

# **REFERENCES**

American Diabetes Association (2009). Diagnosis and classification of diabetes mellitus. *Diabetes Care* 32 Suppl 1:S62-7.

Anderson JL, Morrow DA (2017). Acute Myocardial Infarction. *N Engl J Med.* 376(21): 2053-2064.

Andrew P. Selwyn, Eugene Braunwald (2005). Ischemic heart disease, Harrison's Principles of Internal Medicine, 16th edition, McGraw-Hill Co, 1434-1444.

Aronson D, Rayfield EJ (2002). How hyperglycemia promotes atherosclerosis: molecular mechanisms. *Cardiovasc Diabetol* 1:1.

Aronson D (2008) Hyperglycemia and the pathobiology of diabetic complications. *Adv Cardiol* 45:1-16.

Arquilla ER & Stavitsky AB (1956). The production and identification of antibodies to insulin and their use in assaying insulin. *J Clin Invest* 35 (5): 458-66.

"Aspirin". Drugs.com. American Society of Health-System Pharmacists. 6 June 2016. Archived from the original on 25 April 2017. Retrieved 30 August 2016.

Baelde HJ, Cleton-Jansen AM, van Beerendonk H (2001). High quality RNA isolation from tumours with low cellularity and high extracellular matrix component for cDNA microarrays: application to chondrosarcoma. *J Clin Pathol* 54(10):778-82.

Banerjee PS, Ma J, Hart GW (2015). Diabetes-associated dysregulation of O-GlcNAcylation in rat cardiac mitochondria. *Proc Natl Acad Sci U S A* 112(19): 6050-5.

Bank S, Ghosh R, Jana P, Bhattacharya S, Sinha AK (2014). The diagnosis of high altitude illness by the determination of plasma dermcidin isoform 2 levels by enzyme linked immunosorbent assay. *Clin Lab* 60(7): 1187-91.

Bank S, Jana P, Maiti S, Guha S, Sinha AK (2014). Dermcidin isoform-2 induced nullification of the effect of acetyl salicylic acid in platelet aggregation in acute myocardial infarction. *Sci Rep* 4: 5804.

Bank S, Maiti S, Guha S, Sinha AK (2016). TRIAD system catalase, insulin, and low dose aspirin neutralize the effect of dermcidin isoform-2 and prevent cell death in acute myocardial infarction and recurrence of the disease. *Cardiol J* 23(6):623-625.

Benhar M, Forrester MT, Stamler JS. Nitrosative stress in the ER: a new role for Snitrosylation in neurodegenerative diseases. *ACS Chem Biol.* 2006;1(6):355-8.

Bergman BC, Perreault L, Hunerdosse D, Kerege A, Playdon M, Samek AM, Eckel RH. Novel and reversible mechanisms of smoking-induced insulin resistance in humans. *Diabetes* 61(12): 3156-66.

Bhattacharjee KG, Bhattacharyya M, Halder UC, Jana P, Sinha AK (2012). The role

of estrogen receptor status in neutrophils and maspin synthesis through nitric oxide production in human breast cancer. *J Breast Cancer* 15(2):181-8.

Bhattacharya S, Ghosh R, Maiti S, Khan GA, Sinha AK (2013). The activation by glucose of liver membrane nitric oxide synthase in the synthesis and translocation of glucose transporter-4 in the production of insulin in the mice hepatocytes. *PLoS One* 8(12):e81935.

Bluestein D, Niu L, Schoephoerster RT, Dewanjee MK (1997). Fluid mechanics of arterial stenosis: relationship to the development of mural thrombus. *Ann Biomed Eng* 25(2): 344-56.

Borna C, Lazarowski E, van Heusden C, Ohlin H, Erlinge D (2005). Resistance to aspirin is increased by ST-elevation myocardial infarction and correlates with adenosine diphosphate levels. *Thromb J* 3:10.

Borowitz JL, Isom GE. Nicotine and type-2 diabetes (2008). *Toxicol Sci* 103 (2): 225-7.

Braunwald E (2001). Coronary blood flow and myocardial ischemia. *Heart disease: a textbook of cardiovascular medicine*. W.B. Saunders Company. Philadelphia, Pennsylvania, USA. 1161-1183.

Brenner B, Harney JT, Ahmed BA, Jeffus BC, Unal R, Mehta JL, Kilic F (2007).

Plasma serotonin levels and the platelet serotonin transporter. *J Neurochem* 102(1):206-15.

Bryant NJ, GoversR, James DE (2002). Regulated transport of the glucose transporter GLUT4. *Nat Rev Mol Cell Biol* 3(4): 267-77.

Qu BH, Strickland EH, Thomas PJ (1997). Localization and suppression of a kinetic defect in cystic fibrosis transmembrane conductance regulator folding. *J Biol Chem* 272 (25) 15739-44.

Cabral CM, Liu Y, Sifers RN. Dissecting glycoprotein quality control in the secretory pathway. *Trends Biochem Sci* 26(10):619-24.

Carbone F, Nencioni A, Mach F, Vuilleumier N, Montecucco F (2013). Pathophysiological role of neutrophils in acute myocardial infarction. *Thromb Haemost* 110 (3): 501-514.

Carvalho de Sousa J, Azevedo J, Soria C, Barros F, Ribeiro C, Parreira F, Caen JP. (1988). Factor VII hyperactivity in acute myocardial thrombosis. A relation to the coagulation activation. *Thromb Res* 51 (2):165-73.

Chakraborty S, Khan GA, Karmohapatra SK, Bhattacharya R, Bhattacharya G,

Sinha AK (2009). Purification and mechanism of action of "cortexin," a novel antihypertensive protein hormone from kidney and its role in essential hypertension in men. *J. Am. Soc. Hypertens* 3, 119-32.

Chen R, Ovbiagele B, Feng W (2016). Diabetes and Stroke: Epidemiology, Pathophysiology, Pharmaceuticals and Outcomes. *Am J Med Sci* 351(4): 380-6.

Chen ZQ, Mou RT, Feng DX, Wang Z, Chen G. The role of nitric oxide in stroke. *Med Gas Res.* 2017 Oct 17;7(3):194-203.

Cherry JH (1974). Isolation of microsomes, ribosomes, and polysomes from plant tissues. *Methods Enzymol* 31:583-9.

Clark A, Charge SB, Badman MK, MacArthur DA, de Koning EJ (1996). Islet amyloid polypeptide: actions and role in the pathogenesis of diabetes. *Biochem Soc Trans* 24(2): 594-9.

Coligan JE, Kruisbeek AM, Margulies DH, Shevack EM, Strober W (1992). *Current Protocols in immunology*. Vol 1. Cytokines. (6.83-6.85) Greene Publishing Associates and Wiley Interscience.USA.

Colman RW, Walsh PN. Haemostasis and thrombosis. In: Colman RW, Hirsh J, Maeder VJ, Salzman EW, eds. Philadelphia, PA (USA), *J.B. Lippincott*, 1987: 594-605.

Cooke JP, Stamler J, Andon N, Davies PF, McKinley G, Loscalzo J. (1990). Flow stimulates endothelial cells to release a nitrovasodilator that is potentiated by reduced thiol. *Am J Physiol.* 259(3 Pt 2): H804-12.

Cook L, Ross AM, Knight GB, Agnello V (2000). Use of whole blood specimens for routine clinical quantitation of hepatitis C virus RNA does not increase assay sensitivity. *J Clin Microbiol* 38:4326-31.

Cortese-Krott MM, Mergia E, Kramer CM, Lückstädt W, Yang J, Wolff G, Panknin C, Bracht T, Sitek B, Pernow J, Stasch JP, Feelisch M, Koesling D, Kelm M (2018). Identification of a soluble guanylate cyclase in RBCs: preserved activity in patients with coronary artery disease. *Redox Biol* 14:328-337.

Cox RD, Frank CW (1982). Determination of nitrate and nitrite in blood and urine by chemiluminescence. *J Anal Toxicol* 6, 148-152.

DeBurman SK, Raymond GJ, Caughey B, Lindquist S (1997). Chaperone -supervised conversion of prion protein to its protease-resistant form. *Proc Natl Acad Sci USA.* 94 (25): 13938-43.

de Lemos JA, Antman EM, Giugliano RP, McCabe CH, Murphy SA, Van deWerf F, Gibson CM, Braunwald E (2000). ST-segment resolution and infarct-related artery patency and flow after thrombolytic therapy. Thrombolysis in Myocardial Infarction (TIMI) 14 investigators. *Am J Cardiol* 85:299-304.

Del Principe D, Menichelli A, De Matteis W, Di Corpo ML, Di Giulio S, Finazzi-Agro A (1985). Hydrogen peroxide has a role in the aggregation of human platelets. *FEBS Lett* 185 (1): 142-6.

Derave W, Lund S, Holman GD, Wojtaszewski J, Pedersen O & Richter EA (1999). Contraction-stimulated muscle glucose transport and GLUT-4 surface content are dependent on glycogen content. *Am J Physiol Endocrinol Metab* 277 (6): E1103-10.

Durante A & Camici PG (2015). Novel insights into an "old" phenomenon: the no reflow. *Int J Cardiol* 187:273-80.

Dutta Roy AK, Sinha AK (1987). Purification and properties of prostaglandin E1/prostacyclin receptor of human blood platelets. *J Biol Chem* 262 (26): 12685-91.

Engvall E & Perlmann P (1972). Enzyme-linked immunosorbent assay, Elisa. 3. Quantitation of specific antibodies by enzyme-labeled anti-immunoglobulin in antigen-coated tubes. *J Immunol* 109 (1): 129-35.

Fazekas de St Groth S, Webster RG & Datyner A (1963). Two new staining procedures for quantitative estimation of proteins on electrophoretic strips. *Biochim Biophys Acta* 71, 377-91.

Ferrie JE *et al* (2016). Job insecurity and risk of diabetes: a meta-analysis of individual participant data. *CMAJ* 188 (17-18): E447-E455.

Förstermann U, Pollock JS, Schmidt HH, Heller M, Murad F (1991). Calmodulin dependent endothelium derived relaxing factor/nitric oxide synthase activity is present in the particulate and cytosolic fractions of bovine aortic endothelial cell. *Proc Natl Acad Sci USA*, 88 (5): 1788-92.

Förstermann U, Sessa WC (2012). Nitric oxide synthases: regulation and function. *Eur Heart J*, 33(7):829-37, 837a-837d.

Forster T (1965). "Modern Quantum Chemistry," In: O. Sinaoglu, Ed., Vol. 3, Academic Press, New York.

Frangogiannis NG (2012). Regulation of the inflammatory response in cardiac repair. *Circ Res* 110 (1):159-173.

Fuster V, Badimon J, Chesebro JH & Fallon JT (1996). Plaque rupture, Thrombosis, and therapeutic implications. *Haemostasis* 26 (Suppl 4): 269-84.

Galougahi KK, Liu CC, Garcia A, Gentile C, Fry NA, Hamilton EJ, Hawkins CL, Figtree GA (2016).  $\beta$ 3 Adrenergic Stimulation Restores Nitric Oxide/Redox Balance and Enhances Endothelial Function in Hyperglycemia. *J Am Heart Assoc* 5(2).pii: e002824.

Galligan JJ, Petersen DR (2012). The human protein disulfide isomerase gene family. *Hum Genomics*. 6:6.

Gerd Heusch, Bernard J. Gersh (2017). The pathophysiology of acute myocardial infarction and strategies of protection beyond reperfusion: a continual challenge. *European Heart Journal* 38(11):774-784.

Gheith O, Farouk N, Nampoory N, Halim MA & Al-Otaibi T (2015). Diabetic kidney disease: worldwide difference of prevalence and risk factors. *J Nephropharmacol* 5(1): 49-56.

Ghosh R, Bank S, Bhattacharya R, Khan NN, Sinha AK (2014). Neutralization by insulin of the hypertensive effect of dermcidin isoform 2: an environmentally induced diabetogenic and hypertensive protein. *Cardiol Res Pract* 2014:412815.

Ghosh R, Bhattacharya R, Bhattacharya G, et al. The Control of Stress Induced Type I Diabetes Mellitus in Humans through the Hepatic Synthesis of Insulin by the Stimulation of Nitric Oxide Production. *Int J Biomed Sci* 2012;8(3):171 -82.

Ghosh R, Jana P, Sinha AK (2012). The control of hyperglycemia in alloxan treated diabetic mice through the stimulation of hepatic insulin synthesis due to the production of nitric oxide. *Exp Clin Endocrinol Diabetes* 120(3):145-51.

Ghosh R, Karmohapatra SK, Bhattacharyya M, Bhattacharya R, Bhattacharya G, Sinha AK (2011). The appearance of dermcidin isoform 2, a novel platelet aggregating agent in the circulation in acute myocardial infarction that inhibits insulin synthesis and the restoration by acetyl salicylic acid of its effects. *J Thromb*

*Thrombolysis* 31 (1): 13-21.

Ghosh R, Karmohapatra SK, Bhattacharya G, Sinha AK (2010). The glucose-induced synthesis of insulin in liver. *Endocrine* 38(2):294-302.

Ghosh R, Maji UK, Bhattacharya R, Sinha AK (2012). The role of dermcidin isoform 2, a two faceted atherosclerotic risk factor for coronary artery disease and the effect of acetyl salicylic acid on it. *Thrombosis* 2012:987932.

Ghosh R, Ray U, Jana P, Bhattacharya R, Banerjee D, Sinha A (2014). Reduction of death rate due to acute myocardial infarction in subjects with cancers through systemic restoration of impaired nitric oxide. *PLoS One* 9 (2): e88639.

Giordano (2005). Oxygen, oxidative stress, hypoxia, and heart failure. *J Clin Invest* 115(3): 500-508.

Goldberg RJ, Currie K, White K, Brieger D, Steg PG, Goodman SG, Dabbous O, Fox KA, Gore JM (2004). Sixmonth outcomes in a multinational registry of patients hospitalized with an acute coronary syndrome (the Global Registry of Acute Coronary Events [GRACE]). *Am J Cardiol* 93 (3): 288-93.

Gori T, Fineschi M (2012). Two coronary "orphan" diseases in search of clinical consideration: coronary syndromes x and y. *Cardiovasc Ther* 30 (2):e58-65.

Guha M, Biswas J, Tirkey J, Sinha AK (2002). Impairment of stimulation by estrogen of insulin- activated nitric oxide synthase in human breast cancer. *Int J Cancer* 100 (3), 261-5.

Harper JD, Lansbury PT Jr (1997). Models of amyloid seeding in Alzheimer's disease and scrapie: mechanistic truths and physiological consequences of the time dependent solubility of amyloid proteins. *Annu Rev Biochem* 66, 385-407.

Harrison's principle of Internal medicine, 16th edition [Ischemic Heart Disease], Andrew p. Selwyn & Eugene Braunwald, Page no. 1434-1444

Heemskerk JW, Bevers EM, Lindhout T (2002). Platelet activation and blood coagulation. *Thromb Haemost* 88(2): 186-93.

Hoylaerts M, Rijken DC, Lijnen HR, Collen D (1982). Kinetics of the activation of plasminogen by human tissue plasminogenin. *J Biol Chem* 257(6): 2912-9

Huang S, Czech MP (2007). The GLUT4 glucose transporter. *Cell Metab* 5(4):237-52.

Huang Y, Hickey RP, Yeh JL, Liu D, Dadak A, Young LH, Johnson RS, Giordano FJ. (2004). Cardiac myocyte-specific HIF-1alpha deletion alters vascularization, energy availability, calcium flux, and contractility in the normoxic heart. *FASEB J* 18 (10):1138-1140.

Jana P, Maiti S, Ghosh R, Ghosh TK & Sinha AK (2013). Estriol A stimulator of nitric oxide synthesis in platelets, and its role as the powerful inhibitor of platelet aggregation. *Cardiovascular Endocrinology* 2 (3): 50-54.

Kahn NN & Sinha AK (1990). Stimulation of prostaglandin E1 binding to human blood platelet membrane by insulin and the activation of adenylate cyclase. *J Biol Chem.* 265 (9): 4976-81.

Kahn NN, Acharya K, Bhattacharya S, Acharya R, Mazumder S, Bauman WA, Sinha AK. Nitric oxide: the "second messenger" of insulin. *IUBMB Life* 49(5): 441-50.

Kahn SE, Andrikopoulos S & Verchere CB (1999). Islet amyloid: a long-recognized but under appreciated pathological feature of type 2 diabetes. *Diabetes* 48 (2): 241-53.

Kannel WB, McGee DL. Diabetes and cardiovascular disease. The Framingham study. *JAMA* 241 (19): 2035-2038.

Kaplan ZS, Jackson SP (2011) The role of platelets in atherothrombosis. *Hematology Am Soc Hematol Educ Program* 2011:51-61.

Karlsson HK, Chibalin AV, Koistinen HA, Yang J, Koumanov F, Wallberg-Henriksson H, Zierath JR & Holman GD. Kinetics of GLUT4 trafficking in rat and human skeletal muscle. *Diabetes* 58(4): 847-54.

Karmohapatra SK, Chakraborty, K, Kahn NN, Sinha AK (2007) The role of nitric oxide in aspirin induced thrombolysis in vitro and the purification of aspirin activated nitric oxide synthase from human blood platelets. *Am J Hematol* 82(11):986-995.

Kinouchi T, Koizumi K, Kuwata T & Yajima T (2000). Milk-borne insulin with trypsin inhibitor in milk induces pancreatic amylase development at the onset of weaning in rats. *J Pediatr Gastroenterol Nutr.* 30 (5):515-21.

Klock JC, Bainton DF (1976). Degranulation and abnormal bactericidal function of granulocytes procured by reversible adhesion to nylon wool. *Blood* 48(1):149-61.

Kono T, Sabbah HN (2014). Takotsubo Cardiomyopathy. *Heart Fail Rev* 19 (5): 585-93.

Laing SP, Swerdlow AJ, Slater SD, *et al.* Mortality from heart disease in a cohort of 23,000 patients with insulin-treated diabetes. *Diabetologia* 2003; 46(6):760-5.

Lauritzen HP, Galbo H, Brandauer J, Goodyear LJ & Ploug T (2008). Large GLUT4 vesicles are stationary while locally and reversibly depleted during transient insulin stimulation of skeletal muscle of living mice: imaging analysis of GLUT4-enhanced green fluorescent protein vesicle dynamics. *Diabetes* 57 (2): 315-24.

Lamas S, Marsden PA, Li GK, Tempst P, Michel T (1992). Endothelial nitric oxide synthase: molecular cloning and characterization of a distinct constitutive enzyme isoform. *Proc Natl Acad Sci U S A.* 89, 6348-52.

Lammie GA (2002). Hypertensive cerebral small vessel disease and stroke. *Brain Pathol* 12(3):358-370.

Lan X, Lederman R, Eng JM, Shoshtari SS, Saleem MA, Malhotra A & Singhal PC (2016). Nicotine Induces Podocyte Apoptosis through Increasing Oxidative Stress. *PLoS One* 12 e0167071.

Lovich MA, Pezone M.J, Wakim MG, Denton RJ, Maslov MY, Murray MR, Tsukada H, Agnihotri AK, Roscigno RF, Gamero LG, Gilbert RJ (2015). Inhaled nitric oxide augments left ventricular assist device capacity by ameliorating secondary right ventricular failure. *ASAIO J* 61(4): 379-85.

McNicol A, Israels SJ (1999). Platelet dense granules: structure, function and implications for haemostasis. *Thromb Res* 95(1):1-18.

Montecucco F, Braunersreuther V, Burger F, Lenglet S, Pelli G, Carbone F, Fraga-Silva R, Stergiopoulos N, Monaco C, Mueller C, Pagano S, Dallegrí F, Mach F, Vuilleumier N (2015). Anti- apoA-1 auto-antibodies increase mouse atherosclerotic plaque vulnerability, myocardial necrosis and mortality triggering-TLR2 and TLR4. *Thromb Haemost* 114 (2): 410-22.

Morell M, Burgos JI, Gonano LA, Vila Petroff M (2017). AMPK-dependent nitric oxide release provides contractile support during hyperosmotic stress. *Basic Res Cardiol* 113(1):7.

Morrow DA Ed. Myocardial Infarction: A Companion to Braunwald's Heart Disease. 1st Edition St. Louis: Elsevier, 2016: 2.

Murtaza I, Wang HX, Feng X *et al* (2008). Down-regulation of catalase and oxidative modification of protein kinase CK2 lead to the failure of apoptosis repressor with caspase recruitment domain to inhibit cardiomyocyte hypertrophy. *J Biol Chem* 283(10): 5996-6004.

Newhouse LP, Joyner MJ, Curry TB, Laurenti MC, Man CD, Cobelli C, Vella A, Limberg JK (2017). Three hours of intermittent hypoxia increases circulating glucose levels in healthy adults. *PhysiotRep* 5(1). pii: e13106.

Nicolau JC, Maia LN, Vitola J, Vaz VD, Machado MN, Godoy MF, Giraldez RR, Ramires JA (2003). ST-segment resolution and late (6-month) left ventricular remodeling after acute myocardial infarction. *Am J Cardiol* 91 (4):451 453.

Nomura S, Monobe M, Ema K, Maeda-Yamamoto M, Nesumi A (2017). Comparison of the Effects of Three Tea Cultivars (*Camellia sinensis* L.) on Nitric Oxide Production and Aortic Soluble Guanylate Cyclase Expression in High-Salt Diet-Fed Spontaneously Hypertensive Rats. *J Nutr Sci Vitaminol (Tokyo)* 63(5):306-

Norberg M, Stenlund H, Lindahl B, Andersson C, Eriksson JW, Weinehall L (2007).

Work stress and low emotional support is associated with increased risk of future type 2 diabetes in women. *Diabetes Res Clin Pract* 76(3): 368-77.

Ornelas A, Zacharias-Millward N, Menter DG *et al* (2017). Beyond COX-1: the effects of aspirin on platelet biology and potential mechanisms of chemoprevention. *Cancer Metastasis Rev* 36(2):289-303.

Page DL, Caulfield JB, Kastor JA, et al (1971). Myocardial changes associated with cardiogenic shock. *N Engl J Med* 1971 285:133-137

Palmer RMJ, Ferrige AG, Moncada S (1987). Nitric oxide release accounts for the biological activity of endothelium-derived relaxing factor. *Nature* 327(6122):524-6.

Paneni F, Beckman JA, Creager MA *et al* (2013). Diabetes and vascular disease: pathophysiology, clinical consequences, and medical therapy: part I. *Eur Heart J* 34(31):2436-43.

Parakh S, Atkin JD ( 2015). Novel roles for protein disulphide isomerase in disease states: a double edged sword? *Front Cell Dev Biol* 3:30.

Petrie JR, Ueda S, Webb DJ *et al* (1996). Endothelial nitric oxide production and insulin sensitivity. A physiological link with implications for pathogenesis of

cardiovascular disease. *Circulation* 93(7):1331-33.

Pigazzi A, Fabian A, Johnson J *et al* (1995). Identification of nitric oxide synthases in human megakaryocytes and platelets. *Circulation* 92:I-365.

Petrie JR, Ueda S, Webb DJ, Elliott HL & Connell JM (1996). Endothelial nitric oxide production and insulin sensitivity. A physiological link with implications for pathogenesis of cardiovascular disease. *Circulation* 7, 1331-3.

Pollack CV Jr (1995). Emerging oral antiplatelet therapies for acute coronary syndromes. *Hosp Pract* 38 (4):29-37.

Poulsen TS, Jørgensen B, Korsholm L, Licht PB, Haghfelt T, Mickley H (2007). Prevalence of aspirin resistance in patients with an evolving acute myocardial infarction. *Thromb Res.* 119(5):555-62.

Qu BH, Strickland EH, Thomas PJ (1997). Localization and suppression of a kinetic defect in cystic fibrosis transmembrane conductance regulator folding. *J Biol Chem* 272 (25) 15739-44.

Ray U, Khan GA, Chakraborty K (2012). Isolation and study of insulin activated nitric oxide synthase inhibitor protein in acute myocardial infarction subjects. *J Thromb Thrombolysis* 33(3):218-29.

Rodnick KJ, Piper RC, Slot JW *et al* (1992). Interaction of insulin and exercise on

glucose transport in muscle. *Diabetes Care* 15(11):1679-89..

Ruggeri ZM (1997). Mechanisms initiating platelet thrombus formation.

*Thromb Haemost* 78(1):611-6.

Sansen V, Holvoet G et al (2007). Takotsubo cardiomyopathy presenting as multivessel coronary spasm syndrome: case report and review of the literature. *Acta Cardiol* 62(5):507-11.

Sarkar M, Smith AE & Pielak GJ. Impact of reconstituted cytosol on protein stability. *Proc Natl Acad Sci U S A* 110(48):19342-7.

Sase K, Michel T (1995). Expression of constitutive endothelial nitric oxide synthase in human blood platelets. *Life Sci* 57 (22):2049-55.

Sato H, Kubota N, Kubota T et al (2016). Anagliptin increases insulin-induced skeletal muscle glucose uptake via an NO-dependent mechanism in mice. *Diabetologia* 59(11): 2426-2434.

Schneidman-Duhovny D, Inbar Y, Nussinov R, Wolfson HJ (2005). PatchDock and SymmDock: servers for rigid and symmetric docking. *Nucleic Acids Res* 33(Web Server issue):W363-7.

Setianto BY, Hartopo AB, Gharini PP et al (2010). Circulating soluble CD40 ligand

mediates the interaction between neutrophils and platelets in acute coronary syndrome. *Heart Vessels* 25(4):282-7.

Shehadeh N, Shamir R, Berant M & Etzioni A (2001). Insulin in human milk and the prevention of type 1 diabetes. *Pediatr Diabetes* 2(4): 175-7.

Shulman RJ (1990). Oral insulin increases small intestinal mass and disaccharides activity in the newborn miniature pig. *Pediatr Res* 28:171-5.

Sims PJ, Rollins SA, Wiedmer T (1989). Regulatory control of complement on blood platelets. Modulation of platelet procoagulant responses by a membrane inhibitor of the C5b -9 complex. *J Biol Chem* 264(32):19228-35.

Sims PJ, Faioni EM, Wiedmer T, Shattil SJ (1988). Complement proteins C5b-9 cause release of membrane vesicles from the platelet surface that are enriched in the membrane receptor for coagulation factor Va and express prothrombinase activity. *J Biol Chem* 263(34):18205-12.

Singh B, Biswas I, Garg I *et al* (2014). von Willebrand factor antagonizes nitric oxide synthase to promote insulin resistance during hypoxia. *Biochemistry* 53(1):115-26.

Sinha AK, Acharya K, Bhattacharya S *et al* (2002). Neutralization by "antineoplastin" of insulin activated nitric oxide synthase antibody and its effects in cancers. *J Cancer Res Clin Oncol* 128(12):659-68.

Sinha AK, Bhattacharya S, Acharya K & Mazumdar S (1999). Stimulation of nitric oxide synthesis and protective role of insulin in acute thrombosis in vivo. *Life Sci* 65 (25): 2687-96.

Sinha AK, Dutta-Roy AK, Chiu HC *et al* (1985) Coagulant factor Xa inhibits prostacyclin formation in human endothelial cells. Role of factor V. *Arteriosclerosis* 5(3):244-9.

Sinha AK, Rao AK, Willis J & Colman RW (1983). Inhibition of thromboxane A2 synthesis in human platelets by coagulation factor Xa. *Proc Natl Acad Sci USA* 80 (19): 6086-90.

Solum NO (1999). Procoagulant expression in platelets and defects leading to clinical disorders. *Arterioscler Thromb Vasc Biol* 19(12): 2841-6.

Steinhorn BS, Loscalzo J, Michel T (2015). Nitroglycerin and Nitric Oxide--A Rondo of Themes in Cardiovascular Therapeutics. *N Engl J Med* 373(3):277-80

Steinberg D, Carew TE, Fielding C, Fogelman AM, Mahley RW, Sniderman AD, Zilversmit DB (1989). Lipoproteins and the pathogenesis of atherosclerosis. *Circulation* 80 (3): 719-23.

Tanoue Y, Morita S, Ochiai Y, Haraguchi N, Tominaga R, Kawachi Y, Yasui H (1999). Nitroglycerin as a nitric oxide donor accelerates lipid peroxidation but preserves ventricular function in a canine model of orthotopic heart transplantation. *J*

*Thorac Cardiovasc Surg* 118 (3):547-56.

The National Heart, Lung, and Blood Institute; The Juvenile Diabetes Foundation International; The National Institute of Diabetes and Digestive and Kidney Diseases; and The American Heart Association. Diabetes mellitus: a major risk factor for cardiovascular disease (1999). A joint editorial statement by the American Diabetes Association; *Circulation* 100(10):1132-3.

Thunemann M, Schmidt K, de Wit C, Han X, Jain RK, Fukumura D, Feil R (2014). Correlative intravital imaging of cGMP signals and vasodilation in mice. *Front Physiol* 14 (5): 394.

Thurston JH, Hauhart RE, Jones EM, Ater JL. Effects of alloxan diabetes, anti-insulin serum diabetes, and non-diabetic dehydration on brain carbohydrate and energy metabolism in young mice. *J Biol Chem*. 1975 Mar 10;250(5):1751-8.

Tokarz VL, MacDonald PE, Klip A (2018). The cell biology of systemic insulin function. *J Cell Biol* 217(7): 2273-2289.

Uryga AK, Bennett MR. Ageing induced vascular smooth muscle cell senescence in atherosclerosis. *J Physiol*, 2015; doi: 10.1113/JP270923.

U.S. Department of Health and Human Services. The Health Consequences of Smoking

50 Years of Progress: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014 [accessed 2014 May 5].

Vasilevko V, Passos GF, Quiring D, Head E, Kim RC, Fisher M, Cribbs DH (2010) Aging and cerebrovascular dysfunction: contribution of hypertension, cerebral amyloid angiopathy, and immunotherapy. *Ann N Y Acad Sci* 1207:58–70.

Vilahur G, Padro T, Badimon L (2011). Atherosclerosis and thrombosis: insights from large animal models. *J Biomed Biotechnol* 2011:907575.

Vilahur G, Badimon L (2014). Ischemia/reperfusion activates myocardial innate immune response: the key role of the toll-like receptor. *Front Physiol* 5:496.

West, J.B. 1991. Cardiac energetics and myocardial oxygen consumption. Physiologic basis of medical practice. Williams and Wilkins. Baltimore, Maryland, USA. 250–260.

Whitmore TJ, Trengove NJ, Graham DF, Hartmann PE (2012). Analysis of insulin in human breast milk in mothers with type 1 and type 2 diabetes mellitus. *Int J Endocrinol* 2012, 296368.

Whittle BJ, Moncada S & Vane JR (1978). Comparison of the effects of prostacyclin (PGI<sub>2</sub>), prostaglandin E1 and D2 on platelet aggregation in different species. *Prostaglandins* 16(3): 373-88.

Wong V, Farah A, von Korn H, Memisevic N, Richter S, Tukhiashvili K, Lauer B, Ohlow MA (2015). Patients  $\geq$  75 years with acute coronary syndrome but without critical epicardial coronary disease: prevalence, characteristics, and outcome. *J Geriatr Cardiol* 12 (1): 11-6.

Williams Hematology, Chapter 112, Platelet Morphology, Biochemistry and Function; SUSANS. SMYTH Sidney Whiteheart, Joseph E. Italiano Jr., Paul Bray and Barry S. Coller.

White JG (1993). Functional significance of mobile receptors on human platelets. *Arterioscler Thromb* 13(8):1236-43.

Young SG, Farese RV Jr, Pierotti VR, Taylor S, Grass DS, Linton MF (1994). Transgenic mice expressing human apoB100 and apoB48. *Curr Opin Lipidol* 5 (2): 94-101.

Zhou Q, Hellermann GR, Solomonson LP (1995). Nitric oxide release from resting human platelets. *Thromb Res* 1995 (77): 87-96.

Zhou G, Marathe GK, Willard B & McIntyre TM (2011). Intracellular erythrocyte platelet- activating factor acetylhydrolase I inactivates aspirin in blood. *J Biol Chem* 286 (40): 34820-9.