootar, S., Kim, D.-W., Kweon, I.-Y., O'neil, W. M., Saikia, T. K. & Wang, J. (2009). Chronic myeloid leukemia in asia. *Int J Hem*, 89: 14-23.
- Awasthi, S. K., Mishra, N., Kumar, B., Sharma, M., Bhattacharya, A., Mishra, L. C. & Bhasin, V. K. (2009). Potent antimalarial activity of newly synthesized substituted chalcone analogs in vitro. *Med Chem Res.*, 18: 407-420.
- Baccarani M. Deininger M.W., Rost G et al. (2013). European LeukemiaNet recommendation for the management of chronic myeloid leukemia. *Blood.* 2013 122:872-884; doi: <https://doi.org/10.1182/blood-2013-05-501569>
- Badisa R.B., Darling-Reed S.F., Joseph P., Cooperwood J.S., Latinwo L.M., & Goodman C.B. (2009). Selective cytotoxic activities of two novel synthetic drugs on human breast carcinoma mcf-7 cells. *Anticancer Res.* 29(8): 2993-6
- Bag, S., Ramar, S. & Degani, M. S. (2009). Synthesis & biological evaluation of  $\alpha$ ,  $\beta$ -unsaturated ketone as potential antifungal agents. *Med Chem Res.*, 18: 309-316.
- Baldy CM. (2005). Gangguan sel darah putih dan sel plasma. Dalam : patofisiologi konsep klinis proses-proses penyakit. Ed 6. Terjemahan : Hartanto H, Wulansari P, Susi N, Jakarta : EGC ,Hal 277-8

- Bali A, O'Brien P.M, Edwards L.S, Sutherl& R.L, & Hacker N.F, (2004). Cyclin D1, p53, & p21Waf1/Cip1 expression is predictive of poor clinical outcome in serous epithelial ovarian cancer. *Clin cancer res*, 10: 5168–5177.
- Bedi A, Barber JP, Bedi GC, et al. (1995). BCR-ABL-mediated inhibition of apoptosis with delay of G2/M transition after DNA damage: a mechanism of resistance to multiple anticancer agents. *Blood*. 86:1148-1158.
- Bedi A, Zehnbauber BA, Barber JP, Sharkis SJ, Jones RJ. (1994). Inhibition of apoptosis by BCR-ABL in chronic myeloid leukemia. *Blood*. 83:2038- 2044.
- Begum, N. A., Roy, N., Laskar, R. A. & Roy, K. (2011). Mosquito larvicidal studies of some chalcone analogues & their derived products: structure–activity relationship analysis. *Med Chem Res.*, 20: 184-191.
- Bellacosa A., Kumar C.C., Di Cristofano A., Testa J.R.,(2005). Activation of AKT Kinases in Cancer: Implications for Therapeutic Targeting. *Adv. in Cancer Res.* 94 : 29-86
- Belson, M. (2007). Risk factors for acute leukemia children : a review. *Env Health Perspective*, 115 (1): 138-143
- Berger, U., Engelich, G., Maywald, O., Pfirrmann, M., Hochhaus, A., Reiter, A., Metzgeroth, G., Gnad, U., Hasford, J. & Heinze, B. (2003). Chronic myeloid leukemia in the elderly: long-term results from randomized trials with interferon A. *Leukemia*, 17: 1820-1826.
- Berthet, C. & Kaldis, P. (2007). Cell-Specific Responses to loss of cyclin-dependent Kinases. *Oncogene*, 26: 4469-4477.
- Bhatia, N. M., Mahadik, K. R. & Bhatia, M. S. (2009). Qsar analysis of 1, 3-diaryl-2-propen-1-ones & their indole analogs for designing potent antibacterial agents. *Chem Papers*, 63: 456-463.
- Bibi S., Dilara M.A., Langenfeld F, Jeanningros S, CernyReiterer S, Hadzijusufovic E, Tchertanov L, Moriggl R, Valent P, Arock M.2014. Co-Operating STAT5 And AKT Signaling Pathways In Chronic Myeloid Leukemia And Mastocytosis: Possible New Targets Of Therapy. *Haematologica*, 99: 417-429; **Doi**:10.3324/haematol.2013.098442
- Biliran, H., Wang, Y., Banerjee, S., Xu, H., Heng, H., Thakur, A., Bollig, A., Sarkar, F. H. & Liao, J. D. (2005). Overexpression of cyclin d1 promotes tumor cell growth & confers resistance to cisplatin-mediated apoptosis In An Elastase-Myc Transgene–Expressing Pancreatic Tumor Cell Line. *Clin Cancer Res.*, 11: 6075-6086.
- Birg F, Courcoul M, & Rosnet O., (1992). Expression of the fms/kit-like gene FLT3 in human acute leukemias of the myeloid & lymphoid lineages. *Blood*. 80:2584-2593.
- Birg F, Rosnet O, Carbuccia N, & Birnbaum D., 1994. The expression of FMS, KIT & FLT3 in hematopoietic malignancies. *Leuk Lymphoma*, 13:223-227.
- Bissonnette RP, Echeverri F, Mahboubi A, Green DR. (1992). Apoptotic cell death induced by c-myc is inhibited by bcl-2. *Nature*, 359:552-554.
- Blanco-Aparicio, C., Renner, O., Leal, J. F.& Carnero, A. (2007). PTEN, more than the akt pathway. *Carcinogenesis*, 28, 1379-1386.
- Bland, K. I. (1997). Quality-of-life management for cancer patients. *Ca: A Cancer J For Clinicians*, 47: 194-197.
- Bournazou, E. and Bromberg, J. (2013) Targeting the Tumor Microenvironment: JAK-STAT3 Signaling. *JAK-STAT*, 2, Article ID: e23828. <http://dx.doi.org/10.4161/jkst.23828>
- Brandts, C.H., Sargin, B., Rode, M., Biermann, C., Lindtner, B., Schwäble, J., Buerger, H., Müller-Tidow, C., Choudhary, C., McMahon, M. & Berdel, W.E. (2005). Constitutive activation of Akt by Flt3 internal tandem duplications is necessary for

- increased survival, proliferation, & myeloid transformation. *Cancer res.*, 65(21): 9643-9650.
- Bras, M., Queenan, B. & Susin, S. (2005). Programmed cell death via mitochondria: different modes of dying. *Biochem(Moscow)*, 70, 231-239.
- Breitman, T., Collins, S. & Keene, B. (1980). Replacement of serum by insulin & transferrin supports growth & differentiation of the human promyelocytic cell line, HL-60. *Exp Cell Res*, 126, 494-498.
- Bromberg JF, Wrzeszczynska MH, Devgan G, Zhao Y, & Pestell RG., 1999. STAT3 as an oncogene. *Cell* 98: 295–303.
- Brown EJ, Albers MW, Shin TB, Ichikawa K, Keith CT, Lane WS, Schreiber SL. (1994). A mammalian protein targeted by G1-arresting rapamycin-receptor complex. *Nature*, 369(6483):756-758.
- Chiarini F, Lonetti A, Teti G, Orsini E, Bressanin D, Cappellini A, Ricci F, Tazzari PL, Ognibene A, Falconi M, Pagliaro P, Iacobucci I, Martinelli G, Amadori S, McCubrey JA, & Martelli AM.(2012). A combination of temsirolimus, an allosteric mTOR inhibitor, with clofarabine as a new therapeutic option for patients with acute myeloid leukemia. *Oncotarget*. 3:1615–28.
- Cahill MA, Janknecht R, Nordheim A. (1996). Signalling pathways: jack of all cascades. *Curr Biol.*, 6: 16-19.
- Carow CE, Levenstein M, Kaufmann SH. (1996). Expression of the hematopoietic growth factor receptor FLT3 (STK-1/Flk2) in human leukemias. *Blood*, 87:1089-1096.
- Carraway H, Hidalgo M: New targets for therapy in breast cancer: mammalian target of rapamycin (mTOR) antagonists. *Breast Cancer Res* 2004, 6(5):219-224.
- Chai SK, Nichols GL, Rothman P. (1997). Constitutive activation of JAKs and STATs in BCR-Abl-expressing cell lines and peripheral blood cells derived from leukemic patients. *J Immunol*. 1997; 159:4720-4728.
- Chan KS, Sano S, Kiguchi K, Anders J, & Komazawa N. (2004) Disruption of Stat3 reveals a critical role in both the initiation & the promotion stages of epithelial carcinogenesis. *J of Clin Invest.*, 114: 720–728.
- Chang JT, Lee, PM., Navolanic, LS Steelman , JG Shelton , WL Blalock , RA Franklin and JA McCubrey. (2003). Involvement of PI3K/Akt pathway in cell cycle progression, apoptosis, and neoplastic transformation: a target for cancer chemotherapy F. *Leukemia*. 17, 590–603
- Chari N.S., Pinaire, N.L., Thorpe, L., Medeiros, L.J., Routbort, M.J. & McDonnell T.J., (2009). The p53 tumor suppressor network in cancer & the therapeutic modulation of cell death. *Apoptosis*, 14:336-47.
- Chathoth, S., Thayyullathil, F. & Galadari, S. (2008). Curcumin cell signaling: a possible target for chemotherapy. *Curr Trends In Biotech & Pharm*, 2: 226-238.
- Chen, R.J., Ho, Y.S., Guo, H.R. and Wang, Y.J. (2008) Rapid Activation of Stat3 and ERK1/2 by Nicotine Modulates Cell Proliferation in Human Bladder Cancer Cells. *Toxicological Sciences*, 104, 283-293. <http://dx.doi.org/10.1093/toxsci/kfn086> [
- Cheng, M. S., Rong Shi, L. & Kenyon, G. (2000). A solid phase synthesis of chalcones by claisen-schmidt condensations. *Chinese Chem Lett.*, 11: 851-854.
- Chetana, B.P, Mahajan, S.K. & Katti, S.A. (2009). Chalcone : a versatile molecule. *J.Pharm.Sci & Res*, 1(3):11-22.
- Chimenti, F., Fioravanti, R., Bolasco, A., Chimenti, P., Secci, D., Rossi, F., Yanez, M., Orallo, F., Ortuso, F. & Alcaro, S. (2009). Chalcones: a valid scaffold for monoamine oxidases inhibitors. *J. Med. Chem*, 52: 2818-2824.

- Chu E & Sartorelli A.C. (2007). *Cancer chemotherapy*. In Katzung B.G (ed). *Basic & Clin. Pharm* 10<sup>th</sup> ed. New York : MacGraw Hill  
*Clin Oncol Educ Book*. 2015;35:e381-388.
- Colditz G & Wolin K.Y. (2005). Physical activity & body weight. In De vita V.T. Jr., Helmann S. Rosenberg S.A (eds). *Cancer : principles ad practice of oncology*. 7<sup>th</sup> ed. Philadelphia : Lippincot William & Wilkins.
- Cooper M.R, & Cooper M.R. (2001). Basis for current major therapies for cancer : systematic therapy. In Lenhard RE, Osteen R.T, gansler T (Eds). *The American Cancer Soc. Clin Oncol*. Atlanta : American Cancer Society.
- Coqueret O. (2002). Linking cyclins to transcriptional control. *Gene*, 299(1-2):35-55.
- Corbin A.S., La Rosee O., Stoffregen E.P., Druker B.J., & Deininger M.W. (2003). Several bcr-abl kinase domain mutants associated with imatinib mesylate resistance remain sensitive to imatinib. *Blood.*, 101:4611-41
- Cortez D, Kadlec L, Pendergast AM. (1995). Structural and signaling requirements for BCR-ABL-mediated transformation and inhibition of apoptosis. *Mol Cell Biol*. 15:5531-5541.
- Creutzig U, Ritter J, Budde M. (1987). Early death due to hemorrhage and leukostasis in childhood acute myelogenous leukemia : association s with hyperleukocytosis and acute monocytic leukemia. *Cancer*. 60 : 3071-79
- Croce, C. M. (2008). Oncogenes & cancer. *NEJM*, 358: 502-511.
- Dan H.C, Sun, M., Kaneko, S., Feldman, R.I., Nicosia, S.V., Wang, H.G., Tsang, B.K., Cheng, J.Q.(2004) Akt phosphorylation & stabilization of x-linked inhibitor of apoptosis protein (XIAP), *J. Biol. Chem*. 279 :5405–5412.
- Darnell Jr., J.E., Kerr, I.M. and Stark, G.R. (1994) Jak-STAT Pathways and Transcriptional Activation in Response to IFNs and Other Extracellular Signaling Proteins. *Science*, 264, 1415-1421. <http://dx.doi.org/10.1126/science.8197455>
- Data Registrasi Kanker Departemen Ilmu Kedokteran Anak FKUI RSCM 2011
- Datta S.R, Dudek H., Tao X., Masters S., Fu, H.A., Gotoh, Y., & Greenberg, M.E.(1997). Akt phosphorylation of BAD couples survival signals to the cell-intrinsic death machinery, *Cell*, 91: 231–241.
- Datta SR, Brunet A, Greenberg M. (1999). Cellular survival: a play in three Akts. *Genes Dev.*, 13(22):2905-2927.
- de Groot RP, Raaijmakers JA, Lammers JW, Jove R, Koenderman L. (1999). STAT5 activation by BCR-Abl contributes to transformation of K562 leukemia cells. *Blood*, 94:1108-1112.
- De Souza C.P., Ellem K.A., & Gabrielli B.G., (2000). Centrosomal & cytoplasmic Cdc2/cyclin B1 activation precedes nuclear mitotic events. *Exp Cell Res* **257**:11–21.
- Deininger MW, Druker BJ. (2003). Specific targeted therapy of chronic myelogenous leukemia with imatinib. *Pharmacol. Rev.* **55** (3): 401-23. doi:10.1124/pr.55.3.4. PMID 12869662.
- Deininger MW, Vieira S, Mendiola R, Schultheis B, Goldman JM, Melo JV. (2000).BCR-ABL tyrosine kinase activity regulates the expression of multiple genes implicated in the pathogenesis of chronic myeloid leukemia. *Cancer Res.*, 60:2049-2055.
- Deininger MW. (2015). Diagnosing and managing advanced chronic myeloid leukemia. *Am Soc.Clin.Oncol Educ.Book*. DOI:1014694/EdBook AM.2015.35.e381-8.
- Del Peso L, Gonzalez-Garcia, M., Page, C., Herrera,R., & Nunez, G., (1997). Interleukin-3-induced phosphorylation of BAD through the protein kinase Akt, *Science*, 278: 687–689.



- Devarajan, E., Sahin, A. A., Chen, J. S., Krishnamurthy, R. R., Aggarwal, N., Brun, A.-M., Sapino, A., Zhang, F., Sharma, D. & Yang, X.-H. (2002). Down-regulation of caspase 3 in breast cancer: a possible mechanism for chemoresistance. *Oncogene*, 21: 8843-8851.
- Di Gennaro E, Barbarino M, & Bruzzese F. (2003). Critical role of both p27KIP1 & p21CIP1/WAF1 in the antiproliferative effect of ZD1839 ('Iressa'), an epidermal growth factor receptor tyrosine kinase inhibitor, in head & neck squamous carcinoma cells. *J Cell Physiol*.195:139–50.
- Diehl JA, Cheng M, Roussel MF, Sherr CJ. (1998). Glycogen synthase kinase-3 $\beta$  regulates cyclin D1 proteolysis and subcellular localization. *Genes Dev.*, 12(22):3499-3511.
- Diehl JA, Zindy F, Sherr CJ (1997). Inhibition of cyclin D1 phosphorylation on threonine-286 prevents its rapid degradation via the ubiquitin-proteasome pathway. *Genes Dev*, 11(8):957-972.
- Dimmock J, Jha A, Zello G, Allen T, Santos C. & Balzarini J. (2003). Cytotoxic 4'aminochalcones & related compounds. *Pharmazie*. 58: 227-232.
- Dosil M, Wang S, Lemischka IR. (1993). Mitogenic signalling and substrate specificity of the Flk2/Flt3 receptor tyrosine kinase in fibroblasts and interleukin 3-dependent hematopoietic cells. *Mol Cell Biol* 1993;13:6572^85. PubMed.
- Downward, J. (2004). PI 3-Kinase, Akt & Cell Survival..*Seminar In Cell & Develop Biol*, 177-182.
- Dragnev KH, Feng Q, Ma Y, Shah SJ, Black C, Memoli V, Nugent W, Rigas JR, Kitareewan S, Freemantle S, Dmitrovsky E. (2007). Uncovering novel targets for cancer chemoprevention. *Recent Results Cancer Res*, 174:235-243.
- Dragnev KH, Petty WJ, Dmitrovsky E. (2003). Retinoid targets in cancer therapy and chemoprevention. *Cancer Biol Ther*, 2(4 Suppl1):S150-6.
- Drexler, H. G. (2000). The leukemia-lymphoma cell line factsbook, Academic Press.
- Dubrez L, Eymin B, Sordet O, Droin N, Turhan AG, Solary E. BCR-ABL delays apoptosis upstream of procaspase-3 activation. *Blood*. (1998), 91:2415-2422.
- Echeverria, C., Santibañez, J. F., Donoso-Tauda, O., Escobar, C. A. & Ramirez-Tagle, R. (2009). Structural antitumoral activity relationships of synthetic chalcones. *Intl J Mol Sci*, 10, 221-231.
- Estey, E. & Döhner, H. (2006). Acute Myeloid Leukaemia. *The Lancet*, 368: 1894-1907.
- Evan GI, Wyllie AH, Gilbert CS, et al. (1992). Induction of apoptosis in fibroblasts by c-myc protein. *Cell*. 69:119-128.
- Evan, G.I & Vousden, K.H. (2001). Proliferation, cell cycle & apoptosis in cancer. *Nature*, 411:342-348
- Fadjari H. (2006). Leukemia granulositik kronis. Dalam : Sudoyo AW, Setyohadi B. Alwi I, Simadibrata M., Setiati S.(editor). Buku Ajar Ilmu Penyakit Dalam, Ed 4, Jakarta : Departemen Ilmu Penyakit Dalam FKUI , hal 698-705
- Fajar S. (2014). Analisis Biaya Terapi pada Pasien Kanker Payudara Rawat Inap yang Menjalani Kemoterapi di RSUP DR. Sardjito Yogyakarta Tahun 2012, Skripsi . Fakultas Farmasi UGM.
- Falanga A, & Barbui T. 2001. Coagulopathy of acute promyelocytic leukemia. *Acta Haematol*, 106(1-2): 43-51
- Fan Y-b, Huang M, Cao Y, Gong P, Liu W-b, Jin S-y, et al. (2016). Usnic acid is a novel Pim-1 inhibitor with the abilities of inhibiting growth and inducing apoptosis in human myeloid leukemia cells. *RSC Adv*. 6:24091-24096

- Fathi, A. T & Chabner, B. A. (2011). Flt3 inhibition as therapy in acute myeloid leukemia: a record of trials & tribulations. *The Oncologist*, 16: 1162-1174.
- Feng J.H, Tamaskovic, R., Yang, Z.Z., Brazil, D.P., Merlo, A., Hess, D., & Hemmings, B.A., (2004). Stabilization of mdm2 via decreased ubiquitination is mediated by protein kinase B/Akt-dependent phosphorylation, *J. Biol. Chem.* 279 : 35510–35517.
- Ferreira, C.G., Tolis, C. & Giaccone, G. (1999). P53 & chemosensitivity. *Ann.Oncol.*, 10:1011-21
- Format referensi elektronik dari [www.metrotvnews.com](http://www.metrotvnews.com) tanggal 16 Mei 2016, yang diunduh pada tanggal 20 Maret 2017
- Franke TF, Kaplan DR, Cantley LC. (1997). PI3K: downstream AKTion blocks apoptosis. *Cell.*, 88:435-437.
- Frankfurt, O.S., & Krishan, A., (2003). Apoptosis-based drug screening & detection of selective toxicity to cancer cells. *Anticancer Drugs*, 14: 555-61
- Fu , M., Wang, C., Li, Z., Sakamaki, T., & Pestell, R.G. (2004). Minireview : cyclin D1 : normal & abnormal functions. *Endocrinol.*, 145:5439-47
- Gabbianelli M, Pelosi E, Montesoro E, et al. (1995).Multilevel effects of flt3 ligand on human hematopoiesis: expansion of putative stem cells and proliferation of granulomonocytic progenitors/monocytic precursors. *Blood*, 86:1661^70. PubMed..
- Gallagher, R., Collins, S., Trujillo, J., (1979). Characterization of the continuous, differentiating myeloid cell line (HL-60) from a patient with acute promyelocytic leukemia. *Blood*, 54 (3): 713–33.
- Gambacorti-Passerini CB, Gunby RH, Piazza R, Galiotta A, Rostagno R, Scapozza L. (2003). Molecular mechanisms of resistance to imatinib in Philadelphia-chromosome-positive leukaemias. *Lancet Oncol.* 4 (2): 75–85. doi:10.1016/S1470-2045(03)00979-3. PMID 12573349
- Ge, H., Kong, X., Shi, L., Hou, L., Liu, Z. & Li, P. (2009). Gamma-linolenic acid induces apoptosis & lipid peroxidation in human chronic myelogenous leukemia K562 cells. *Cell Biol Intl*, 33, 402-410.
- Ghobrial, I.M., Witzig, T.E & Adjei, A.A. (2005). Targeting apoptosis pathways in cancer therapy. *CA Cancer J. Clin.* 55 (3):178-94.
- Gibbs, J.B., 2000. Mechanism-based target identification & drug discovery in cancer research. *Science*, 287:1969-70
- Gilliland DG, & Griffin JD. (2002). The roles of FLT3 in hematopoiesis and leukemia. *Blood.*, 100: 1532-1542.
- Gkouveris I, Nikitakis N., & Sauk J. (2015). STAT3 Signaling in Cancer. *J. of Cancer Therapy.*, 6:709-726
- Gordaliza M., (2007). Natural products as leads to anticancer drugs. *Clin.Transl.Oncol.*, 9(12):767-76
- Gorre ME., Mohammed M., Ellwood1 K., Hsu N., Paquette R., Nagesh P.R, Sawyers CL. (2001). Clinical Resistance to STI-571 Cancer Therapy Caused by BCR-ABL Gene Mutation or Amplificati. *Science*, 293 : 876-880.DOI: 10.1126 / science.1062538
- Graham-Evans B., Tchounwou, P.B., & Cohly, H.H. (2003). Cytotoxicity & proliferation studies with arsenic in established human cell lines : keratinocytes, melanocytes, dendritic cells, dermal fibroblasts, microvascular endothelial cells, monocytes & T-cells. *Int.J.Mol.Sci.*, 4:13-21.
- Greaves MF. (2006). Speculation on the cause of childhood acute lymphoblastic leukemia. In : Permono B, Sutary H, Ugrasena I, Windiastuti E., Abdulsalam M., 2006. Hematologi- Onkologi anak. Jakarta : Badan Penerbit IDAI, p 236-37

- Green D.R., (1998). Apoptotic pathways: the roads to ruin. *Cell*. 94: 695–8.
- Griffin JN, Pinali D, Olds K, Lu N, Appleby L, Doan L, Lane MA ( 2010). 13-Cis-retinoic acid decreases hypothalamic cell number in vitro". *Neurosci. Res.* **68** (3): 185–90. doi:10.1016/j.neures.2010.08.003. PMID 20708044.
- Grignani F, Fagioli M, Alcalay M, et al. (1994). Acute promyelocytic leukemia: from genetics to treatment. *Blood*. 83:10-25.
- Grivennikov, S.I. and Karin, M. (2010) Dangerous Liaisons: STAT3 and NF-κB Collaboration and Crosstalk in Cancer. *Cytokine & Growth Factor Rev.*, 21, 11-19. <http://dx.doi.org/10.1016/j.cytogfr.2009.11.005>
- Gutierrez R, Muniz-Ramirez A, & Saucedo J. (2015). Review: the potential of chalcones as a source of drugs. *Afr. J. Pharm. Pharmacol.* 9(8): 237-257.
- Hahn S.M, & Gladstein E. (2005). Principles of radiation therapy. In Kasper D.L. Fauci A.S. & Longo D.L (eds). Harrison's principles of Internal medicine 16<sup>th</sup> ed. New York : McGraw Hill
- Hamdi, N., Fischmeister, C., Puerta, M. C. & Valerga, P. (2011). A rapid access to new coumarinyl chalcone & substituted chromeno [4, 3-c] pyrazol-4 (1h)-ones & their antibacterial & dpph radical scavenging activities. *Med Chem Res*, 20, 522-530.
- Hanada M., Feng J., & Hemmings B.A. (2004). Structure, regulation & function of PKB/AKT—a major therapeutic target. *Biochim Biophys Acta*, 1697: 3–16.
- Hanahan D and Weinberg R.A. 2000. The hallmark of cancer. *Cell*. 100:57-70
- Hanahan D & Weinberg R.A. (2011). Hallmarks of Cancer : The Next Generation. *Cell*. 144:646-674
- Hartoyo V & Kurniawan A., (2015). Pendekatan diagnostik terhadap leukemia akut. *Medicinus*, 4: 18-21
- Hawkins R.(2002). Hormone therapy in cancer. *Oncol Nurs Updates*. 9(3):1-16.
- Hay N, Sonenberg N. (2004). Upstream and downstream of mTOR. *Genes Dev.*, 18(16):1926-1945.
- Heaney C, Kolibaba K, Bhat A, et al. (1997). Direct binding of CRKL to BCR-ABL is not required for BCRABL transformation. *Blood*. 89:297-306.
- Hehlmann R. (2015). CML--Where do we stand in 2015? *Ann Hematol.*, 94 Suppl 2:S103-105.
- Hehlmann, R., Hochhaus, A. & Baccarani, M. (2007). Chronic Myeloid Leukaemia. *The Lancet*, 370: 342-350.
- Hijova, E. (2006). Bioavailability of chalcones. *Bratislavské Lekárske Listy*, 107: 80.
- Hillman R.S, Ault K.A, Leporrier M, & Rinder H.M. (2011). Hematology in clinical practice. New York : McGraw Hill
- Hirano, T., Ishihara, K. & Hibi, M. (2000). Roles of stat3 in mediating the cell growth, differentiation & survival signals relayed through the il-6 family of cytokine receptors. *Oncogene*, 19: 2548-2556.
- Hochhaus, A. & La Rosee, P. (2004). Imatinib therapy in chronic myelogenous leukemia: strategies to avoid & overcome resistance. *Leukemia*, 18: 1321-1331.
- Hoffbrand A.V, Pettit J.E, & Moss P.A.H. (2001). Haematology. 4<sup>th</sup> ed. USA : Blackwell Science Ltd.
- Hoffman E.J. (1999). Cancer & The Search for Selective Biochemical Inhibitors. CRC Press. Boca Raton. London
- Horita M, Andreu EJ, Benito A, et al. (2000). Blockade of the Bcr-Abl kinase activity induces apoptosis of chronic myelogenous leukemia cells by suppressing signal transducer and activator of transcription 5-dependent expression of Bcl-xL. *J Exp Med.*, 191:977-984.
- Hu, W & Kanavagh, J.J. (2003). Anticancer therapy targeting the apoptotic pathway. *Lancet*

- Oncol.*, 4: 721-9
- Hui R, Finney G.L, Carroll J.S, Lee C.S.L, Musgrove E.A, & Sutherland R.L. (2002). Constitutive overexpression of cyclin D1 but not cyclin econfers acute resistance to antiestrogens in T47D breast cancer cells. *Cancer Res.*, 62:6916-23
- Igney, F. H. & Krammer, P. H. (2002). Death & anti-death: tumour resistance to apoptosis. *Nat Rev Cancer*, 2: 277-288.
- Ilango, K., Valentina, P. & Saluja, G (2010). Synthesis & in-vitro anticancer activity of some substituted chalcone derivatives. *Res. J. Pharm. Biol. Chem. Sci*, 1: 354-359.
- Ilaria RL Jr, Van Etten RA. (1996). P210 and P190(BCR/ ABL) induce the tyrosine phosphorylation and DNA binding activity of multiple specific STAT family members. *J Biol Chem*. 271:31704-31710.
- Jabbour E, & Kantarjian H. Chronic myeloid leukemia: 2014 update on diagnosis, monitoring and management. *Am J of Hematol*.89,(5)547–556
- Jagasia HM, & Arrowsmith ER., (2004). Complications of haematopoietic neoplasms in : Greer Jp., Foersters J., Luken JN *et al*. 2004. eds. Wintrobe's Clinical Haematology, 11<sup>th</sup> ed. Philadelphia Lippincot Williams &Wilkins, 1919-43
- Jandial, D., Blair, C., Zhang, S., Krill , L., Zhang, Y., & Zi, X. (2014). Molecular targeted approaches to cancer therapy & prevention using chalcones. *Curr. Cancer Drug Targets*. 14: 181-200.
- Janus A, Robak T, Smolewski P. (2005). The mammalian target of the rapamycin (mTOR) kinase pathway: its role in tumourigenesis and targeted antitumour therapy. *Cell Mol Biol Lett*, 10(3):479-498.
- Jemal, A., Bray, F., Center, M. M., Ferlay, J., Ward, E. & Forman, D. (2011). Global cancer statistics. *Ca: A Cancer J Clin*, 61, 69-90.
- Jeong , JH. & Kang S.S. (2010). P53-independent induction of G1 arrest & p21 WAF1/CIP1 expression by ascofuranone, an isoprenoid antibiotic through downregulation of c-myc. *Mol Cancer Ter*, 9(7):2102-13.
- Ji, Y.B., Gao, S.Y., Ji, H., Kong, Q., Zhang, X.J., & Yang, B.F. (2004). Anti neoplastic efficacy of haimiding on gastric carcinoma & its mechanism, *World J. Gastroenterol.*, 10(4): 484-90.
- Jiang X, Lopez A, Holyoake T, Eaves A, Eaves C. (1999). Autocrine production and action of IL-3 and granulocyte colony-stimulating factor in chronic myeloid leukemia. *Proc Natl Acad Sci U S A*. 96:12804-12809.
- Kabarowski JH, Allen PB, Wiedemann LM. (1994). A temperature sensitive p210 BCR-ABL mutant defines the primary consequences of BCR-ABL tyrosine kinase expression in growth factor dependent cells. *EMBO J*. 13:5887-5895.
- Kaiser, A., Purwanto, I., Mulatsih, S, Supriyadi, E., Widjajanto, P.H., Sumadiono & Nurse, J. (2010). Yogyakarta Pediatric Cancer Registry : an internatioal collaborative project of University Gadjah Mada, University of Saskatchewan & The Saskatchewan Cancer Agency. *Asian Pacific J Cancer Prev*, 10: 131-136
- Kandel, E. S. & Hay, N. (1999). The Regulation & Activities Of The Multifunctional Serine/Threonine Kinase Akt/Pkb. *Exp Cell Res*, 253: 210-229.
- Kane, E., Roman, E., Cartwright, R., Parker, J. & Morgan, G. (1999). Tobacco & The Risk Of Acute Leukaemia In Adults. *British J Cancer*, 81: 1228.
- Karthikeyan C, Narayana S, Narayana M, Sakthivel R, Uma V, & Elangovan M. (2015). Advances in chalcones with anticancer activities. *Recent Pat. Anticancer Drug Discov*. 10: 1-19.
- Kasibhatla, S & Tseng, B. (2003). Why target apoptosis in cancer treatment ?. *Mol.Cancer Ther.*, 2:573-80



- Kaspers, G.J. & Zwaan, C.M. (2007). Pediatric acute myeloid leukemia : towards high-quality cure all patients. *Progres in hematology. The Hem J*, 92(11): 1519-1529
- Kastan, M.B & Bartek, J. (2004). Cell cycle checkpoints & cancer. *Nature*, 432:316-23
- Kato J, Matsushime H, Hiebert SW, Ewen ME, Sherr CJ (1993). Direct binding of cyclin D to the retinoblastoma gene product (pRb) and pRb phosphorylation by the cyclin D-dependent kinase CDK4. *Genes Dev*, 7(3):331-342.
- Kaushik, S., Kumar, N. & Drabu, S. (2010). Synthesis & anticonvulsant activities of phenoxychalcones. *The Pharm Res*, 3, 257-262.
- Kementrian Kesehatan. (2013). Panduan Memperingati hari kanker Sedunia di Indonesia Tahun 2013. Direktorat Jenderal PP dan PL.
- Khanage, S.G & Raju, A.S.(2013). Anticancer activity of some novel 1-(3,5-diphenyl-1h-1,2,4- triazol-1-yl)-3-(substituted aryl)prop-2-en-1-one. *J of Curr Res in Sci*, 6 : 521-525.
- Khan TZ, Wagener J.S., Bost T., Martinez J., Accurso F.J., & Riches D.W. (1995). Early pulmonary inflammation in infants with cystic fibrosis. *Am. J. Respir. Crit. Care Med*. 151: 1075-2
- Kiyoi H, Towatari M, Yokota S, et al. (1998). Internal tandem duplication of the FLT3 gene is a novel modality of elongation mutation which causes constitutive activation of the product. *Leukemia*.12:1333-1337.
- Klejman A., Rushen L., & Morrione A. (2002). Phosphatidylinositol-3 kinase inhibitors enhance the antileukemia effect of ST1571. *Oncogene*, 21:5868-76.
- Kong Y, Wang K, Edler M, Hamel E, Mooberry S, & Paige M. (2010). A boronic acid chalcone analog of combretastatin A-4 as a potent anti-proliferation agent. *Bioorg Med. Chem*. 18(2): 971-977.
- Kottaridis PD, Gale RE, Frew ME, et al. (2001). The presence of a FLT3 internal tandem duplication in patients with acute myeloid leukemia (AML) adds important prognostic information to cytogenetic risk group and response to the first cycle of chemotherapy: analysis of 854 patients from the United Kingdom Medial Research Council AML 10 and 12 trials. *Blood*. 98:1752-1759.
- Kumar V, Abbas A.k, & Fausto N (eds). (2005). *Robbins & Cotran Pathologic basis of disease*. 7<sup>th</sup> ed., Philadelphia : Elsevier Saunders
- Kusume T, Tsuda H, Kawabata M, Inoue T, & Umesaki N. (1999). The p16-cyclin D1/CDK4-pRb pathway & clinical outcome in epithelial ovarian cancer. *Clin cancer res.*, 5: 4152–4157.
- Kwaan HC, Wang J, Boggio LN. (2002). Abnormalities in hemostasis in acute promyelocytic leukemia. *Acta Haematol Oncol*. 20(1):33-41
- Lahaye, T., Riehm, B., Berger, U., Paschka, P., Müller, M. C., Kreil, S., Merx, K., Schwindel, U., Schoch, C. & Hehlmann, R. (2005). Response & Resistance In 300 Patients With Bcr-Abl-Positive Leukemias Treated With Imatinib In A Single Center. *Cancer*, 103, 1659-1669.
- Lahtchev, K., Batovska, D., Parushev, S. P., Ubiyvovk, V. & Sibirny, A. (2008). Antifungal activity of chalcones: a mechanistic study using various yeast strains. *European J Med Chem*, 43: 2220-2228.
- Lai, S.Y. and Johnson, F.M. (2010). Defining the Role of the JAK-STAT Pathway in Head and Neck and Thoracic Malignancies: Implications for Future Therapeutic Approaches. *Drug Resistance Updates*, 13, 67-78. <http://dx.doi.org/10.1016/j.drug.2010.04.001>

- Langenfeld J, Kiyokawa H, Sekula D, Boyle J, Dmitrovsky E. (1997). Posttranslational regulation of cyclin D1 by retinoic acid: a chemoprevention mechanism. *Proc Natl Acad Sci U S A*, 94(22):12070-12074.
- Lapenna, S & Giordano, A. (2009). Cell cycle kinases as therapeutic targets for cancer. *Nature Rev. Drug Discov.*, 8:547-66
- Lauder T.M, Lawnicki L.C. & Perkins M.L, 2002. *Introduction to Leukemia and the acute leukemia*. In Harmening DM (editor). *Clin Hem & Fundamental of Hemostasis*. Philadelphia : F.A Davis Company. P 272-74
- Lavagna-Sevenier C, Marchetto S, Birnbaum D, Rosnet O. (1998). FLT3 signaling in hematopoietic cells involves CBL, SHC and an unknown P115 as prominent tyrosine-phosphorylated substrates. *Leukemia*, 12: 301-10. PubMed doi:10.1038/sj.leu.2400921.
- Layton A. (2009). The use of isotretinoin in acne. *Dermatoendocrinol.* 1 (3): 162–9. doi:10.4161/derm.1.3.9364. PMC 2835909, PMID 20436884.
- Lewis JM, Baskaran R, Taagepera S, Schwartz MA, Wang JY. (1996). Integrin regulation of c-Abl tyrosine kinase activity and cytoplasmic-nuclear transport. *Proc Natl Acad Sci U S A*. 93:15174-15179.
- Li Q, Li C, Lu X, Zhang H, & Zhu H. (2012). Design, synthesis & biological evaluation of novel (E)-alpha-benzylsulfonylchalcone derivatives as potential BRAF inhibitors. *Eur. J. Med. Chem.*, 22(2): 288-295.
- Li, L. Y., Luo, X. & Wang, X. (2001). Endonuclease G is an apoptotic DNase when released from mitochondria. *Nature*, 412: 95-99.
- Lieberman, M.M., Patterson, G.M.I., & Moore, R.E., (2001). In vitro for anticancer drug screening : effect of cell concentration & other assay parameters on growth inhibitory activity, *Cancer Lett.*, 173:21-29.
- Lim, S. S., Kim, H. & Lee, D. (2007). In vitro antimalarial activity of flavonoids & chalcones. *Bulletin-Korean Chem Soc*, 28:2495.
- Lin DI, Barbash O, Kumar KG, Weber JD, Harper JW, Klein-Szanto AJ, Rustgi A, Fuchs SY, Diehl JA (2006). Phosphorylation-dependent ubiquitination of cyclin D1 by the SCF(FBX4-alphaB crystallin) complex. *Mol Cell*, 24(3):355-366.
- Lin, J., Dong, H.F., Oppenheim, J.J., & Howard, O.M, (2003). Effect of astragali radix on the growth of different cancer cell lines. *World J. Gastroenterol.*, 9(4):670-3
- Lindley C., (2005). *Neoplastic disorders*. In Koda-Kimble M.A, young L.Y, & Kradjan W.A et al (Eds). *Applied therapeutics : The clinical use of drugs*. 8<sup>th</sup> ed. Philadelphia : Lippincot William & Wilkins.
- Lioubin MN, Algate PA, Tsai S, Carlberg K, Aebersold A, Rohrschneider LR. (1996). p150Ship, a signal transduction molecule with inositol polyphosphate- 5-phosphatase activity. *Genes Dev*. 10:1084-1095.
- Lodish H, Berk A, Matsudaira P, Kaiser C.A, Krieger M, Scott M.P, Zipusky L, & Darnell J. (2005). *Mol Cell Biol*. Fifth edition.
- Lorenzo, H. K. & Susin, S. A. (2004). Mitochondrial effectors in caspase-independent cell death. *Febs Lett*, 557, 14-20.
- Löwenberg, B., Griffin, J. D. & Tallman, M. S. (2003). Acute myeloid leukemia & acute promyelocytic leukemia. *Ash Education Program Book*, 82:101.
- Lozzio, B. B. & Lozzio, C. B. (1979). Properties & usefulness of the original k-562 human myelogenous leukemia cell line. *Leukemia Res*, 3: 363-370.
- Lozzio, B. B., Lozzio, C. B., Bamberger, E. G. & Feliu, A. S. (1981). A multipotential leukemia cell line (K562) of human origin. *Exp Biol & Med*, 166: 546-550.

- Lozzio, C. B. & Lozzio, B. B. (1975). Human chronic myelogenous leukemia cell-line with positive philadelphia chromosome. *Blood*, 45: 321-334.
- Lunardi, F., Guzela, M., Rodrigues, A. T., Corrêa, R., Eger-Mangrich, I., Steindel, M., Grisard, E. C., Assreuy, J., Calixto, J. B. & Santos, A. R. (2003). Trypanocidal & leishmanicidal properties of substitution-containing chalcones. *Antimicrobial Agents & Chemoth*, 47: 1449-1451.
- Lundberg AS & Weinberg RA. (1998). Functional inactivation of the retinoblastoma protein requires sequential modification by at least two distinct cyclin-cdk complexes. *Mol Cell Biol*, 18(2):753-761.
- Luo, X., Budihardjo, I., Zou, H., Slaughter, C. & Wang, X. (1998). Bid, a Bcl2 interacting protein, mediates cytochrome c release from mitochondria in response to activation of cell surface death receptors. *Cell*, 94: 481-490.
- Lyman SD & Jacobsen SE. (1998). c-kit ligand and Flt3 ligand: stem/progenitor cell factors with overlapping yet distinct activities. *Blood*, 91:1101^34. PubMed
- Mahavorasirikul, W., Viyanant, V., Chaijaroenkul, W., Itharat, A., & Na-Bangchang, K. (2010). Cytotoxic activity of thai medicinal plants against human cholangiocarcinoma, laryngeal & hepatocarcinoma cells in Vitro. *BMC Compl & Alter Med*, 10: 55
- Maioral MF, Gaspar PC., Souza GRR., Mascarello A., Chiaradia LD., Licinio MA & Moraes ACR.(2013). Apoptotic events induced by synthetic naphthylchalcones in human acute leukemia cell lines. *Biochimie*. 95 (4):866-8
- Mali, S.B. (2015) Review of STAT3 (Signal Transducers and Activators of Transcription) in Head and Neck Cancer. *Oral Oncol.*, 51, 565-569.
- Mandal, T., Bhowmik, A., Chatterjee, A., Chatterjee, U., Chatterjee, S. and Ghosh, M.K. (2014). Reduced Phosphorylation of Stat3 at Ser-727 Mediated by Casein Kinase 2—Protein Phosphatase 2A Enhances Stat3 Tyr-705 Induced Tumorigenic Potential of Glioma Cells. *Cell Signal.*, 26, 1725-1734.
- Mandge, S., Singh, H. P., Gupta, S. D. & Moorthy, N. (2007). Synthesis & characterization of some chalcone derivatives. *Trends In Appl Sci Res*, 2: 52-56.
- Marais R, Light Y, Paterson HF, Marshall CJ.(1995). Ras recruits Raf-1 to the plasma membrane for activation by tyrosine phosphorylation. *EMBO J.*, 14:3136-3145.
- Marchetto S, Fournier E, Beslu N, et al. (1999). SHC and SHIP phosphorylation and interaction in response to activation of the FLT3 receptor. *Leukemia*, 13:1374^ 82. PubMed doi:10.1038/sj/leu/2401527.
- Martelli, A.M., Nyakjern, M., Bortul, R., Tarzani, P.L., Evalengelisti, C & Cocco, L. (2006). Phosphoinositide 3 kinase/Akt signaling pathway & its theurapeutical implications for Human Acute Myeloid Leukemia. *Leukemia*, 20:911-28.
- Masriani, Mustofa, Jumina, Sumarti, & Enawaty, E. (2014) Cytotoxic and pro-apoptotic activities of crude alkaloid from root of sengkubak (*Pycnarrhena cauliflora* (Miers) Diels) in human breast cancer T47D cell line. *Sch. Acad. J. Biosci.*, 2014; 2(5): 336-340.
- Meshinchi, S & Arceci, R. (2007). Prognostic factors & risk based therapy in pediatric acute myeloid leukemia. *The Oncologist*, 12:341-355
- Meyer T, Regenass U, Fabbro D, et al. (1989). A derivative of staurosporine (CGP 41 251) shows selectivity for protein kinase C inhibition and in vitro anti-proliferative as well as in vivo anti-tumor activity. *Int J Cancer*. 43:851-856.
- Michelle M. Le Beau<sup>6</sup>, Clara D. Bloomfield<sup>7</sup>, Mario Cazzola<sup>8</sup>, James W. Vardiman. (2016). The revision to the World Health Organization (WHO) classification of myeloid neoplasms and acute leukemia. *Blood*. doi:10.1182/blood-2016-03-643544

- Miltyk W, Craciunescu C.N, Fischer L, Jeffcoat R.A., Koch M.A, Lopaczynski W., Mahoney C., Crosumuran J., Paglieri J & Zeisel S.H. (2003). Lack of significant genotoxicity of purified soy isoflavones (genistein, daidzein & glycitein) in 20 patient with prostate cancer. *Am J.Clin.Nutr*, 77:875-82
- Min Y.H., Cheong J.W., & Kim J.Y. (2004). Cytoplasmic mislocalization of p27Kip1 protein is associated with constitutive phosphorylation of Akt or protein Kinase B & poor prognosis in acute myelogenous leukemia. *Cancer Res.*, 64: 5225-5231
- Mizuki M, Fenski R, & Halfter H. (2000). Flt3 mutations from patients with acute myeloid leukemia induce transformation of 32D cells mediated by the Ras & STAT5 pathways. *Blood*, 96:3907-14.
- Moorman, A., Roman, E., Cartwright, R. & Morgan, G. (2002). Smoking & The Risk Of Acute Myeloid Leukaemia In Cytogenetic Subgroups. *British J Cancer*, 86: 60-62.
- Morgan, D.O, (1995). Principles of CDK regulation. *Nature*, 374: 131-4
- Mostert, S., Sitaresmi, M.N., Gundy, C.M., Sutaryo & Veerman, A.P. (2006). Influence of Socioeconomic Status on Childhood Acute Lymphoblastic Leukemia Treatment in Indonesia. *American Academy of Pediatrics*, 1600-1606.
- Motta, L., Gaudio, A. & Takahata, Y. (2006). Quantitative structure-activity relationships of a series of chalcone derivatives (1, 3-diphenyl-2-propen-1-one) as anti-plasmodium falciparum agents (antimalaria agents). *Internet Electron J Mol Des*, 5: 555-569.
- Munoz J.Dhilon N., Janku F., Watowich S & Hong DS. (2014). STAT3 Inhibitors: Finding a Home in Lymphoma and Leukemia. *The Oncologist*.
- Najafian, M., Ebrahim-Habibi, A., Hezareh, N., Yaghmaei, P., Parivar, K. & Larijani, B. (2011). Trans-chalcone: a novel small molecule inhibitor of mammalian alpha-amylase. *Mol Biol Reports*, 38: 1617-1620.
- Namikawa R, Muench MO, de Vries JE, Roncarolo MG. (1996). The FLK2/FLT3 ligand synergizes with interleukin-7 in promoting stromal-cell-independent expansion and differentiation of human fetal pro-B cells in vitro. *Blood*, 87:1881-90. PubMed.
- Neves, M. P., Lima, R. T., Choosang, K., Pakkong, P., De São José Nascimento, M., Vasconcelos, M. H., Pinto, M., Silva, A. & Cidade, H. (2012). Synthesis of a natural chalcone & its prenyl analogs—evaluation of tumor cell growth-inhibitory activities, & Effects On Cell Cycle & Apoptosis. *J Chem & Biodiv*, 9: 1133-1143.
- Nishimura, R., Tabata, K., Arakawa, M., Ito, Y., Kimura, Y., Akihisa, T., Nagai, H., Sakuma, A., Kohno, H. & Suzuki, T. (2007). Isobavachalcone, a chalcone constituent of angelica keiskei, induces apoptosis in neuroblastoma. *Biol & Pharm Bull*, 30:1878-1883.
- Nosaka T, Kawashima T, Misawa K, Ikuta K, Mui AL, Kitamura T. (1999). STAT5 as a molecular regulator of proliferation, differentiation and apoptosis in hematopoietic cells. *EMBO J.*, 18:4754- 4765.
- Nugroho T.T. (1999). Telaah beberapa fungsi titik-uji siklus pembelahan se fase G1 dan S dari inhibitor kinase-bergantung-siklin sic1. *J. Nat. Ind.*, I(1):1-11
- Nurmalasari, S.A., Widjajanto, P.H., Mulatsih, S & Purwanto, I. (2012). Leukemia Myeloblastik Akut : Luaran Terapi di RSUP DR. Sardjito Yogyakarta 2004-2008. *Indonesia Journal of Cancer*, 6 (2): 49-52
- O'Brien S, Radich JP, Abboud CN, et al. (2015). Chronic myelogenous leukemia, version 1. *J Natl Compr Canc Netw.*, 12(11):1590-1610.
- Oda T, Heaney C, Hagopian JR, Okuda K, Griffin JD, Druker BJ. (1994). Crkl is the major tyrosine-phosphorylated protein in neutrophils from patients with chronic myelogenous leukemia. *J Biol Chem*. 269:22925-22928.



- Ogawara Y, Kishishita, S., Obata, T., Isazawa, Y., Suzuki, T., Tanaka, K., Masuyama, N., & Gotoh, Y., (2002). AKT enhances Mdm2-mediated ubiquitination & degradation of p53, *J. Biol. Chem.* 277 : 21843–21850.
- Okabe H, Lee SH, Phuchareon J, Albertson DG, McCormick F, Tetsu O.(2006).: A Critical Role for FBXW8 and MAPK in Cyclin D1 Degradation and Cancer Cell Proliferation. *PLoS ONE*, 1:e128
- Okey A.B, Harper P.A, Grant D.M, & Hill R.P. (2005). *The Basic Science of Oncology: chemical & radiation carcinogenesis* . Mc Graw Hill Company. 4th ed. New York.
- Orlikova B, Tasdemir D, Golais F, Dicato M, & Diederich M. (2011). Dietary chalcones with chemopreventive & chemotherapeutic potential. *Genes. Nutr.* 6(2): 125-147.
- Ozeki K, Kiyoi H, Hirose Y, et al. (2004). Biologic and clinical significance of the FLT3 transcript level in acute myeloid leukemia. *Blood*, 103:1901 ^ 8. PubMed doi:10.1182/blood-2003-06-1845.
- Patel, A.A., Patel, K.M & Jain, A. (2013). Chronic Myeloid Leukemia in childhood. *GCSMC J Med Sci*, 2 (2) : 5-8.
- Patil, C. B., Mahajan, S. & Katti, S. A. (2010). Chalcone-a versatile molecule. *Cheminform*, 41: I.
- Paulovich, A.G.,(1997). When checkpoints fail. *Cell*, 88: 315–321
- Pellicci G, Lanfrancone L, Salcini AE, et al. (1995). Constitutive phosphorylation of Shc proteins in human tumors. *Oncogene*. 11:899-907.
- Pendergast AM, Quilliam LA, Cripe LD, et al. (1993). BCR-ABL-induced oncogenesis is mediated by direct interaction with the SH2 domain of the GRB-2 adaptor protein. *Cell*. 75:175-185.
- Permono B, Sutary H, Ugrasena I, Windiastuti E., Abdulsalam M., (2006). *Hematologi-Onkologi anak*. Jakarta : Badan Penerbit IDAI, p 236-37
- Petroulakis E, Mamane Y, Le Bacquer O, Shahbazian D, Sonenberg N. (2006). mTOR signaling: implications for cancer and anticancer therapy. *Br J Cancer*, 94(2):195-199.
- Plas D.R, & Thompson C.B. (2005). Akt-dependent transformation : there is more to grow than just surviving. *Oncogene*, 24:7435-42
- Polak R, & Buitenhuis M. The PI3K/PKB signaling module as key regulator of hematopoiesis: implications for therapeutic strategies in leukemia. *Blood*, 119:911–923.
- Porter, A. G. & Jänicke, R. U. (1999). Emerging roles of caspase-3 in apoptosis. *Cell Death & Diff.*, 6: 99-104.
- Porth C.M, & Matfin G. (2009). *Pathophysiology, concept of altered Health states*. Eight edition. Philadelphia : Lippincott William & Wilkins.
- Prayong, P., Barusrux, S. & Weerapreeyakul, N. (2008). Cytotoxic activity screening of some indigenous thai plants. *Fitoterapia*, 79, 598-601
- Propper DJ, McDonald AC, Man A, et al. (2001).Phase I and pharmacokinetic study of PKC412, an inhibitor of protein kinase C. *J Clin Oncol.* 19: 1485-1492.
- Puil L, Liu J, Gish G, et al. Bcr-Abl oncoproteins bind directly to activators of the Ras signalling pathway. *EMBO J.* 1994;13:764-773
- Qi F, Li A, Zhao L., Xu H, Inagaki Y, & Wang D. (2010). Cinobufacini, an aqueous extract from *Bufo bufo gargarizans cantor*, induce apoptosis through a mitochondria-mediated pathway in human hepatocellular carcinoma cells. *J. Ethnopharmacol*, 128:654-61

- Raitano AB, Halpern JR, Hambuch TM, Sawyers CL. (1995). The Bcr-Abl leukemia oncogene activates Jun kinase and requires Jun for transformation. *Proc Natl Acad Sci U S A.*, 92:11746-11750.
- Rao, Y. K., Fang, S.-H. & Tzeng, Y.-M. (2004). Differential effects of synthesized 2'-oxygenated chalcone derivatives: modulation of human cell cycle phase distribution. *Bioorg & Med Chem*, 12: 2679-2686.
- Ratanachoo, K., Gascoyne, P. R. & Ruchirawat, M. (2002). Detection of cellular responses to toxicants by dielectrophoresis. *Biochimica Et Biophysica Acta (Bba)-Biomembranes*, 1564: 449-458.
- Ray RJ, Paige CJ, Furlonger C, Lyman SD, Rottapel R. (1996). Flt3 ligand supports the differentiation of early B cell progenitors in the presence of interleukin-11 and interleukin-7. *Eur J Immunol* 26:1504 ^ 10. PubMed doi:10.1002/eji.1830260715.
- Reed, J. C. (2003). Apoptosis-Targeted Therapies For Cancer. *Cancer Cell*, 3: 17-22.
- Reiger P.T. (2001). An overview. In Reiger P.T (Ed). *Biotherapy : A comprehensive overview* . 2<sup>nd</sup> ed. Sudbury, MA : Jones & Bartlett
- Reksodiputro, A.H., Tajodin, H., Rinaldi, I. & Witarto, A.B.(2011). Preliminary report: clinical characteristic, hematologic response & gene mutation of patients with chronic phase Chronic Myeloid Leukemia (CML) to Imatinib at Cipto Mangunkusumo national hospital (RSUPN CM). *Indonesia J Cancer*, 5(4): 147-151.
- Reyland M.E, (2007). *Protein Kinase C & Apoptosis in Apoptosis, Cell Signaling & Human Diseases. Molecular Mechanism*, Volume 2. Humana Press, Totowa, New Jersey.
- Riedl, S. J. & Shi, Y. (2004). Molecular Mechanisms Of Caspase Regulation During Apoptosis. *Nature Reviews Molecular Cell Biology*, 5: 897-907.
- Robbins RL, Kumar V. (1999). Sistem hematopoiesis dan limfoma. Dalam : Oswari J, Erlan, Setiawan I, Hartanto H, Komala S. editor. Buku ajar Patologi II, Ed 4, Terjemahan : Putra ST, Jakarta : EGC, Hal 79-85
- Roboz, G. J. (2011). Novel approaches to the treatment of acute myeloid leukemia. *Ash Education Program Book*, 43-50.
- Romagnoli, R., Baraldi, P. G., Carrion, M. D., Cara, C. L., Cruz-Lopez, O., Preti, D., Tolomeo, M., Grimaudo, S., Cristina, A. D. & Zonta, N. (2008). Design, Synthesis, & Biological Evaluation Of Thiophene Analogues Of Chalcones. *Bioorg & Med Chem*, 16: 5367-5376.
- Rosnet O, Buhning HJ, Marchetto S, et al. (1996). Human FLT3/FLK2 receptor tyrosine kinase is expressed at the surface of normal and malignant hematopoietic cells. *Leukemia*, 10:238^48. PubMed.
- Rosnet O, Schiff C, Pebusque MJ, et al. (1993). Human FLT3/FLK2 gene: cDNA cloning and expression in hematopoietic cells. *Blood*, 82:1110^9. PubMed.
- Ross, J., & Hughes. (1994). Epidemiology of Childhood Leukemia with a focus on Infants. *Epid Rev J Epid.*, 15(1): 243
- Ruddon R.W (ed).(1995). *Cancer biology*. New York : Oxford University Press.
- Rusten LS, Lyman SD, Veiby OP, Jacobsen SE. The FLT3 ligand is a direct and potent stimulator of the growth of primitive and committed human CD34+ bone marrow progenitor cells in vitro. *Blood* 1996;87: 1317^25. PubMed.
- Rusten LS, Lyman SD, Veiby OP, Jacobsen SE.(1996). The FLT3 ligand is a direct and potent stimulator of the growth of primitive and committed human CD34+ bone marrow progenitor cells in vitro. *Blood*, 87: 1317-25.
- Safitri R. (2015). Analisis Biaya dan Faktor yang Berpengaruh Terhadap Pengobatan Pasien Kemoterapi Kenker Payudara Jamkesmas Rawat Inap di RSUP DR Sardjito Yogyakarta. Tesis. Fakultas Farmasi UGM.

- Sakai, T., Eskander, R. N., Guo, Y., Kim, K. J., Mefford, J., Hopkins, J., Bhatia, N. N., Zi, X. & Hoang, B. H. (2012). Flavokawain b, a kava chalcone, induces apoptosis in synovial sarcoma cell lines. *J Orthopaedic Res*, 30: 1045-1050.
- Salvesen, G & Duckett, C. (2002). IAP Proteins : blocking the road to death's door. *Nat Rev Moll Cell Biol.*, 3: 401-410
- Sancar A, Lindsey-Boltz LA, Unsal-Kacmaz K, & Linn S. (2004). Molecular mechanisms of mammalian DNA repair & the DNA damage checkpoints. *Annu Rev Biochem.*, 73:39–85.
- Sanchez Garcia I, Martin Zanca D. (1997). Regulation of Bcl-2 gene expression by BCR-ABL is mediated by Ras. *J Mol Biol.*, 267:225-228.
- Sattler M, Salgia R, Okuda K, et al. (1996). The protooncogene product p120CBL and the adaptor proteins CRKL and c-CRK link c-ABL, p190BCR/ABL and p210BCR/ABL to the phosphatidylinositol-3' kinase pathway. *Oncogene*, 12:839-846.
- Sattler M, Salgia R, Shrikhande G, et al. (1997). Differential signaling after b1 integrin ligation is mediated through binding of CRKL to p120(CBL) and p110(HEF1). *J Biol Chem*, 272:14320- 14326.
- Sausville E.A & Longo D.L. (2005). Principles of cancer treatment surgery, chemotherapy & biologic therapy. In Kasper D.L., fauci A.S, Longo D.L et al (Eds). Harrison's principles of internal medicine. 16<sup>th</sup> ed. New York : McGraw Hill.
- Sawyers CL, Callahan W, Witte ON. Dominant negative MYC blocks transformation by ABL oncogenes. *Cell*. 1992;70:901-910.
- Saxena, H. O., Faridi, U., Kumar, J., Luqman, S., Darokar, M., Shanker, K., Chanotiya, C. S., Gupta, M. & Negi, A. S. (2007). Synthesis of chalcone derivatives on steroidal framework & their anticancer activities. *Steroids*, 72: 892-900.
- Saydam, G., Aydin, H. H., Sahin, F., Kucukoglu, O., Erciyas, E., Terzioglu, E., Buyukkececi, F. & Omay, S. B. (2003). Cytotoxic & inhibitory effects of 4, 4'-dihydroxy chalcone (rvc-588) on proliferation of human leukemic HL-60 Cells. *Leukemia Res*, 27: 57-64.
- Scheijen B., Ngo H.T., Kang H, & Griffin J.D. (2004). FLT3 receptors with internal t&em duplications promote cell viability & proliferation by signaling through Foxo proteins. *Oncogene*, 23:3338–3349
- Schiffer CA, Stone RM. 2003. Acute Myeloid Leukemia in Adults. In: Kufe DW, Pollock RE, Welchselbaum RR, et al, eds. Cancer Medicine. 6th ed. Hamilton, ON, Canada: B. C. Decker; 2095-2115.
- Schnell, F. M. (2003). Chemotherapy-induced nausea & vomiting: the importance of acute antiemetic control. *The Oncologist*, 8, 187-198.
- Schnittger S, Schoch C, Dugas M, et al. (2002). Analysis of FLT3 length mutations in 1003 patients with acute myeloid leukemia: correlation to cytogenetics, FAB subtype, and prognosis in the AMLCG study and usefulness as a marker for the detection of minimal residual disease. *Blood*. 100:59-66.
- Senechal K, Halpern J, Sawyers CL. (1996).The CRKL adaptor protein transforms fibroblasts and functions in transformation by the BCR-ABL oncogene. *J Biol Chem.*, 271:23255-23261.
- Shackney, S. E. & Shankey, T. V. (1999). Cell Cycle Models For Molecular Biology & Molecular Oncology: Exploring New Dimensions. *Cytometry*, 35, 97-116.
- Shah AJ, Smogorzewska EM, Hannum C, Crooks GM. (1996). Flt3 ligand induces proliferation of quiescent human bone marrow CD34+CD38- cells and maintains progenitor cells in vitro. *Blood*, 87:3563^70. PubMed.

- Shah AJ, Smogorzewska EM, Hannum C, Crooks GM. (1996). Flt3 ligand induces proliferation of quiescent human bone marrow CD34<sup>+</sup>CD38<sup>-</sup> cells and maintains progenitor cells in vitro. *Blood*, 87:3563-3570. PubMed.
- Shankar S, & Srivastava R.K. (2007). *Death receptors : mechanisms, biology, & therapeutic potential*. New Jersey : Humana Press.
- Shaw RJ, Cantley LC. (2006). Ras, PI(3)K and mTOR signalling controls tumour cell growth. *Nature*, 441(7092):424-430.
- Shen, K.H., Chang, J.K., Hsu, Y.L. & Kuo, P.L. (2007). Chalcone arrests cell cycle progression & induces apoptosis through induction of mitochondrial pathway & inhibition of nuclear factor kappa B signalling in human bladder cancer cells. *Basic Clin Pharm & Toxicology*, 101(4): 254-261.
- Shi C-S, Tuscano JM, Witte O, Kehrl JH. (1999). GCKR links the BCR-ABL oncogene and RAS to the stress-activated protein kinase pathway. *Blood*. 1999;93:1338-1345.
- Shi, Y. (2002). Mechanisms of caspase activation & inhibition during apoptosis. *Mol Cell*, 9: 459-470.
- Sillaber C, Gesbert F, Frank DA, Sattler M, Griffin JD. (2000). STAT5 activation contributes to growth and viability in Bcr/Abl-transformed cells. *Blood*.
- Silver, R. T., Woolf, S. H., Hehlmann, R., Appelbaum, F. R., &erson, J., Bennett, C., Goldman, J. M., Guilhot, F., Kantarjian, H. M. & Lichtin, A. E. (1999). An evidence-based analysis of the effect of busulfan, hydroxyurea, interferon, & allogeneic bone marrow transplantation in treating the chronic phase of chronic myeloid leukemia: developed for the american society of hematology presented in part at the education session of The American Society Of Hematology, December 5, 1998, Miami Beach, Fl. *Blood*, 94: 1517-1536.
- Simanjorang, C., Adisasmita, A.C. & Tehuteru, E.S., Gambaran Epidemiologi kasus Leukemia Anak di Rumah Sakit Kanker Dharmais 2004-2008. (2010). *Indonesia J Cancer*, 4(1):15-22
- Sirard C, Laneuville P, Dick JE. Expression of bcr-abl abrogates factor-dependent growth of human hematopoietic M07E cells by an autocrine mechanism. *Blood*. 1994;83:1575-1585
- Sirion, U., Kasemsook, S., Suksen, K., Piyachaturawat, P., Suksamrarn, A. & Saeeng, R. (2012). New Substituted C-19-andrographolide analogues with potent cytotoxic activities. *Bioorg & Med Chem Lett.*, 22: 49-52.
- Sivakumar, P., Prabhakar, P. & Doble, M. (2011). Synthesis, antioxidant evaluation, & quantitative structure–activity relationship studies of chalcones. *Med Chem Res*, 20: 482-492.
- Siveen, K.S., Sikka, S., Surana, R., Dai, X., Zhang, J., Kumar, A.P., Tan, B.K., Sethi, G. and Bishayee, A. (2014) Targeting the STAT3 Signaling Pathway in Cancer: Role of Synthetic and Natural Inhibitors. *Biochimica et Biophysica Acta*, 1845, 136-154.
- Sjakti H A & Windiastuti E. (2012). Pola infeksi pada leukemia mieloblastik akut pada anak. *Sari Pediatri*. 13 (6) : 426-30
- Skorski T, Bellacosa A, Nieborowska-Skorska M, et al. (1997). Transformation of hematopoietic cells by BCR/ABL requires activation of a PI-3k/Akt-dependent pathway. *EMBO J*. 16:6151-6161.
- Skorski T, Kanakaraj P, Nieborowska Skorska M, et al. (1995). Phosphatidylinositol-3 kinase activity is regulated by BCR/ABL and is required for the growth of Philadelphia chromosome-positive cells. *Blood*. 1995;86:726-736.
- Small D. (2008). Targeting FLT3 for treatment of Leukemia. *Semin Hematol*. 45 : 17-21



- Sondak V.K, Redman B.G. (2005). *Interferons*. In de vita V.T.Jr., Hellman S., Rosenberg S.A (eds). *Cancer : principles & practice of oncology*. 7<sup>th</sup> ed., Philadelphia : Lippincot Williams & Wilkins.
- Stacchini A, Fubini L, Severino A, Sanavio F, Aglietta M, & Piacibello W. (1996). Expression of type III receptor tyrosine kinases FLT3 & KIT & responses to their lig&s by acute myeloid leukemia blasts. *Leukemia*,10:1584-1591.
- Stone R.M., DeAngelo D.J., , Klimek V., Galinsky I., Estey E., Nimer S.D.,Grandin W.,Lebwohl D., Wang Y., Cohen P., Fox E.A., Neuberg D., Clark J., Gilliland D.G., & Griffin J.D. 2005. Patients with acute myeloid leukemia and an activating mutation in FLT3 respond to a small-molecule FLT3 tyrosine kinase inhibitor, PKC412. *Blood*. 105: 54-60
- Stone RM. 2002.The difficult problem of acute myeloid leukemia in the older adult. *CA Cancer J Clin*. 52:363-371.
- Stone, R. M., O'donnell, M. R & Sekeres, M. A. (2004). Acute Myeloid Leukemia. *Ash Education Program Book*, 98:117
- Subramaniam, A., Shanmugam, M.K., Perumal, E., Li, F., Nachiyappan, A., Dai, X., et al. (2013). Potential Role of Signal Transducer and Activator of Transcription (STAT)3 Signaling Pathway in Inflammation, Survival, Proliferation and Invasion of Hepatocellular Carcinoma. *Biochimica et Biophysica Acta (BBA)—Reviews on Cancer*, 1835, 46-60. <http://dx.doi.org/10.1016/j.bbcan.2012.10.002>
- Suwito H, Jumina J, Mustofa M, Ni'matuzahroh N, & Puspaningsih N. (2015). Anticancer & antimicrobial activity of methoxy amino chalcone derivates. *Der Pharma Chemica*. 7(3): 89-94.
- Syam, S., Abdelwahab, S. I., Al-Mamary, M. A. & Mohan, S. (2012). Synthesis of chalcones with anticancer activities. *Molecules*, 17: 6179-6195.
- Szliszka, E., Czuba, Z. P., Mazur, B., Sedek, L., Paradysz, A. & Krol, W. (2009). Chalcones enhance trail-induced apoptosis in prostate cancer cells. *Intl J Mol Sci*, 11, 1-13.
- Takimoto CH, & Calvo E. 2000. Principles of Oncologic Pharmacotherapy" in Pazdur R, Wagman LD, Camphausen KA, Hoskins WJ (Eds)Cancer Management: A Multidisciplinary Approach. Edisi 11.
- Tallman, M. S., Gilliland, D. G. & Rowe, J. M. (2005). Drug therapy for acute myeloid leukemia. *Blood*, 106, 1154-1163.
- Tan, G., Gyllenhaal, C. & Soejarto, D. (2006). Biodiversity as a source of anticancer drugs. *Current Drug Targets*, 7, 265-277.
- Tashiro, E., Tsuchiya, A. & Imoto, M. (2007). Functions Of Cyclin D1 As An Oncogene & Regulation Of Cyclin D1 Expression. *Cancer Science*, 98: 629-635.
- Testa U. and Riccioni R. (2007). Dereglulation of apoptosis in acute myeloid leukemia. *Hema J*. 92 (01):81-94
- Thavasu P, Propper D, McDonald A, et al. (1999). The protein kinase C inhibitor CGP41251 suppresses cytokine release and extracellular signal-regulated kinase 2 expression in cancer patients. *Cancer Res*.15:53980-53984.
- the management of chronic myeloid leukemia: 2013. *Blood*. 2013;122(6):872-884.
- Thorburn A. (2004). Death receptor-induced cell killing. *Cell Signal*.16: 139-144
- Tsuruo, T. (2003). Molecular cancer therapeutics: recent progress & targets in drug resistance. *Internal Medicine-Tokyo-Japanese Society Of Internal Medicine-*, 42, 237-243.
- Uemura N, & Griffin JD. (1999). The adapter protein Crkl links Cbl to C3G after integrin ligation and enhances cell migration. *J Biol Chem*, 274: 37525-37532.

- Vasil'ev, R., Kancheva, V., Fedorova, G., Batovska, D. & Trofimov, A. (2010). Antioxidant activity of chalcones: the chemiluminescence determination of the reactivity & the quantum chemical calculation of the energies & structures of reagents & intermediates. *Kinetics & Catalysis*, 51: 507-515.
- Veiby OP, Lyman SD, Jacobsen SE. (1996). Combined signaling through interleukin-7 receptors and flt3 but not c-kit potently and selectively promotes Bcell commitment and differentiation from uncommitted murine bone marrow progenitor cells. *Blood*, 88:1256-1265. PubMed.
- Veiby OP, Lyman SD, Jacobsen SE. Combined signaling through interleukin-7 receptors and flt3 but not c-kit potently and selectively promotes Bcell commitment and differentiation from uncommitted murine bone marrow progenitor cells. *Blood* 1996;88:1256-1265. PubMed.
- Vigneri P, & Wang JY (2001). Induction of apoptosis in chronic myelogenous leukemia cells through nuclear entrapment of BCR-ABL tyrosine kinase. *Nat. Med.* 7 (2): 228-34. doi:10.1038/84683. PMID 11175855.
- Vitale-Cross, Amornphimoltham, P., Fisher, G., Molinolo, A.A., & Gutkind, J.S. (2004). Conditional expression of K-ras in an epithelial compartment that include the stem cell is sufficient to promote squamous cell carcinogenesis. *Cancer Res.*, 64:8804-7
- Vitorovic-Todorovic M, Eric-Nikolic A, Kolundzija B, Hamel E, Ristic S, & Juranic I (2013). (E)-4-aryl-4-oxo-2-butanoic acid amides, chalcone-arylacrylic acid chimeras: design, antiproliferative activity & inhibition of tubulin polymerization. *Eur. J. Med. Chem.* 62: 40-50.
- Vogel, S., Ohmayer, S., Brunner, G. & Heilmann, J. (2008). Natural & non-natural prenylated chalcones: synthesis, cytotoxicity & anti-oxidative activity. *Bioorg & Med Chem*, 16: 4286-4293.
- Wang C, Fu M, D'Amico M, Albanese C, Zhou JN, Brownlee M, Lisanti MP, Chatterjee VK, Lazar MA, Pestell RG.(2001). Inhibition of cellular proliferation through IκB kinase-independent and peroxisome proliferator-activated receptor gamma-dependent repression of cyclin D1. *Mol Cell Biol*, 21(9):3057-3070.
- Wang HG, Rapp UR, Reed JC.(1996). Bcl-2 targets the protein kinase Raf-1 to mitochondria. *Cell*.87:629-638.
- Wang, S. & El-Deiry, W. S. (2003). TRAIL & apoptosis induction by tnfr-family death receptors. *Oncogene*, 22: 8628-8633.
- Watzinger F, Gaiger A, Karlic H, Becher R, Pillwein K, Lion T. (1994). Absence of N-ras mutations in myeloid and lymphoid blast crisis of chronic myeloid leukemia. *Cancer Res.*, 54:3934-3938.
- Weinberg RA: The retinoblastoma protein and cell cycle control. *Cell* 1995, 81(3):323-330.
- Weisberg E, Boulton C, Kelly LM, et al. (2002). Inhibition of mutant FLT3 receptors in leukemia cells by the small molecule tyrosine kinase inhibitor PKC412. *Cancer Cell*. 1:433-443.
- Widowati W., Mosef T., Risdian .C, & Yellianty Y. (2013). Anticancer & free radical scavenging potency of *Catharanthus roseus*, *Dendrophthoe petandra*, *Piper betle*, & *Curcuma mangga* extract in breast cancer cell lines. *Oxid. Antioxid. Med. Sci.* 2(2): 137-42.
- Wiederrecht GJ, Sabers CJ, Brunn GJ, Martin MM, Dumont FJ, Abraham RT. (1995). Mechanism of action of rapamycin: new insights into the regulation of G1-phase progression in eukaryotic cells. *Prog Cell Cycle Res*, 1:53-71.

- Windholz M., Budavari S., Blumetti R.F., & Otterbein E.S. (1983). The Merck Index. *An Encyclopedia of Chemicals, Drugs & Biologicals*, 10<sup>th</sup> Ed, Merck & Co. Inc.Rahway,N.J. USA,pp : 283
- Wisniewski D, Strife A, Swendeman S, et al. (1999). A novel SH2-containing phosphatidylinositol 3,4,5- trisphosphate 5-phosphatase (SHIP2) is constitutively tyrosine phosphorylated and associated with src homologous and collagen gene (SHC) in chronic myelogenous leukemia progenitor cells. *Blood*, 93:2707-2720.
- Wolter F., Akoglu B., Clausnitzer A., & Stein J. (2001). Downregulation of the cyclin D1/Cdk4 complex occurs during resveratrol-induced cell cycle arrest in colon cancer cell lines. *J of nutr.*, 131: 2197–2203.
- Woodgett JR: Recent advances in the protein kinase B signalling pathway. *Curr Opin Cell Biol* 2005, 17(2):150-157.
- Xiong, A., Yang, Z., Shen, Y., Zhou, J. and Shen, Q. (2014) Transcription Factor STAT3 as a Novel Molecular Target for Cancer Prevention. *Cancers (Basel)*, 6, 926-957. <http://dx.doi.org/10.3390/cancers6020926>
- Xu, S., Chen, M., Chen, W., Hui, J., Ji, J., Hu, S., Zhou, J., Wang, Y. & Liang, G. (2015). Chemopreventive effect of chalcone derivative, L2H17, in colon cancer development. *BMC cancer*, 15(1): 870.
- Yadav, H. L., Gupta, P., Pawar, R., Singour, P. & Patil, U. (2011). Synthesis & biological evaluation of anti-inflammatory activity of 1, 3 diphenyl propenone derivatives. *Med Chem Res*, 20: 461-465.
- Yamamoto Y, Kiyoi H, Nakano Y, et al. (2001).Activating mutation of D835 within the activation loop of FLT3 in human hematologic malignancies. *Blood*. 97:2434-2439.
- Yayli, N., Ucuncu, O., Yasar, A., Kucuk, M., Yayli, N., Akyuz, E. & Karaoglu, S. A. (2006). Synthesis & biological activities of n-alkyl derivatives of o-, m- & p-nitro (e)-4-azachalcones & stereoselective photochemistry in solution, with theoretical calculations. *Turkish J Chem*, 30: 505.
- Ye, C.-L., Liu, J.-W., Wei, D.-Z., Lu, Y.-H. & Qian, F. (2004). In vitro anti-tumor activity of 2', 4'-dihydroxy-6'-methoxy-3', 5'-dimethylchalcone against six established human cancer cell lines. *Pharm Res*, 50: 505-510.
- Ye, C.-L., Qian, F., Wei, D.-Z., Lu, Y.-H. & Liu, J.-W. (2005). Induction of apoptosis in k562 human leukemia cells by 2', 4'-dihydroxy-6'-methoxy-3', 5'-dimethylchalcone. *Leukemia Res*, 29: 887-892.
- Yerra K.R, Fang S & Tzeng Y.M. (2004). Synthesis of 2-oxygenated chalcones. *Bioorg.Med.Chem*, 12: 2679-2686
- Yoon W.J., Ham Y.M., Kim S.S., Yoo B.S., & Moon J.Y. (2009). Suppression of pro-inflammatory cytokines, iNOS & COX-2 expression by brown algae *Sargassum micracanthum* in RAW 264.7 macrophages. *Eur Asia J. BioSci.*, 3: 130-3.
- Yu H, Kortylewski M., & Pardoll D. (2007). Crosstalk between cancer & immune cells: role of STAT3 in the tumour microenvironment. *Nat Rev Immun*, 7: 41–51. doi: 10.1038/nri195
- Yu ZK, Gervais JL, & Zhang H. (1998). Human CUL-1 associates with the SKP1/SKP2 complex and regulates p21(CIP1/WAF1) and cyclin D proteins. *Proc Natl Acad Sci U S A*. 95(19):11324-11329.
- Zarghi, A., Zebardast, T., Hakimion, F., Shirazi, F. H., Praveen Rao, P. & Knaus, E. E. (2006). Synthesis & biological evaluation of 1, 3-diphenylprop-2-en-1-ones possessing a methanesulfonamido or an azido pharmacophore as cyclooxygenase-1/-2 inhibitors. *Bioorg & Med Chem*, 14: 7044-7050.

- Zha J, Harada H, Yang E, Jockel J, Korsmeyer SJ. (1996). Serine phosphorylation of death agonist BAD in response to survival factor results in binding to 14-3-3 not BCL-X(L). *Cell*, 87:619-628
- Zhang S, Broxmeyer HE. (2000). Flt3 ligand induces tyrosine phosphorylation of gab1 and gab2 and their association with shp-2, grb2, and PI3 kinase. *Biochem Biophys Res Commun*, 277:195 ^ 9. PubMed doi:10.1006/bbrc.2000.3662.
- Zhang, E.-H., Wang, R.-F., Guo, S.-Z. & Liu, B. (2013). An update on antitumor activity of naturally occurring chalcones. *Evidence-Based Compl & Alter Med*.
- Zhang, L. & Fang, B. (2004). Mechanisms of resistance to trail-induced apoptosis in cancer. *Cancer Gene Therapy*, 12: 228-237.
- Zhang, X.-W., Zhao, D.-H., Quan, Y.-C., Sun, L.-P., Yin, X.-M. & Guan, L.-P. (2010). Synthesis & evaluation of antiinflammatory activity of substituted chalcone derivatives. *Med Chem Res*, 19: 403-412.
- Zhao RC, Tarone G, Verfaillie CM. (1997). Presence of the adhesion inhibitory b1B integrin isoform on CML but not normal progenitors is at least in part responsible for the decreased CML progenitor adhesion [abstract]. *Blood*, 90:393a.



