Mitigation of the progression of heart failure with sildenafil involves inhibition of RhoA/Rho-kinase pathway

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#	Paper	IF	Citations
62	Is inhibition of phosphodiesterase type 5 by sildenafil a promising therapy for volume-overload heart failure?. *Circulation*, **2012**, 125, 1341-3	16.7	7
61	Phosphodiesterase-5 and retargeting of subcellular cGMP signaling during pathological hypertrophy. *Circulation*, **2012**, 126, 916-9	16.7	6
60	PDE5 inhibitor treatment options for urologic and non-urologic indications: 2012 update. *Current Pharmaceutical Design*, **2012**, 18, 5590-606	3.3	14
59	Phosphodiesterases and cyclic GMP regulation in heart muscle. *Physiology*, **2012**, 27, 248-58	9.8	38
58	Cardiac uses of phosphodiesterase-5 inhibitors. *Journal of the American College of Cardiology*, **2012**, 59, 9-15	15.1	65
57	Effects of sildenafil and/or muscle derived stem cells on myocardial infarction. *Journal of Translational Medicine*, **2012**, 10, 159	8.5	13
56	Cyclic guanosine monophosphate signaling and phosphodiesterase-5 inhibitors in cardioprotection. *Journal of the American College of Cardiology*, **2012**, 59, 1921-7	15.1	58
55	Cardiac role of cyclic-GMP hydrolyzing phosphodiesterase type 5: from experimental models to clinical trials. *Current Heart Failure Reports*, **2012**, 9, 192-9	2.8	26
54	Anti-inflammatory and cardioprotective effects of tadalafil in diabetic mice. *PLoS ONE*, **2012**, 7, e45243	3.7	65
53	The pleiotropic effects of phosphodiesterase 5 inhibitors on function and safety in patients with cardiovascular disease and hypertension. *Journal of Clinical Hypertension*, **2012**, 14, 644-9	2.3	22
52	Role of phosphodiesterase-5 inhibitors in heart failure: emerging data and concepts. *Current Heart Failure Reports*, **2013**, 10, 26-35	2.8	14
51	Pharmacokinetic evaluation of sildenafil as a pulmonary hypertension treatment. *Expert Opinion on Drug Metabolism and Toxicology*, **2013**, 9, 1193-205	5.5	19
50	Effectiveness and safety of phosphodiesterase 5 inhibitors in patients with cardiovascular disease and hypertension. *Current Hypertension Reports*, **2013**, 15, 475-83	4.7	42
49	Phosphodiesterase type 5 inhibitors improve endothelial function and may benefit cardiovascular conditions. *American Journal of Medicine*, **2013**, 126, 192-9	2.4	25
48	Therapeutic potential of PDE modulation in treating heart disease. *Future Medicinal Chemistry*, **2013**, 5, 1607-20	4.1	24
47	Protein kinase g positively regulates proteasome-mediated degradation of misfolded proteins. *Circulation*, **2013**, 128, 365-76	16.7	98
46	Protein kinase G I and heart failure: Shifting focus from vascular unloading to direct myocardial antiremodeling effects. *Circulation: Heart Failure*, **2013**, 6, 1268-83	7.6	19

45	Signaling effectors underlying pathologic growth and remodeling of the heart. *Journal of Clinical Investigation*, **2013**, 123, 37-45	15.9	307
44	Tadalafil prevents acute heart failure with reduced ejection fraction in mice. *Cardiovascular Drugs and Therapy*, **2014**, 28, 493-500	3.9	18
43	Neuroprotection by sildenafil: neuronal networks potentiation in acute experimental stroke. *CNS Neuroscience and Therapeutics*, **2014**, 20, 40-9	6.8	26
42	In Vivo Protective Effects of Diosgenin against Doxorubicin-Induced Cardiotoxicity. *Nutrients*, **2015**, 7, 4938-54	6.7	50
41	Protective Effect and Mechanism of Total Flavones from Rhododendron simsii Planch Flower on Cultured Rat Cardiomyocytes with Anoxia and Reoxygenation. *Evidence-based Complementary and Alternative Medicine*, **2015**, 2015, 863531	2.3	6
40	Beetroot juice reduces infarct size and improves cardiac function following ischemia-reperfusion injury: Possible involvement of endogenous H2S. *Experimental Biology and Medicine*, **2015**, 240, 669-81	3.7	21
39	Hydrogen sulfide mediates the cardioprotective effects of gene therapy with PKG-I *Basic Research in Cardiology*, **2015**, 110, 42	11.8	21
38	Priming the proteasome by protein kinase G: a novel cardioprotective mechanism of sildenafil. *Future Cardiology*, **2015**, 11, 177-89	1.3	5
37	Pathophysiology of cardiac hypertrophy and heart failure: signaling pathways and novel therapeutic targets. *Archives of Toxicology*, **2015**, 89, 1401-38	5.8	337
36	Erectile Dysfunction in Coronary Artery Disease and Heart Failure. **2015**, 59-71		2
35	Sildenafil attenuates the fibrotic phenotype of skin fibroblasts in patients with systemic sclerosis. *Clinical Immunology*, **2015**, 161, 333-8	9	9
34	PDE5 inhibitors as therapeutics for heart disease, diabetes and cancer. *Pharmacology & Therapeutics*, **2015**, 147, 12-21	13.9	144
33	Rho kinase mediates right ventricular systolic dysfunction in rats with chronic neonatal pulmonary hypertension. *American Journal of Respiratory Cell and Molecular Biology*, **2015**, 52, 717-27	5.7	8
32	New Therapeutic Applications of Phosphodiesterase 5 Inhibitors (PDE5-Is). *Current Medicinal Chemistry*, **2016**, 23, 1239-49	4.3	27
31	PDE5 inhibitors protect against post-infarction heart failure. *Frontiers in Bioscience - Landmark*, **2016**, 21, 1194-210	2.8	13
30	Protein kinase G signaling in cardiac pathophysiology: Impact of proteomics on clinical trials. *Proteomics*, **2016**, 16, 894-905	4.8	9
29	Simultaneous Rho kinase inhibition in circulating leukocytes and in cardiovascular tissue in rats with high angiotensin converting enzyme levels. *International Journal of Cardiology*, **2016**, 215, 309-17	3.2	15
28	Sildenafil ameliorates left ventricular T-tubule remodeling in a pressure overload-induced murine heart failure model. *Acta Pharmacologica Sinica*, **2016**, 37, 473-82	8	14

27	Mechanisms of favorable effects of Rho kinase inhibition on myocardial remodeling and systolic function after experimental myocardial infarction in the rat. *Therapeutic Advances in Cardiovascular Disease*, **2016**, 10, 4-20	3.4	14
26	Everything you ever wanted to know about phosphodiesterase 5 inhibitors and the heart (but never dared ask): How do they work?. *Journal of Endocrinological Investigation*, **2016**, 39, 131-42	5.2	18
25	Pharmacodynamics, pharmacokinetics and clinical efficacy of phosphodiesterase-5 inhibitors. *Expert Opinion on Drug Metabolism and Toxicology*, **2017**, 13, 183-192	5.5	19
24	Phosphodiesterase-5 inhibitors and the heart: compound cardioprotection?. *Heart*, **2018**, 104, 1244-1250	5.1	43
23	Involvement of brain natriuretic peptide signaling pathway in the cardioprotective action of sitagliptin. *Pharmacological Reports*, **2018**, 70, 720-729	3.9	5
22	Two Birds with One Stone: Regular Use of PDE5 Inhibitors for Treating Male Patients with Erectile Dysfunction and Cardiovascular Diseases. *Cardiovascular Drugs and Therapy*, **2019**, 33, 119-128	3.9	10
21	Phosphodiesterase 5 inhibition improves contractile function and restores transverse tubule loss and catecholamine responsiveness in heart failure. *Scientific Reports*, **2019**, 9, 6801	4.9	22
20	Pharmacological preconditioning with phosphodiestrase inhibitor: an answer to stem cell survival against ischemic injury through JAK/STAT signaling. *Heart Failure Reviews*, **2020**, 25, 355-366	5	7
19	Rho-kinase pathway activation and apoptosis in circulating leucocytes in patients with heart failure with reduced ejection fraction. *Journal of Cellular and Molecular Medicine*, **2020**, 24, 1413-1427	5.6	7
18	Hydrogen Sulfide Therapy Suppresses Cofilin-2 and Attenuates Ischemic Heart Failure in a Mouse Model of Myocardial Infarction. *Journal of Cardiovascular Pharmacology and Therapeutics*, **2020**, 25, 472-483	2.6	4
17	An update of cyclic nucleotide phosphodiesterase as a target for cardiac diseases. *Expert Opinion on Drug Discovery*, **2021**, 16, 183-196	6.2	3
16	Erectile Dysfunction and Cardiovascular Risk in Men With Rheumatoid Arthritis: A Population-based Cohort Study. *Journal of Rheumatology*, **2021**, 48, 1641-1647	4.1	2
15	Cardiac fibrosis: emerging agents in preclinical and clinical development. *Expert Opinion on Investigational Drugs*, **2021**, 30, 153-166	5.9	0
14	Nutraceutical, Dietary, and Lifestyle Options for Prevention and Treatment of Ventricular Hypertrophy and Heart Failure. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	6
13	Rho-kinase pathway activation and apoptosis in circulating leucocytes in patients with heart failure with reduced ejection fraction. *Journal of Cellular and Molecular Medicine*, **2020**, 24, 1413-1427	5.6	1
12	Upregulation of miR-93 and inhibition of LIMK1 improve ventricular remodeling and alleviate cardiac dysfunction in rats with chronic heart failure by inhibiting RhoA/ROCK signaling pathway activation. *Aging*, **2019**, 11, 7570-7586	5.6	5
11	Mechanism of HS-mediated ROCK inhibition of total flavones of against myocardial ischemia injury. *Experimental and Therapeutic Medicine*, **2019**, 18, 3783-3792	2.1	1
10	Guidelines for in vivo mouse models of myocardial infarction. *American Journal of Physiology - Heart and Circulatory Physiology*, **2021**, 321, H1056-H1073	5.2	7

9	Phosphodiesterase-5 Inhibitors in Cardioprotection. **2013**, 439-458		
8	PDE5 inhibition improves symptom-free survival and restores transverse tubule loss and catecholamine responsiveness in heart failure.		
7	Non-classical effects of sildenafil in clinical medicine: an interdisciplinary approach. *Meditsinskiy Sovet*, **2019**, 192-202	0.4	
6	Emerging new uses of phosphodiesterase-5 inhibitors in cardiovascular diseases. *Experimental and Clinical Cardiology*, **2011**, 16, e30-5		39
5	The Effects of Fasudil at Different Doses on Acute Myocardial Infarction in Rats. *Acta Cardiologica Sinica*, **2013**, 29, 524-30	1.1	1
4	Postimplant Phosphodiesterase-5 Inhibitor Use in Centrifugal Flow Left Ventricular Assist Devices.. *JACC: Heart Failure*, **2022**, 10, 89-100	7.9	2
3	Beyond Erectile Dysfunction: cGMP-Specific Phosphodiesterase 5 Inhibitors for Other Clinical Disorders. **2023**, 63,		1
2	Recent developments of phosphodiesterase inhibitors: Clinical trials, emerging indications and novel molecules. 13,		0
1	Nitric Oxide-cGMP-PKG Signaling in the Cardioprotective Effects of Phosphodiesterase 5 Inhibitors. **2023**, 111-126		0