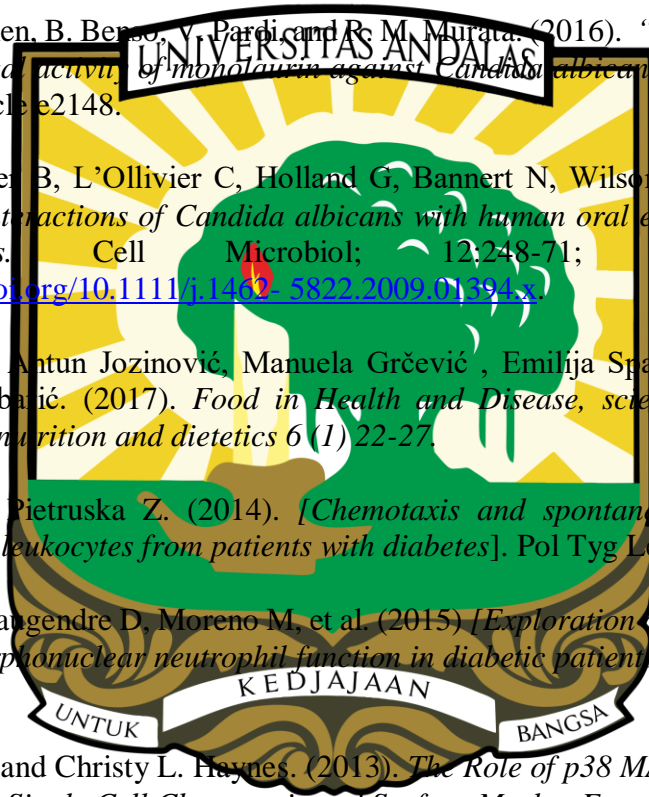


## DAFTAR PUSTAKA

- Abas F, Ruslay S, Shaari K, Zainal Z, Maulidiani, Sirat H, et al. (2007). Characterization of the components in the active fractions of health gingers (*Curcuma xanthorrhiza* and *Zingiber zerumbet*) by HPLC-DAD-ESIMS. *Food Chem.*;104:1183–91. [[Google Scholar](#)] [[Ref listn](#)]
- Advani A, Marshall SM, Thomas TH. (2014). *Impaired neutrophil store-mediated calcium entry in Type 2 diabetes*. *Eur J Clin Invest*; 34: 43–49.
- Alba-Loureiro TC, Hirabara SM, Mendonca JP, Curi R, Pithon-Curi TC. (2016). *Diabetes causes marked changes in the actin and metabolism of rat neutrophils*. *J Endocrinol*; 188: 295–303.
- Albert DA, Ward A, Allweiss P, Graves DT, Knowler WC, Kuntzel C, et al. (2012). *Diabetes and oral disease: Implications for health professionals*. *Ann N Y Acad Sci*;1255:1–15.
- Albuquerque P, Casadevall A. (2012). *Quorum sensing in fungi--a review*. *Med Mycol*; 50:337–45; PMID:22268493; <http://dx.doi.org/10.3109/13693786.2011.652201>.
- American Diabetes Association. (2018) *Classification and diagnosis of diabetes. Standard of Medical Care in Diabetes*. *Diabetes Care*; 39:13–22. [PubMed: 26696675].
- Anjusha S, Gangaprasad A. (2014). Phytochemical and antibacterial analysis of two important *Curcuma* species *Curcuma aromatica* Salisb and *Curcuma xanthorrhiza* Roxb. (*Zingiberaceae*). *J Pharm. Phytochem.* 3:50–53.
- Astrid Feliasari, Ivan Lumban Toruan, Agus Fitriangga. (2014) *The type 2 diabetes mellitus patients profile with insulin therapy in outpatient clinic dr. soedarso general hospital Pontianak*. Hal:4.
- Babaii N, Zamaninejad S. (2016). *Inhibitory effect of curcumin on candida albicans compared with Nystatin: an invitro study*. *J Dent Mater Tech*; 5(4): 196-201.
- Bettencourt-Silva R, Aguiar B, Sá-Araújo V, et al. (2019). *Diabetes-related symptoms, acute complications and management of diabetes mellitus of patients who are receiving palliative care: a protocol for a systematic review*. *BMJ Open* ;9:e028604. doi:10.1136/ bmjopen-2018-028604.

- Bhawana, R. K. Basniwal, H. S. Buttar, V. K. Jain, and N. Jain. (2011). “*Curcumin nanoparticles: preparation, characterization, and antimicrobial study*,” *Journal of Agricultural and Food Chemistry*, vol. 59, no. 5, pp. 2056–2061,
- Borreagaard N. (2010) *Neutrophils, from marrow to microbes*. *Immunity*; 33: 657–670.
- C. F. Urban, S. Lourido, and A. Zychlinsky. (2006). “How do microbes evade neutrophil killing?” *Cellular Microbiology*, vol. 8, no. 11, pp. 1687–1696.
- Chen L, Magliano DJ, Zimmet PZ. (2011) *The worldwide epidemiology of type 2 diabetes mellitus--present and future perspectives* *Nat Rev Endocrinol*. Nov 8; 8(4):228-36.
- D. Seleem, E. Chen, B. Benso, V. Pardi, and R. M. Murata. (2016). “*In vitro evaluation of antifungal activity of monolaurin against Candida albicans biofilms*,” *PeerJ*, vol. 4, article e2148.
- Dalle F, Wächter B, L’Ollivier C, Holland G, Bannert N, Wilson D, et al. (2010). *Cellular interactions of Candida albicans with human oral epithelial cells and enterocytes*. *Cell Microbiol*; 12:248-71; PMID:19863559; <http://dx.doi.org/10.1111/j.1462-5822.2009.01991.x>.
- Daria Jovičić , Antun Jozinović, Manuela Grčević , Emilija Spaseska Aleksovska ,Drago Šubalić. (2017). *Food in Health and Disease, scientific-professional journal of nutrition and dietetics* 6 (1) 22-27.
- Debczynski W, Pietruska Z. (2014). [*Chemotaxis and spontaneous migration of neutrophil leukocytes from patients with diabetes*]. *Pol Tyg Lek*; 49: 11–13.
- Delamaire M, Mangendre D, Moreno M, et al. (2015) [*Exploration of the various steps of polymorphonuclear neutrophil function in diabetic patients*]. *J Mal Vasc*; 20: 107–112.
- Donghyuk Kim and Christy L. Haynes. (2013). *The Role of p38 MAPK in Neutrophil Functions: Single Cell Chemotaxis and Surface Marker Expression*. NIH Public Access Published in final edited form as: *Analyst*. November 21; 138(22): . doi:10.1039/c3an01076g.
- Eliska Svobodová, Peter Staib, Josephine Losse, Florian Hennicke, Dagmar Barz and Mihály Józsi. (2012). *Differential interaction of two related fungal species Candida albicans and Candida dubliniensis with human neutrophils*. *J Immunol*; 189:2502-2511; Prepublished online 30 July 2012 . doi:10.4049/jimmunol.1200185.<http://www.jimmunol.org/content/189/5/2502>.
- Emily Chen, Bruna Benso, Dalia Seleem, Luiz Eduardo Nunes Ferreira , Silvana Pasetto, Vanessa Pardi, and Ramiro Mendonça Murata. (2018). *Fungal-Host*



*Interaction: Curcumin Modulates Proteolytic Enzyme Activity of Candida albicans and Inflammatory Host Response In Vitro*. Hindawi International Journal of Dentistry, Article ID 2393146, 7 pages <https://doi.org/10.1155/2018/2393146>.

Fanning S, Mitchell AP. (2012). *Fungal biofilms*. PLoS Pathog; 8:e1002585; PMID:22496639; <http://dx.doi.org/10.1371/journal.ppat.1002585>.

Finkel JS, Mitchell AP. (2011). *Genetic control of Candida albicans biofilm development*. Nat Rev Microbiol; 9:109-18; PMID:21189476; <http://dx.doi.org/10.1038/nrmicro2475>.

Francis Antoine & Denis Girard. (2015). *Curcumin increases gelatinase activity in human neutrophils by a p38 mitogen-activated protein kinase (MAPK)-independent mechanism*, Journal of Immunotoxicology, 12(2), 188-193, DOI: 10.3109/1547691X.2014.917749.

François L. Mayer, Duncan Wilson and Bernhard Hube. (2013). *Candida albicans pathogenicity mechanism*. Lands bioscience. <http://dx.doi.org/10.4161/vim.22913>. Volume 4:2, 119–128

Galeriukm. (2011). *Morfologi, Anatomi dan Fisiologi Tanaman Temulawak*. [http://toiusd.multiply.com/journal/item/240/Curcuma\\_xanthorrhiza\\_Temulawak\\_Morfologi\\_Anatomi\\_dan\\_Fisiologi](http://toiusd.multiply.com/journal/item/240/Curcuma_xanthorrhiza_Temulawak_Morfologi_Anatomi_dan_Fisiologi). Diakses 26 Desember 2019

Hall RA, Turner KJ, Chaloupka J, Cottier F, De Sordi L, Sanglard D, et al. (2011) *The quorum-sensing molecules farnesol/homoserine lactone and dodecanol operate via distinct modes of action in Candida albicans*. Eukaryot Cell; 10:1034-42; PMID:21666074; <http://dx.doi.org/10.1128/EC.05060-11>.

Harlina. (2002). *Hubungan antara kadar glukosa saliva dengan jumlah koloni kandida albicans pada penderita diabetes mellitus*. Jurnal PDGF. Fisi Khusus. Th Ke-52. h. 274-7.

Harsunen MH, Puff R, D'Orlando O, et al. (2013). *Reduced blood leukocyte and neutrophil numbers in the pathogenesis of type 1 diabetes*. Horm Metab Res; 45: 467–470.

Hernani, Raharjo M., (2005), *Tanaman Berkhasiat Antioksidan*, Jakarta: Penebar Swadaya. Hal: 8-11.

Hu, M., Du, Q., Vancurova, I., et al. (2005). *Pro-apoptotic effect of curcumin on human neutrophils: Activation of the p38 mitogen-activated protein kinase pathway*. Crit. Care Med. 33: 2571–2578.

Hyun Y-M, Sumagin R, Sarangi PP, Lomakina E, Overstreet MG, Baker CM, et al. (2012). *Uropod elongation is a common final step in leukocyte extravasation through inflamed vessels*. J Exp Med.209:134962.doi:10.1084/jem.20111426.

*Integrated Taxonomic Information System (ITIS)*, taksonomi *Candida albicans* dengan nomor serial 194598. <https://www.itis.gov/>.

*Integrated Taxonomic Information System (ITIS)*, taksonomi *Curcuma xanthorrhiza* dengan nomor serial 42394. <https://www.itis.gov/>.

J. R. Dunkelberger and W.-C. Song. (2010). "Complement and its role in innate and adaptive immune responses," *Cell Research*, vol. 20, no. 1, pp. 34–50.

Jacobsen ID, Wilson D, Wächtler B, Brünke S, Naglik JS, Hube B. (2012). *Candida albicans dimorphism as a therapeutic target*. Expert Rev Ant Infect Ther; 10:85-93; PMID:22149617; <http://dx.doi.org/10.1586/eri.11.152>.

Jeffrey K. Actor PhD. (2012) in Elsevier's *Integrated Review Immunology and Microbiology (Second Edition)*.

John A.H. Wass, Paul M. Stewart, Stephanie A. Amiel, and Melanie J. Davies. (2011) . [Oxford Textbook of Endocrinology and Diabetes \(2 edn\)](#). Oxford University Press. Jul Print ISBN-13: 9780199235292. DOI:10.1093/med/9780199235292.001.1

Joshi MB, Lad A, Bharath PAS, et al. (2013). *High glucose modulates IL-6 mediated immune homeostasis through impeding neutrophil extracellular trap formation*. FEBS Lett 587: 2241–2246.

Juan Huang, Yang Xiao, Aimin Xu, Zhiguang Zhou. (2016). *Neutrophils in type 1 diabetes*. Institute of Metabolism and Endocrinology, The Second Xiangya Hospital, Key Laboratory of Diabetes Immunology, Ministry of Education, Central South University, National Clinical Research Center for Metabolic Diseases, Changsha, Hunan, and State Key Laboratory of Pharmaceutical Biotechnology, Department of Medicine, Department of Pharmacology & Pharmacy, The University of Hong Kong, Hong Kong, China.

K. Neelofar, S. Shreaz, B. Rimple, S. Muralidhar, M. Nikhat, and L. A. Khan. (2011). "Curcumin as a promising anticandidal of clinical interest," *Canadian Journal of Microbiology*, vol. 57, no. 3, pp. 204–210.

Kharroubi AT, Darwish HM. Diabetes mellitus: The epidemic of the century. *World J Diabetes* 2015; 6(6): 850-867 Available from: URL: <http://www.wjgnet.com/1948-9358/full/v6/i6/850.htm> DOI: <http://dx.doi.org/10.4239/wjd.v6.i6.850>.

Leliefeld PH, Koenderman L, Pillay J. (2015). *How neutrophils shape adaptive immune responses*. Front Immunol. 6:471. doi: 10.3389/fimmu.2015.00471.

Leonhardt, JM., Heyman, WR. (2013). Cutaneous Manifestation of Other Endocrine Disease. In : Freedberg, IM., Elsen, AZ., Wolff, K., Austen, KF., Goldsmith, LA., Katz, SI., ed. *Fitzpatrick's Dermatology in General Medicine*. New York : McGraw- Hill, 1662-1670.

M. Anaul Kabir, Mohammad Asif Hussain, and Zulfiqar Ahmad. (2012). *Candida albicans: A Model Organism for Studying Fungal Pathogens*. International Scholarly Research Network. ISRN Microbiology Volume, Article ID 538694, 15 pages. doi:10.5402/2012/538694

M. C. Gholap, V. R. Mohite, and P. H. Mahesh Bhupal Chendake. (2016) "A study to assess the knowledge and practices of self administration of injection insulin among diabetic patient attending out-patient." International Journal of Health Sciences and Research., vol. 6, no. 9, pp. 277-282.

Magare JD, Awasthi RS. (2014). *Evaluating the Prevalence of Candida Species in the Oral Cavity of Immunocompromised Patients*. Int J Sci Res.. <http://www.ijsr.net/archive/v3i3/MDIwMTMxMDUw.pdf>.

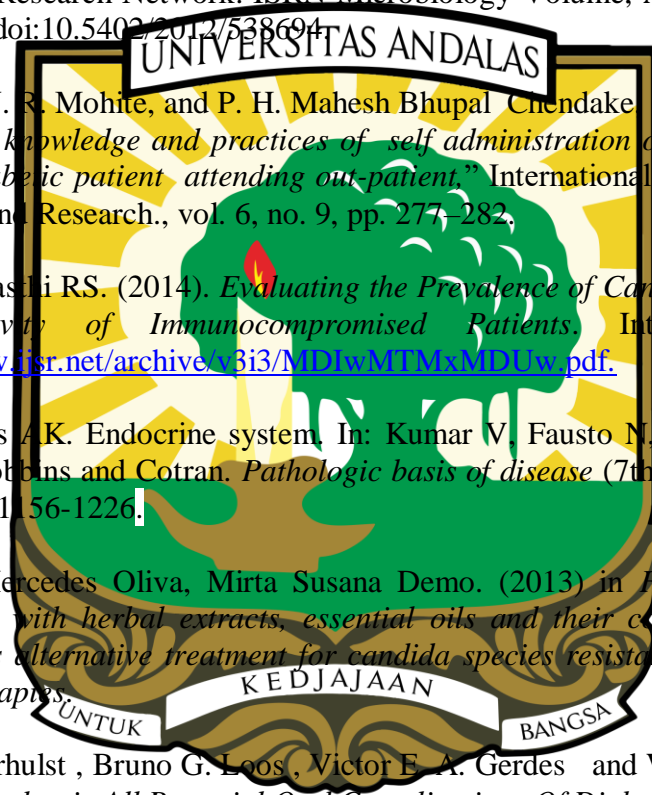
Maitra A, Abbas AK. Endocrine system. In: Kumar V, Fausto N, Abbas AK (eds). (2015). *Robbins and Cotran. Pathologic basis of disease* (7th ed). Philadelphia, Saunders; 1156-1226.

Maria de las Mercedes Oliva, Mirta Susana Demo. (2013) in *Fighting multidrug Resistance with herbal extracts, essential oils and their component. Natural product as alternative treatment for candida species resistant to conventional chemotherapy*.

Martijn J. L. Verhulst, Bruno G. Loos, Victor E. A. Gerdes and Wijnand J. Teeuw. (2019). *Evaluating All Potential Oral Complications Of Diabetes Mellitus*. Front. Endocrinol. 10:56.. doi: 10.3389/fendo.2019.00056.

Mauri-Obradors E, Estrugo-Devesa A, Jané-Salas E, Viñas M, López- López J. (2017). *Oral manifestations of Diabetes Mellitus. A systematic review*. Med Oral Patol Oral Cir Bucal. Sep 1;22 (5):e586-94. <http://www.medicinaoral.com/medoralfree01/v22i5/medoralv22i5p586.pdf>.

Moghadamtousi SZ, Kadir HA, Hassandarvish P, Tajik H, Abubakar S, Zandi K. (2014). *Review on antibacterial, antiviral, and antifungal activity of curcumin* Biomed Res Int.; 2014():186864



- Mowat A, Baum J. Chemotaxis of polymorphonuclear leukocytes from patients with diabetes mellitus. *N Engl J Med* 2016; 284: 621- 627.
- Naglik JR, Moyes DL, Wächtler B, Hube B. 2011. *Candida albicans interactions with epithelial cells and mucosal immunity*. *Microbes Infect*; 13:963-76; PMID:21801848; <http://dx.doi.org/10.1016/j.micinf.2011.06.009>.
- Nathan C. (2006) . *Neutrophils and immunity: challenges and opportunities*. *Nat Rev Immunol*. 6:173–82. doi: 10.1038/nri1785
- Pallavan B, Ramesh V, Dhanasekaran BP, Oza N, Indu S, Govindarajan V. (2014). *Comparison And Correlation Of Candidal Colonization In Diabetic Patients And Normal Individuals*. *Diabetes Metab Disord*. <http://link.springer.com/article/10.1186/2251-6581-33-66>.
- Park SA, Hyun YM. (2016) . *Neutrophil Extravasation Cascade: what can we learn from two-photon intravital imaging?*. *Immune Netw*. 16:317–21. doi: 10.4110/in.2016.16.6.317
- Peleg AY, Weerathna T, McCarthy JS, Davis TM. (2007). *Common infections in diabetes: pathogenesis, management and relationship to glycaemic control*. *Diabetes Metab Res Rev*. Jan; 23(1):3-13.
- Phan QT, Myers CL, Fu Y, Sheppard DC, Yeaman MR, Welch WH et al. (2007). *Als3 is a Candida albicans invasion that binds to cadherins and induces endocytosis by host cells*. *PLoS Biol*; 5:e64; PMID:17311474; <http://dx.doi.org/10.1371/journal.pbio.0050064>.
- Raheem T, Obaisi Abdul Adeem .Y. A. AL-Barrack,Shakir .H. M. Al-Alwany,Hala Abd Al-Hadi Chabok. (2014) *Study of phagocytosis in diabetic patients*. *Medical Journal of Babylon* 5:4. Doi 10.18127/1568-5544. Published :04 July 2014.
- Riyapa D, Buddhisa S, Korbsrisate S, et al. (2012). *Neutrophil extracellular traps exhibit antibacterial activity against burkholderia pseudomallei and are influenced by bacterial and host factors*. *Infect Immun*; 80: 3921–3929,
- Roderick J. Hay. (2014). in *Manson's Tropical Infection Disease* ( Twenty-third Edition). Fungal Infections.
- Rosales Carlos. (2018). *Neutrophil: A Cell with Many Roles in Inflammation or Several Cell Types?* *Front. Physiol*. 9:113. doi: 10.3389/fphys.2018.00113.
- Ruslay S, Abas F, Shaari K, Zainal Z, Maulidiani, Sirat H, et al. (2007). *Characterization of the components in the active fractions of health ginger (Curcuma xanthorrhiza and Zingiber zerumbet) by HPLC-DAD-ESIMS*. *Food Chem*. ;104:1183–91. [[Google Scholar](#)] [[Ref list](#)]

- S. Pasetto, V. Pardi, and R. M. Murata. (2014). "Anti-HIV-1 activity of flavonoid myricetin on HIV-1 infection in a dual-chamber in vitro model," PLoS One, vol. 9, no. 12, Article ID e11532,.
- Scott D. Kobayashi Natalia Malachowa Frank R. DeLeo. (2018). *Neutrophils and Bacterial Immune Evasion*. Journal of Innate Immunity ;10:432–441. DOI: 10.1159/000487756.
- Seok Fang Oon, Meenakshii Nallappan, Thiam Tsui Tee, Shamarina Shohaimi, Nur Kartinee Kassim, Mohd Shazrul Fazry Sa'ariwijaya and Yew Hoong Cheah. (2015). *Xanthorrhizol: a review of its pharmacological activities and anticancer properties*. Cancer Cell Int. 15:100. DOI 10.1186/s12935-015-0255-4.
- Shadmani, A., Azhar, I., Mazhar, F., Hassan, M.M., Ahmed, S.W., Ahmad, I., Usmanghan, K., and Shamim, S. (2004). *Kinetic Studies On Zingiber Officinale*, Pakistan Journal of Pharmaceutical Sciences, 17, hal. 47-54.
- Shehzad, A., Rehman, G., and Lee, Y. S. (2013). *Curcumin in inflammatory diseases*. Biofactors 39:69–77.
- Siti Nurul Mubarakah, Sumarno, I Ketut Gede Muliarta. (2009). *Outer membrane protein 49,4 kDa of Porphyromonas gingivalis is A Hemagglutinin and Adhesin Protein to Neutrophil*. Jurnal Kedokteran Brawijaya, Vol. XXV, No. 2, Agustus 2009: 50.
- SN Wickramasinghe, WN Erber. (2011) in Blood and Bone Marrow Pathology (Second Edition).
- Soheil Zorofchian Moghadamtousi, Habsah Abdul Kadir, Pouya Hassandarvish, Hassan Tajik, Szazly Abubakar, and Keivan Zandi. (2014). A Review on Antibacterial, Antiviral, and Antifungal Activity of Curcumin. Hindawi Publishing Corporation BioMed Research International, Article ID 186864, 12 pages. <http://dx.doi.org/10.1155/2014/186864>.
- Spiller F, Carlos D, Souto FO, et al. (2012). *alpha1-Acid glycoprotein decreases neutrophil migration and increases susceptibility to sepsis in diabetic mice*. Diabetes; 61: 1584–1591.
- Stephen R. Bakos and Richard M. Costanzo. (2011). *Matrix metalloproteinase-9 is associated with acute inflammation after olfactory injury*. NIH Public Access. Published in final edited form as: Neuroreport. August 3; 22(11): 539–543. doi:10.1097/WNR.0b013e328348ab94.
- Steven E. Kahn, M.B., Ch.B., VA. (2014). *Pathophysiology and treatment of type 2 Diabetes: Perspective on the past, present and future*. Published in final edited

form as: *Lancet*. 2014 March 22; 383(9922): 1068–1083. doi:10.1016/S0140-6736(13)62154-6.

Sudbery PE. (2011). *Growth of Candida albicans hyphae*. *Nat Rev Microbiol*; 9:737-48; PMID:21844880; <http://dx.doi.org/10.1038/nrmicro2636>.

Sudjarwo SA, Sudjarwo GW, Koerniasari Res *Pharm Sci*. (2017 ). *Protective effect of curcumin on lead acetate-induced testicular toxicity in Wistar rats*. *Oct*; 12(5):381-390.

Sumintarti, Rahman F. (2015). Korelasi Kadar Glukosa Saliva Dengan Kadar Glukosa Darah Page | 7 Terhadap Terjadinya Kandidiasis Oral Pada Penderita Diabetes Melitus (Correlation Of Salivary Glucose Level And Blood Glucose Level With Oral Candidiasis In Diabetes Melitus Patient);14. <http://jdmfs.org/index.php/jdmfs/article/viewFile/422/423>.

Sun JN, Solis NV, Phan QT, Bajwa JS, Kashleva H, Thompson A, et al. (2010). *Host cell invasion and virulence mediated by Candida albicans Sla1*. *PLoS Pathog*; 6:e1001181. PMID:21085601; <http://dx.doi.org/10.1371/journal.ppat.1001181>.

T. N. Mayadas, X. Cullere, and C. A. Lowell. (2014). "The multifaceted functions of neutrophils." *Annual Review of Pathology: Mechanisms of Disease*, vol. 9, pp. 181–218.

Tak T, Wijten P, Heeres M, Pickkers P, Scholten A, Heck AJ, et al. (2017) *Human CD62Ldim neutrophils identified as a separate subset by proteome profiling and in vivo pulse-chase labeling*. *Blood* 129:3476–85. doi: 10.1182/blood-2016-07-72766.

Tak T, Wijten P, Heeres M, Pickkers P, Scholten A, Heck AJ, et al. (2017) *Human CD62Ldim neutrophils identified as a separate subset by proteome profiling and in vivo pulse-chase labeling*. *Blood*. 129:3476–85. doi: 10.1182/blood-2016-07-72766.

Tan JS, Anderson JL, Watanakunakorn C, Phair JP. (2017) *Neutrophil dysfunction in diabetes mellitus*. *J Lab Clin Med*; 85: 26-33.

Tan JS, Anderson JL, Watanakunakorn C, Phair JP. (2017). *Neutrophil dysfunction in diabetes mellitus*. *J Lab Clin Med*; 85: 26-33.

Tandon N, Ali MK, Narayan K MV. (2012). *Pharmacologic prevention of microvascular and macrovascular complications in diabetes mellitus: implications of the results of recent clinical trials in type 2 diabetes*. *Am J Cardiovasc Drugs*. 1;12:7-22.



- Tomohiro Yokota and Yibin Wang. (2016). *p38 MAP Kinases in Heart*. HHS Public Access Published in final edited form as: *Gene*. January 10; 575(2 Pt 2): 369–376. doi:10.1016/j.gene.2015.09.030.
- Tri J.E. Tarigan, Em Yunir, Imam Subekti, Laurentius A. Pramono, Diah Martina. (2015). *Profile and analysis of diabetes chronic complications in Outpatient Diabetes Clinic of Cipto Mangunkusumo Hospital, Jakarta*. *Medical Journal of Indonesia*. 2014. pISSN: 0853-1773 • eISSN: 2252-8083 • <http://dx.doi.org/10.13181/mji.v24i3.1249> • *Med J Indones*. 2015;24:156-62 .
- Uppuluri P, Chaturvedi AK, Srinivasan A, Banerjee M, Ramasubramaniam AK, Köhler JR, et al. (2010). *Dispersion as an important step in the Candida albicans biofilm developmental cycle*. *PLoS Pathog*: 6:e1000828; PMID:20360962; <http://dx.doi.org/10.1371/journal.ppat.1000828>.
- Valle A, Giamporcaro GM, Scavini M, et al. (2013). Reduction of circulating neutrophils precedes and accompanies type 1 diabetes. *Diabetes*; 62: 2072–2077.
- Vediyappan G, Dumontet V, Pelissier F, d'Enfert C. (2013). *Glycolytic Acids Inhibit Hyphal Growth and Virulence in Candida albicans*. *PLoS ONE* 8(9): e74189. doi:10.1371/journal.pone.0074189.
- Wächtler B, Wilson D, Haedicke K, Dalle F, Hube B. (2011). *From attachment to damage: defined genes of Candida albicans mediate adhesion, invasion and damage during interaction with oral epithelial cells*. *PLoS One*; 6:e17046; PMID:21407800; <http://dx.doi.org/10.1371/journal.pone.0017046>.
- Wang Y, Xiao Y, Zhong L, et al. (2014). *Increased neutrophil elastase and proteinase 3 and augmented NETosis are closely associated with beta-cell autoimmunity in patients with type 1 diabetes*. *Diabetes*; 63: 4239–4248.
- Xiao-Yu Xu , Xiao Meng , Sha Li , Ren-You Gan , Ya-Lin and Hua-Bin Li. (2018). *Bioactivity, Health Benefits, and Related Molecular Mechanisms of Curcumin: Current Progress, Challenges, and Perspectives*. *Nutrients*, 10, 1553; doi:10.3390/nu10101553.
- Yuniarti, Titin. (2008). *Ensiklopedia Tanaman Obat Tradisional*. Yogyakarta: Media Pressindo. Hal: 3

