

# Endothelium

## Bibliography of One Hundred Key Papers

- 
- Arai H, Hori S, Aramori I, Ohkubo H, Nakanishi S.** *Cloning and expression of a cDNA encoding an endothelin receptor.* **Nature.** 1990;348:730-732.
- 
- Archer SL, Huang JMC, Hampl V, Nelson DP, Shultz PJ, Weir EK.** *Nitric oxide and cGMP cause vasorelaxation by activation of a charybdotoxin-sensitive potassium channel by cGMP-dependent protein kinase.* **Proc Natl Acad Sci USA.** 1995;91:7583-7587.
- 
- Ayajiki K, Kindermann M, Hecker M, Fleming I, Busse R.** *Intracellular pH and tyrosine phosphorylation but not calcium determine shear-stress-induced nitric oxide production in native endothelial cells.* **Circ Res.** 1996;78:750-758.
- 
- Berkenboom G, Depierreux M, Fontaine J.** *The influence of atherosclerosis on the mechanical responses of human isolated coronary arteries to substance P, isoprenaline and noradrenaline.* **Br J Pharmacol.** 1987;92:113-120.
- 
- Boger RH, Bode-Boger SM, Brandes RP, et al.** *Dietary L-arginine reduces the progression of atherosclerosis in cholesterol-fed rabbits: comparison with lovastatin.* **Circulation.** 1997;96:1282-1290.
- 
- Bolotina VM, Najibi S, Palacino JJ, Pagano PJ, Cohen RA.** *Nitric oxide directly activates calcium-dependent potassium channels in vascular smooth muscle.* **Nature.** 1994;368:850-853.
- 
- Boulanger CM, Béa ML, Tanner FC, Hahn AWA, Werner A, Lüscher TF.** *Oxidized low-density lipoproteins induce mRNA expression and release of endothelin from human and porcine endothelium.* **Circ Res.** 1992;70:1191-1197.
- 
- Boulanger CM, Caputo L, Lévy BI.** *Endothelial AT<sub>1</sub>-mediated release of nitric oxide decreases contractions to angiotensin II in the intact rat carotid artery.* **Hypertension.** 1995;26:752-757.
- 
- Boulanger CM, Lüscher TF.** *Release of endothelin from the porcine aorta. Inhibition of endothelium-derived nitric oxide.* **J Clin Invest.** 1990;85:587-590.
- 
- Bryan RM Jr, Steenberg ML, Eichler MY, Johnson TD, Swafford MW, Suresh MS.** *Permissive role of NO in  $\alpha_2$ -adrenoceptor-mediated dilations in rat cerebral arteries.* **Am J Physiol.** 1995;269(3, pt 2):H1171-H1174.
- 
- Bult H, Boeckxstaens GE, Pelckmans PA, Jordaens FH, Van Maercke YM, Herman AG.** *Nitric oxide as an inhibitory non-adrenergic non-cholinergic neurotransmitter.* **Nature.** 1990;345:346-347.
- 
- Busse R, Mulsch A, Fleming I, Hecker M.** *Mechanisms of nitric oxide release from the vascular endothelium.* **Circulation.** 1993;87:V18-V25.
-

**Bibliography of One Hundred Key Papers**

---

- Cannan CR, McGoon MD, Holmes DR Jr, Lerman A.** *Altered coronary endothelial function in a patient with asymptomatic left ventricular dysfunction.*  
**Int J Cardiol.** 1996;53:147-151.
- 
- Chen AFY, Jiang SW, Crotty TB, et al.** *Effects of in vivo adventitial expression of recombinant endothelial nitric oxide synthase gene in cerebral arteries.*  
**Proc Natl Acad Sci USA.** 1997;94:12568-12573.
- 
- Christodoulides N, Durante W, Kroll MH, Schafer AI.** *Vascular smooth muscle cell heme oxygenases generate guanylyl cyclase-stimulatory carbon monoxide.*  
**Circulation.** 1995;91:2306-2309.
- 
- Cockcroft JR, Chowienczyk PJ, Benjamin N, Ritter JM.** *Preserved endothelium-dependent vasodilatation in patients with essential hypertension.*  
**N Engl J Med.** 1994;330:1036-1040.
- 
- Cohen RA, Plane F, Najibi S, Huk I, Malinski T, Garland CJ.** *Nitric oxide is the mediator of both endothelium-dependent relaxation and hyperpolarization of the rabbit carotid artery.*  
**Proc Natl Acad Sci USA.** 1997;94:4193-4198.
- 
- Cohen RA, Shepherd JT, Vanhoutte PM.** *Inhibitory role of the endothelium in the response of isolated coronary arteries to platelets.*  
**Science.** 1983;221:273-274.
- 
- Cohen RA, Vanhoutte PM.** *Endothelium-dependent hyperpolarization: beyond nitric oxide and cyclic GMP.*  
**Circulation.** 1995;92:3337-3349.
- 
- Cosentino F, Patton S, d'Uscio LV, et al.** *Tetrahydrobiopterin alters superoxide and nitric oxide release in prehypertensive rats.*  
**J Clin Invest.** 1998;101:1530-1537.
- 
- Creager MA, Roddy MA.** *Effect of captopril and enalapril on endothelial function in hypertensive patients.*  
**Hypertension.** 1994;24:499-505.
- 
- Davies PF.** *Flow-mediated endothelial mechanotransduction.*  
**Physiol Rev.** 1995;75:519-560.
- 
- Faraci FM, Heistad DD.** *Regulation of the cerebral circulation: role of endothelium and potassium channels.*  
**Physiol Rev.** 1998;78:53-97.
- 
- Flavahan NA, Shimokawa H, Vanhoutte PM.** *Pertussis toxin inhibits endothelium-dependent relaxations to certain agonists in porcine coronary arteries.*  
**J Physiol.** 1989;408:549-560.
- 
- Furchgott RF, Zawadzki JV.** *The obligatory role of endothelial cells in the relaxation of arterial smooth muscle by acetylcholine.*  
**Nature.** 1980;299:373-376.
- 
- Garcia-cardena G, Oh P, Liu JW, Schnitzer JE, Sessa WC.** *Targeting of nitric oxide synthase to endothelial cell caveolae via palmitoylation: implication for nitric oxide signalling.*  
**Proc Natl Acad Sci USA.** 1996;93:6448-6453.
-



- 
- Garg UC, Hassid A.** Nitric oxide-generating vasodilators and 8-bromo-cyclic guanosine monophosphate inhibit mitogenesis and proliferation of cultured rat vascular smooth muscle cells.  
*J Clin Invest.* 1989;83:1774-1780.
- 
- Ge T, Hughes H, Junquero DC, Wu KK, Vanhoutte PM, Boulanger CM.** Augmented expression of prostaglandin H synthase and contraction to prostaglandin H<sub>2</sub> in the aorta of spontaneously hypertensive rats.  
*Circ Res.* 1995;76:1003-1010.
- 
- Golino P, Piscione F, Willerson JT, et al.** Divergent effects of serotonin on coronary artery dimensions and blood flow in patients with coronary atherosclerosis and control patients.  
*N Engl J Med.* 1991;324:641-648.
- 
- Graser T, Vanhoutte PM.** Hypoxic contraction of canine coronary arteries: role of endothelium and cGMP.  
*Am J Physiol.* 1991;261(6, pt 2):H1769-H1777.
- 
- Groves P, Kurz S, Just H, Drexler H.** Role of endogenous bradykinin in human coronary vasomotor control.  
*Circulation.* 1995;92:3424-3430.
- 
- Gryglewski RJ, Palmer RM, Moncada S.** Superoxide anion is involved in the breakdown of endothelium-derived relaxing factor.  
*Nature.* 1986;320:454-456.
- 
- Hasdai D, Best PJ, Cannan CR, et al.** Acute endothelin-receptor inhibition does not attenuate acetylcholine-induced coronary vasoconstriction in experimental hypercholesterolemia.  
*Arterioscler Thromb Vasc Biol.* 1998;18:108-113.
- 
- Hassid A, Arabshahi H, Bourcier T, Dhausi GS, Matthews C.** Nitric oxide selectively amplifies FGF-2-induced mitogenesis in primary aortic smooth muscle cells.  
*Am J Physiol.* 1994;267:H1040-H1048.
- 
- Hayakawa H, Raij L.** Nitric oxide synthase activity and renal injury in genetic hypertension.  
*Hypertension.* 1998;31(1, pt 2):266-270.
- 
- Hayashi T, Fukuto JM, Ignarro LJ, Chaudhuri G.** Basal release of nitric oxide from aortic rings is greater in female rabbits than in male rabbits: implications for atherosclerosis.  
*Proc Natl Acad Sci USA.* 1992;89:11259-11263.
- 
- Haynes WG, Webb DJ.** Contribution of endogenous generation of endothelin-1 to basal vascular tone.  
*Lancet.* 1994;344:852-854.
- 
- Hecker M, Sessa WC, Harris HJ, Anggard EE, Vane JR.** The metabolism of L-arginine and its significance for the biosynthesis of endothelium-derived relaxing factor: cultured endothelial cells recycle L-citrulline in L-arginine.  
*Proc Natl Acad Sci USA.* 1990;87:8612-8616.
- 
- Heinzel B, John M, Klatt P, Bohme E, Mayer B.** Ca<sup>2+</sup> calmodulin-dependent formation of hydrogen peroxide by brain nitric oxide synthase.  
*J Biol Chem.* 1992;267:627-630.
- 
- Hogg N, Kalyanaraman B, Joseph J, Struck A, Parthasarathy S.** Inhibition of low-density lipoprotein oxidation by nitric oxide: potential role for atherogenesis.  
*FEBS Lett.* 1993;334:170-174.
-

**Bibliography of One Hundred Key Papers**

---

- Hornig B, Kohler C, Drexler H.** *Role of bradykinin in mediating vascular effects of angiotensin-converting enzyme inhibitors in humans.*  
**Circulation.** 1997;95:1115-1118.
- 
- Huang PL, Huang Z, Mashimo H, et al.** *Hypertension in mice lacking the gene for endothelial nitric oxide synthase.*  
**Nature.** 1995;377:239-242.
- 
- Hutcheson IR, Griffith TM.** *Mechanotransduction through the endothelial cytoskeleton: mediation of flow—but not agonists—induced EDRF release.*  
**Br J Pharmacol.** 1996;118:720-726.
- 
- Ignarro LJ, Buga GM, Wood KS, Byrns RE, Chaudhuri G.** *Endothelium-derived relaxing factor produced and released from artery and vein is nitric oxide.*  
**Proc Natl Acad Sci USA.** 1987;84:9265-9269.
- 
- Jia L, Bonaventura C, Bonaventura J, Stamler JS.** *S-nitrosohaemoglobin: a dynamic activity of blood involved in vascular control.*  
**Nature.** 1996;380:221-226.
- 
- Joannides R, Haefeli WE, Linder L, et al.** *Nitric oxide is responsible for flow-dependent dilatation of human peripheral conduit arteries in vivo.*  
**Circulation.** 1995;91:1314-1319.
- 
- Joannides R, Richard V, Haefeli WE, et al.** *Role of nitric oxide in the regulation of the mechanical properties of peripheral conduit arteries in humans.*  
**Hypertension.** 1997;30:1465-1470.
- 
- Ju H, Zou R, Venema VJ, Venema RC.** *Direct interaction of endothelial nitric-oxide synthase and caveolin-1 inhibits synthase activity.*  
**J Biol Chem.** 1997;272:18522-18525.
- 
- Katusic ZS, Shepherd JT, Vanhoutte PM.** *Vasopressin causes endothelium-dependent relaxations in canine basilar arteries.*  
**Circ Res.** 1984;55:575-579.
- 
- Kim P, Lorenz RR, Sundt TM, Vanhoutte PM.** *Release of endothelium-derived relaxing factors after subarachnoid hemorrhage.*  
**J Neurosurg.** 1989;70:108-114.
- 
- Kinoshita H, Milstien S, Wambi C, Katusic ZS.** *Inhibition of tetrahydrobiopterin biosynthesis impairs endothelium-dependent relaxations in canine basilar artery.*  
**Am J Physiol.** 1997;273(2, pt 2):H718-H724.
- 
- Kourembanas S, McQuillan LP, Leung GK, Faller DV.** *Nitric oxide regulates the expression of vasoconstrictors and growth factors by vascular endothelium under both normoxia and hypoxia.*  
**J Clin Invest.** 1993;92:99-104.
- 
- Lamas S, Marsden PA, Li GK, Tempst P, Michel T.** *Endothelial nitric oxide synthase: molecular cloning and characterization of a distinct constitutive enzyme isoform.*  
**Proc Natl Acad Sci USA.** 1992;89:20496-20501.
- 
- Lee JJ, Olmos L, Vanhoutte PM.** *Recovery of endothelium-dependent relaxations four weeks after ischemia and progressive reperfusion in canine coronary arteries.*  
**Proc Assoc Am Physicians.** 1996;108:362-367.
-



- 
- Lerman A, Edwards BS, Hallett JW, et al.** *Circulating and tissue endothelin immunoreactivity in advanced atherosclerosis.*  
**N Engl J Med.** 1991;325:997-999.
- 
- Lerman A, Kubo SH, Tschumperlin LK, Burnett JC Jr.** *Plasma endothelin concentrations in humans with end-stage heart failure and after heart transplantation.*  
**J Am Coll Cardiol.** 1992;20:849-853.
- 
- Liao JK, Shin WS, Lee WY, Clark SL.** *Oxidized low-density lipoproteins decrease the expression of endothelial nitric oxide synthase.*  
**J Biol Chem.** 1995;270:319-324.
- 
- Linder L, Kiowski W, Buhler FR, Lüscher TF.** *Indirect evidence for release of endothelium-derived relaxing factor in human forearm circulation in vivo. Blunted response in essential hypertension.*  
**Circulation.** 1990;81:1762-1767.
- 
- Ludmer PL, Selwyn AP, Shook TL, et al.** *Paradoxical vasoconstriction induced by acetylcholine in atherosclerotic coronary arteries.*  
**N Engl J Med.** 1986;315:1046-1051.
- 
- Marsden PA, Heng HHQ, Scherer SW, et al.** *Structure and chromosomal localization of the human constitutive endothelial nitric oxide synthase gene.*  
**J Biol Chem.** 1993;268:17478-17488.
- 
- Masaoka H, Suzuki R, Hirata Y, Emori T, Marumo F, Hirakawa K.** *Raised plasma endothelin in aneurysmal subarachnoid haemorrhage.*  
**Lancet.** 1989;2:1402.
- 
- Matsuoka H, Itoh S, Kimoto M, et al.** *Asymmetrical dimethylarginine, an endogenous nitric oxide synthase inhibitor, in experimental hypertension.*  
**Hypertension.** 1997;29(1, pt 2):242-247.
- 
- Miller VM, Vanhoutte PM.** *Endothelial  $\alpha_2$ -adrenoceptors in canine pulmonary and systemic blood vessels.*  
**Eur J Pharmacol.** 1985;118:H432-H437.
- 
- Miller VM, Vanhoutte PM.** *Endothelium-dependent responses in isolated blood vessels of lower vertebrates.*  
**Blood Vessels.** 1986;23:225-235.
- 
- Minor RL Jr, Myers PR, Guerra R Jr, Bates JN, Harrison DG.** *Diet-induced atherosclerosis increases the release of nitrogen oxides from rabbit aorta.*  
**J Clin Invest.** 1990;86:2109-2116.
- 
- Mombouli JV, Vanhoutte PM.** *Kinins and endothelial control of vascular smooth muscle.*  
**Annu Rev Pharmacol Toxicol.** 1995;35:679-705.
- 
- Mombouli JV, Vanhoutte PM.** *Kinins and endothelium-dependent relaxations to converting enzyme inhibitors in perfused canine arteries.*  
**J Cardiovasc Pharmacol.** 1991;18:926-927.
- 
- Moncada S, Palmer RMJ, Higgs EA.** *Nitric oxide: physiology, pathophysiology and pharmacology.*  
**Pharmacol Rev.** 1991;43:109-142.
-

**Bibliography of One Hundred Key Papers**

---

- Moncada S, Vane VR.** *Pharmacology and endogenous roles of prostaglandin endoperoxides, thromboxane A<sub>2</sub> and prostacyclin.* **Pharmacol Rev.** 1979;30:293-331.
- 
- Morita T, Kourembanas S.** *Endothelial cell expression of vasoconstrictors and growth factors is regulated by smooth muscle cell-derived carbon monoxide.* **J Clin Invest.** 1995;96:2676-2682.
- 
- Mulder P, Richard V, Derumeaux G, et al.** *Role of endogenous endothelin in chronic heart failure: effect of long-term treatment with an endothelin antagonist on survival, hemodynamics, and cardiac remodeling.* **Circulation.** 1997;96:1976-1982.
- 
- Muller JM, Chilian WM, Davis MJ.** *Integrin signalling transduces shear stress-dependent vasodilation of coronary arterioles.* **Circ Res.** 1997;80:320-326.
- 
- Nadaud S, Philippe M, Arnal JF, Michel JB, Soubrier F.** *Sustained increase in aortic endothelial nitric oxide synthase expression in vivo in a model of chronic high blood flow.* **Circ Res.** 1996;79:857-863.
- 
- Nakashima N, Mombouli JV, Taylor AA, Vanhoutte PM.** *Endothelium-dependent hyperpolarization caused by bradykinin in human coronary arteries.* **J Clin Invest.** 1993;92:2867-2871.
- 
- Nishida K, Harrison DG, Navas JP, et al.** *Molecular cloning and characterization of the constitutive bovine aortic endothelial cell synthase.* **J Clin Invest.** 1992;90:2092-2096.
- 
- Ohnaka K, Takayanagi R, Nishikawa M, Haji M, Nawata H.** *Purification and characterization of a phosphoramidon-sensitive endothelin-converting enzyme in porcine aortic endothelium.* **J Biol Chem.** 1993;268:26759-26766.
- 
- Palmer RM, Ashton DS, Moncada S.** *Vascular endothelial cells synthesize nitric oxide from L-arginine.* **Nature.** 1988;333:664-666.
- 
- Palmer RMJ, Ferridge AG, Moncada S.** *Nitric oxide accounts for the biological activity of endothelium-derived relaxing factor.* **Nature.** 1987;327:524-526.
- 
- Panza JA, Quyyumi AA, Brush JE Jr, Epstein SE.** *Abnormal endothelium-dependent vascular relaxation in patients with essential hypertension.* **N Engl J Med.** 1990;323:22-27.
- 
- Papapetropoulos A, Garcia-Cardena G, Madri JA, Sessa WC.** *Nitric oxide production contributes to the angiogenic properties of vascular endothelial growth factor in human endothelial cells.* **J Clin Invest.** 1997;100:3131-3139.
- 
- Patel A, Layne S, Watts D, Kirchner KA.** *L-Arginine administration normalizes pressure natriuresis in hypertensive Dahl rats.* **Hypertension.** 1993;22:863-869.
- 
- Pearson PJ, Lin PJ, Schaff HV, Vanhoutte PM.** *Augmented endothelium-dependent constriction to hypoxia early and late following reperfusion of the canine coronary artery.* **Clin Exp Pharmacol Physiol.** 1996;23:634-641.
-



- 
- Pearson PJ, Schaff HV, Vanhoutte PM.** *Acute impairment of endothelium-dependent relaxations to aggregating platelets following reperfusion injury in canine coronary arteries.*  
**Circ Res.** 1990;67:385-393.
- 
- Philbrick WM, Wysolmerski JJ, Galbraith S, et al.** *Defining the roles of parathyroid hormone-related protein in normal physiology.*  
**Physiol Rev.** 1996;76:127-173.
- 
- Pohl U, Holtz J, Busse R, Bassenge E.** *Crucial role of endothelium in the vasodilator response to increase in flow in vivo.*  
**Hypertension.** 1986;8:37-44.
- 
- Pollock JS, Förstermann U, Mitchell JA, et al.** *Purification and characterization of particulate endothelium-derived relaxing factor synthase from cultured and native bovine aortic endothelial cells.*  
**Proc Natl Acad Sci USA.** 1991;88:10480-10484.
- 
- Pou S, Pou WS, Bredt DS, Snyder SH, Rosen GM.** *Generation of superoxide by purified brain nitric oxide synthase.*  
**J Biol Chem.** 1992;267:24173-24176.
- 
- Radomski MW, Palmer RM, Moncada S.** *The anti-aggregating properties of vascular endothelium: interactions between prostacyclin and nitric oxide.*  
**Br J Pharmacol.** 1987;92:639-646.
- 
- Rapoport RM, Murad F.** *Agonist-induced endothelium-dependent relaxation in rat aorta may be mediated through cyclic GMP.*  
**Circ Res.** 1983;52:352-357.
- 
- Rees DD, Palmer RMJ, Moncada S.** *Role of endothelium-derived nitric oxide in the regulation of blood pressure.*  
**Proc Natl Acad Sci USA.** 1989;86:3375-3382.
- 
- Rees DD, Palmer RMJ, Schulz R, et al.** *Characterization of three inhibitors of endothelial nitric oxide synthase in vitro and in vivo.*  
**Br J Pharmacol.** 1990;101:746-751.
- 
- Rosenkranz-Weiss P, Sessa WC, Milstien S, Kaufman S, Watson CA, Pober JS.** *Regulation of nitric oxide synthesis by proinflammatory cytokines in human umbilical vein endothelial cells.*  
**J Clin Invest.** 1994;93:2236-2243.
- 
- Rubanyi GM, Romero C, Vanhoutte PM.** *Flow-induced release of endothelium-derived relaxing factor.*  
**Am J Physiol.** 1986;250:H1145-H1149.
- 
- Rubanyi GM, Vanhoutte PM.** *Superoxide anions and hyperoxia inactivate endothelium-derived relaxing factor.*  
**Am J Physiol.** 1986;250:H822-H827.
- 
- Sakurai T, Yanagisawa M, Takuwa Y, et al.** *Cloning of a cDNA encoding a non-isopeptide-selective subtype of the endothelin receptor.*  
**Nature.** 1990;348:732-735.
- 
- Schmidt K, Werner ER, Mayer B, Wachter H, Kukovetz WR.** *Tetrahydrobiopterin-dependent formation of endothelium-derived relaxing factor (nitric oxide) in aortic endothelial cells.*  
**Biochem J.** 1992;281:297-300.
-

**Bibliography of One Hundred Key Papers**

---

- Scott-Burden T, Vanhoutte PM.** *The endothelium as a regulator of vascular smooth muscle proliferation.*  
**Circulation.** 1993;87:V51-V55.
- 
- Scott-Burden T, Schini VB, Elizondo E, Junquero DC, Vanhoutte PM.** *Platelet-derived growth factor suppresses and fibroblast growth factor enhances cytokine-induced production of nitric oxide by cultured smooth muscle cells: effect on proliferation.*  
**Circ Res.** 1992;71:1088-1100.
- 
- Seo B, Oemar BS, Siebenmann R, von Segesser L, Lüscher TF.** *Both  $ET_A$  and  $ET_B$  receptors mediate contraction to endothelin-1 in human blood vessels.*  
**Circulation.** 1994;89:1203-1208.
- 
- Shimokawa H, Flavahan NA, Shepherd JT, Vanhoutte PM.** *Endothelium-dependent inhibition of ergonovine-induced contraction is impaired in porcine coronary arteries with regenerated endothelium.*  
**Circulation.** 1989;80:643-650.
- 
- Shimokawa H, Flavahan NA, Vanhoutte PM.** *Natural course of the impairment of endothelium-dependent relaxations in regenerating porcine endothelial cells: role of a pertussis toxin sensitive G-protein.*  
**Circ Res.** 1989;65:740-753.
- 
- Shimokawa H, Tsutsui M, Mizuki T, et al.** *Endothelial  $G_i$  protein expression is markedly low in human coronary microvessels.*  
**J Cardiovasc Pharmacol.** 1996;27:297-302.
- 
- Shimokawa H, Vanhoutte PM.** *Impaired endothelium-dependent relaxation to aggregating platelets and related vasoactive substances in porcine coronary arteries in hypercholesterolemia and atherosclerosis.*  
**Circ Res.** 1989;64:900-914.
- 
- Spiecker M, Peng HB, Liao JK.** *Inhibition of endothelial vascular cell adhesion molecule-1 expression by nitric oxide involves the induction and nuclear translocation of  $I\kappa B\alpha$ .*  
**J Biol Chem.** 1997;272:30969-30974.
- 
- Stewart DJ, Langleben D, Cernacek P, Cianflone K.** *Endothelin release is inhibited by coculture of endothelial cells with cells of vascular media.*  
**Am J Physiol.** 1990;259:H1928-H1932.
- 
- Stoclet JC, Andriantsitohaina R, Kleschyov A, Muller B.** *Nitric oxide and cGMP in regulation of arterial tone.*  
**Trends Cardiovasc Med.** 1998;8:14-19.
- 
- Stroes E, Kastelein J, Cosentino F, et al.** *Tetrahydrobiopterin restores endothelial function in hypercholesterolemia.*  
**J Clin Invest.** 1997;99:41-46.
- 
- Stuehr DJ, Griffith OW.** *Mammalian nitric oxide synthases.*  
**Adv Enzymol.** 1992;65:287-346.
- 
- Taddei S, Virdis A, Ghiadoni L, Magagna A, Salvetti A.** *Cyclooxygenase inhibition restores nitric oxide activity in essential hypertension.*  
**Hypertension.** 1997;29(1, pt 2):274-279.
-



- 
- Tesfamariam B, Brown ML, Cohen RA.** *Elevated glucose impairs endothelium-dependent relaxation by activating protein kinase C.*  
**J Clin Invest.** 1991;87:1643-1648.
- 
- Ting HH, Timimi FK, Haley EA, Roddy MA, Ganz P, Creager MA.** *Vitamin C improves endothelium-dependent vasodilation in forearm resistance vessels of humans with hypercholesterolemia.*  
**Circulation.** 1997;95:2617-2622.
- 
- Tronc F, Wassef M, Esposito B, et al.** *Role of NO in flow-induced remodeling of the rabbit common carotid artery.*  
**Arterioscler Thromb Vasc Biol.** 1996;16:1256-1262.
- 
- Tsao PS, Wang B, Buitrago R, Shyy JY, Cooke JP.** *Nitric oxide regulates monocyte chemotactic protein-1.*  
**Circulation.** 1997;96:934-940.
- 
- Tschudi MR, Mesaros S, Lüscher TF, Malinski T.** *Direct in situ measurement of nitric oxide in mesenteric resistance arteries. Increased decomposition by superoxide in hypertension.*  
**Hypertension.** 1996;27:32-35.
- 
- Tsutsui M, Shimokawa H, Tanaka S, et al.** *Endothelial Gi protein in human coronary arteries.*  
**Eur Heart J.** 1994;15:1261-1266.
- 
- Uematsu M, Ohara Y, Navas JP, et al.** *Regulation of endothelial cell nitric oxide synthase mRNA expression by shear stress.*  
**Am J Physiol.** 1995;269(6, pt 1):C1371-C1378.
- 
- Vallance P, Collier J, Moncada S.** *Effects of endothelium-derived nitric oxide on peripheral arterial tone in man.*  
**Lancet.** 1989;2:997-1000.
- 
- Vallance P, Leone A, Calver A, Collier J, Moncada S.** *Accumulation of an endogenous inhibitor of nitric oxide synthesis in chronic renal failure.*  
**Lancet.** 1992;339:572-574.
- 
- Vanhoutte PM, Boulanger CM.** *Endothelium-dependent response in hypertension.*  
**Hypertens Res.** 1995;18:87-98.
- 
- Wagner OF, Christ G, Wojta J, et al.** *Polar secretion of endothelin-1 by cultured endothelial cells.*  
**J Biol Chem.** 1992;267:16066-16068.
- 
- Wang R, Wang Z, Wu L.** *Carbon monoxide-induced vasorelaxation and the underlying mechanisms.*  
**Br J Pharmacol.** 1997;121:927-934.
- 
- Wever RM, Lüscher TF, Cosentino F, Rabelink TJ.** *Atherosclerosis and the two faces of endothelial nitric oxide synthase.*  
**Circulation.** 1998;97:108-112.
- 
- Wilcox JN, Subramanian RR, Sundell CL, et al.** *Expression of multiple isoforms of nitric oxide synthase in normal and atherosclerotic vessels.*  
**Arterioscler Thromb Vasc Biol.** 1997;17:2479-2488.
- 
- Wright RS, Wei CM, Kim CH, et al.** *C-type natriuretic peptide-mediated coronary vasodilation: role of the coronary nitric oxide and particulate guanylate cyclase systems.*  
**J Am Coll Cardiol.** 1996;28:1031-1038.
-

**Bibliography of One Hundred Key Papers**

- 
- Xu D, Emoto N, Giaid A, et al.** *ECE-1: a membrane-bound metalloprotease that catalyzes the proteolytic activation of big endothelin-1.* **Cell.** 1994;78:473-485.
- 
- Yanagisawa M, Kurihara H, Kimura S, et al.** *A novel potent vasoconstrictor peptide produced by vascular endothelial cells.* **Nature.** 1988;332:411-415.
- 
- Yang Z, Stulz P, von Segesser L, Bauer E, Turina M, Lüscher TF.** *Different interactions of platelets with arterial and venous coronary bypass vessels.* **Lancet.** 1991;337:939-943.
- 
- Yates MT, Lambert LE, Whitten JP, et al.** *A protective role for nitric oxide in the oxidative modification of low-density lipoproteins by mouse macrophages.* **FEBS Lett.** 1992;309:135-138.
- 
- Zeiger AM, Fisslthaler B, Schray-Utz B, Busse R.** *Nitric oxide modulates the expression of monocyte chemoattractant protein-1 in cultured human endothelial cells.* **Circ Res.** 1995;76:980-986.
- 
- Zimmermann M, Seifert V, Löffler BM, Stolke D, Stenzel W.** *Prevention of cerebral vasospasm after experimental subarachnoid hemorrhage by RO 47-0203, a newly developed orally active endothelin receptor antagonist.* **Neurosurgery.** 1996;38:115-120.
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The lead article should not exceed 25 standard typed pages (maximum 8000 words), including an abstract of no more than 200 words, no more than 50 references, and a minimum of 5 - maximum of 10 illustrations (figures and/or tables). A maximum of 5-10 keywords should be included. **The 3 questions for the respondents should be introduced in or after the conclusion.** A separate list of **10 references of “seminal papers”** as well as a separate list of **100 Key References** should be provided.

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