

DAFTAR PUSTAKA

- Awolaran, O. T., 2015, Cellular Mechanisms of Oestrogen in Breast Cancer Development, *The Open Access Journal of Science and Technology*, Vol. 3, United Kingdom.
- Aguda, B. D., Tang, Y., 1999, The Kinetics Origins of The Restriction Point In The Mammalian Cell Cycle, *Cell Proliferation*, Vol.32, 321-335.
- Bai, L., Zhu, W. G., 2006, p53: Structure, Function and Therapeutic Application, *Journal of Cancer Molecule*, 2(4): 141-153.
- Berger, C., Qian, Y., dan Chen, X., 2013, The p53-Estrogen Receptor Loop in Cancer, *Curr Mol Med*, 13(8): 1229–1240.
- Bray, F., Ferlay, J., Soerjomataram, I., Siegel, R. L., Torre, L. A., Jemal, A., 2018, Global Cancer Statistics 2018: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries, *CA: A Cancer Journal for Clinicians*, Vol.68, No. 6.
- Caldon, C. E., 2014, Estrogen Signaling and the DNA Damage Response in Hormone Dependent Breast Cancer, *Molecular and Cellular Oncology*, Vol. 4, No. 106, Australia.
- Caldon, C. E., Sergio, C. M., Schütte, J., Boersma, M. N., Sutherland, R. L., Carrol, J. S., Musgrove, E. A., 2009, Estrogen Regulation of Cyclin E2 Requires Cyclin D1 but Not c-Myc, *Molecular and Cellular Biology*, Vol. 29, No. 17, p. 4623-4639.
- Garredo-Castro, A.C., dan Goel, S., 2017, *CDK4/6 Inhibition in Breast Cancer: Mechanisms of Reponse and Treatment Failure*, *Curr Breast Cancer Rep.*, Vol. 9, No. 1, 26-33.

- Chen, L., 2006, *The Cell-Cycle Arrest and Apoptotic Functions of p53 in Tumor Initiation and Progression*, Cold Spring Harb Perspect Med, Vol. 6.
- Eliaš, J., Dimitriou, L., Clairambault, J., Natalini, R., 2014, The p53 protein and its molecular network: Modelling a missing link between DNA damage and cell fate, *Biochimica et Biophysica Acta*, p. 232-247
- Fan, Q. D., Wu, G., Liu, Z. R., 2014, Dynamics of Posttranslational Modifications of p53, *Computational and Mathematical Method in Medicine*, p. 1–8.
- Finizio, N., Ladas, G., 1982, *An Introduction to Differential Equations with Difference Equations, Fouries Series, and Partial Differential Equations*, Wadsworth, California.
- Giordano, A., dan Normanno, N., 2009, *Breast Cancer In The Post Genomic Era*, Springer-Verlag, New York.
- Godone, R. L. N., Leitão, G. M., Araújo, N. B., Castelletti, C. H. M., Lima-Filho, J. L., Martins, D. B. G., 2018, Clinical and Molecular Aspects of Breast Cancer: Targets and Therapies, *Biomedicine & Pharmacotherapy*, 106: 14–34.
- Gonze, D., dan Kaufman, M., 2013, Lecture Notes: Chemical and Enzyme Kinetics, *Master en Bioinformatique et Modélisation*.
- Harbeck, N., Gnant, M., 2017, Breast Cancer, *Lancet*, Vol. 389, 1134–1150.
- He, Y., Liu, Z., Qiao, C., Xu, M., Yu, J., Li, G., 2014, Expression and significance of Wnt signaling components and their target genes in breast carcinoma, *Molecular Medicine Reports*, Vol. 9, 137–143, Capital Medical University, China.
- Iwakuma, T., Lozano, G., 2003, MDM2, An Introduction, *Molecular Cancer Research*, Vol. 1, 993-1000
- Iwamoto, K., Tashima, Y., Hamada, H., Eguchi, Y., Okamoto, M., 2008, Mathematical modelling and sensitivity analysis of G1/S phase in the cell cycle including the DNA-damage signal transduction pathway, *BioSystems*, Vol. 94, 109–117.

- Jeggo, P. A., Löbrich, M., 2007, DNA Double-Strand Breaks: Their Cellular and Clinical Impact?, *Oncogene*, Vol. 26, 7717–7719.
- Kastan, M. B., Lim, D. S., 2000, The Many Substrates and Functions of ATM, *Nat. Rev. Mol. Cell Biol.*, Vol. 1, 179–186.
- Keener, J., Sneyd, J., 1998, *Mathematical Physiology*, Interdisciplinary Applied Mathematics, Springer-Verlag, New York.
- Klipp, E., Herwig, R., Kowald, A., Wierling, C., Lehrach, H., 2005, *Systems Biology in Practice: Concepts, Implementation and Application*, Wiley-VCH, Weinheim.
- Kruman, I., 2011, *DNA Repair*, Intech, Croatia.
- Kumar, V., Abbas, A. K., Aster, J. C., 2017, *Robbins Basic Pathology*, 10th ed, Elsevier, p. 24–29.
- Kusuma, M. F., Adi-Kusumo, F., 2019, A Mathematical Modelling for Estradiol Influence on DNA Damage Response and G1/S Transition Phase Regulations in Early Stage of Breast Cancer, *Bulletin of Mathematical Biology*, submitted.
- Kuznetsov, Y. A., 1998, *Element of Applied Bifurcation Theory*, 2nd Edition, Springer-Verlag, Inc., New York.
- Leung, J. Y., Ehmann, G. L., Giangrande, P. H., Nevins, J. R., 2008, A role for Myc in facilitating transcription activation by E2F1, *Oncogene*, Vol. 27, 4172-4179.
- Liu, Z., Yan, F., Liu, H., Hao, J., 2012, Dynamical Behavior of Rb-E2F Pathway Including Negative Feedback Loops Involving miR449, *PLoS ONE*, Vol. 7.
- McKinnon, P. J., 2004, ATM and Ataxia Telangiectasia: Second in Molecular, *Medicine Review Series, EMBO reports*, Vol. 26, 772–776.
- Metzler, M., Kulling, S. E., Pfeiffer, E., Jacobs, E., 1998, Genotoxicity of Estrogens, *Z Lebensm Unters Forsch A*, 206: 367–373.

- Milosevic, M., Jankovic, D., Milenkovic, A., Stojanov, D., 2018, Early Diagnosis and Detection of Breast Cancer, *Technol Health Care*, Vol. 26, No. 4:729-759.
- Murray, J. D., 2002, *Mathematical Biology I: An Introduction, 3rd ed.*, Springer-Verlag, New York.
- Nelson, L. R., Bulun, S. E., 2001, Estrogen Production and Action, *The American Academy of Dermatology, Inc.*
- Okat, Z., 2018, Molecular Dynamics of Estrogen Receptors, *Eurasian Journal of Medicine and Oncology (EJMO)*, 2(4): 189–197, Turkey.
- Orr, B., Godek, K. M., Compton, D., 2015, Aneuploidy, *Curr Biol.*, Vol. 25, No. 3, R538–R542.
- Pagano, M., Theodoras, A. M., Tam, S. W., Draetta, G. F., 1994, Cyclin D1-mediated inhibition of repair and replicative DNA synthesis in human fibroblast, *Genes and Development*, Vol. 8, 1627–1639.
- Pallis, A. G., Karamouzis, M. V., DNA Repair Pathways and Their Implication in Cancer Treatment, *Cancer Metastasis Rev*, 29:677-685.
- Perko, L., 2001, *Differential Equation and Dynamical System*, Text in Applied Mathematics, Vol. 7, Springer-Verlag, New York.
- Piccolo, M. T., Crispi, S., 2012, The Dual Role Played by p21 May Influence the Apoptotic or Anti-Apoptotic Fate in Cancer, *Journal of Cancer Research Updates*, 1, 189-202.
- Qu, Z., Weiss, J. N., MacLellan, W. R., 2002, Regulation of The Mammalian Cell Cycle: A Model of G1-to-S Transition, *Am J Physiol Cell Physiol*, Vol. 284.
- Rosenbaum, J. N., Weisman, P., 2017, The Evolving Role of Companion Diagnostics for Breast Cancer in an Era of Next Generation Omics, *The American Journal of Pathology*, Vol. 187, No. 10.
- Ross, S. L., 1984, *Differential Equations*, John Wiley & Sons, Inc., Canada.

- Russo, J., Russo, I. H., 2006, The Role Of Estrogen in Initiation Of Breast Cancer, *J Steroid Biochem Mol Biol*, 102(1-5): 89-96.
- Sante, G.D., Rocco, A.D., dkk., 2017, Hormone-Induced DNA Damage Response and Repair Mediated By Cyclin D1 In Breast And Prostate Cancer, *Oncotarget*, Vol. 8, No. 47, 81803–81812.
- Santen, R. J., Yue, W., Ji-Ping Wang, 2015, Estrogen Metabolites and Breast Cancer, *Elsevier: Steroids*, 99: 61-66.
- Shiloh, Y., 2003, ATM and Related Protein Kinases: Safeguarding Genome Integrity, *Nat. Rev. Cancer*, Vol. 3, 155–168.
- Sutherland, R. L., Musgrove, E. A., 2004, Cyclins and Breast Cancer, *J Mammary Gland Biol Neoplasia*, 9(1): 95–104.
- Thu, KL., Soria-Bretones, I., Mak, TW., Cescon, DW., Targeting The Cell Cycle in Breast Cancer: Towards The Next Phase, *Cell Cycle*, Vol. 17, No.15, 1871-1885.
- Vogelstein, B., Lane, D., Levine, A.J., 2000, Surfing The p53 Network, *Nature*, Vol. 408.
- Vrtačnik, P., Ostanek, B., Mencej-Bedračk, S., Marc, J., 2014, The Many Faces Of Estrogen Signaling, *Biochemia Medica*, 24(3):329-42.
- Widodo, 2011, *Pengantar Model Matematika: Model Matematika Bidang Pertumbuhan Populasi dan Penyebaran Epidemi*, Jurusan Matematika FMIPA Universitas Gadjah Mada, Yogyakarta.
- Wiggins, S., 2003, *Intorduction to Applied Nonlinear Dynamical Systems and Chaos*, Springer-Verlag, Inc., New York.
- Xu, J., Chen, Y., Olopade, O. I., 2010, MYC and Breast Cancer, *Genes & Cancer*, 1(6):629-640.
- Yager, J. D., Davidson, N. E., 2006, Estrogen carcinogenesis in breat cancer, *The New England Journal of Medicine*, 354(3):270–82.

Yao, G., Lee, T. J., Mori, S., Nevins, J. R., You, L., 2008, A bistable RbE2F switch underlies the restriction point, *Natural Cell Biology*, Vol. 10, No.4.

Yue, W., Yager, J. D., Wang, J. P., Jupe, E. R., Santen, R. J., 2013, Estrogen Receptor-dependent and independent mechanisms of breast carcinogenesis, *Steroid*, Vol. 78, 161–170, United states.

Zwijssen, R.M., Wientjens, E., Klompaker, R., Van Der Sman, J., Bernards, R., Michalides, R.J., 1997, CDK-independent activation of estrogen receptor by cyclin D1, *Cell*, 88(3):405-15.

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