HEART FAILURE

• GENERAL

**Packer M, Colucci W, Fisher L, et al.**
Effect of levosimendan on the short-term clinical course of patients with acutely decompensated heart failure.

**Giglioli C, Cecchi E, Landi D, et al.**

**Aidonidis G, Kanonidis I, Koutsimanis V, et al.**
Efficiency and safety of prolonged levosimendan infusion in patients with acute heart failure.
Cardiol Res Pract 2011;Mar 31:342302.

**Feola M, Lombardo E, Taglieri C, et al.**
Effects of levosimendan/furosemide infusion on plasma brain natriuretic peptide, echocardiographic parameters and cardiac output in end-stage heart failure patients.

**Lunghetti S, Palmerini E, Urselli R, et al.**
Effects of levosimendan without loading dose on systolic and diastic function in patients with end-stage heart failure.
Cardiol J 2011;18:532-537.

**Bergh C-H, Andersson B, Dahlström U, et al.**
Intravenous levosimendan vs. dobutamine in acute decompensated heart failure patients on beta-blockers.

Acute effects of levosimendan on mitral regurgitation and diastolic function in patients with advanced chronic heart failure.

**Farmerik D, Parissis JT, Bistola V, et al.**
Plasma B-type natriuretic peptide reduction predicts long-term response to levosimendan therapy in acutely decompensated chronic heart failure.
Int J Cardiol 2010;139:75-79.

**Kivikko M, Sundberg S, Karlsson MO, et al.**
Acetylation status does not affect levosimendan’s hemodynamic effects in heart failure patients.

**Cohen-Solal A, Logeart D, Huang B, et al.**
Lowered B-type natriuretic peptide in response to levosimendan or dobutamine treatment is associated with improved survival in patients with severe acutely decompensated heart failure.

**De Santis V, Vitale D, Trittapepe L, et al.**
Use of levosimendan for cardiogenic shock in a patient with the apical ballooning syndrome.

**Parissis J, Toller W, Franco F, et al.**
Levosimendan: a decade of experience in Europe built on years of evidence.

**Mebazaa A, Nieminen MS, Packer M, et al.**
Levosimendan vs dobutamine for patients with acute decompensated heart failure. The SURVIVE randomized trial.
JAMA 2007;297:1883-1891.

**Parissis JT, Papadopoulos C, Nikolaou M, et al.**
Effects of levosimendan on quality of life and emotional stress in advanced heart failure patients.

**Adamopoulos S, Parissis JT, Illoidromitis EK, et al.**
Effects of levosimendan versus dobutamine on inflammatory and apoptotic pathways in acutely decompensated chronic heart failure.
Am J Cardiol 2006;98:102-106.

**Dernellis J, Panaretou M.**
Effects of levosimendan on restrictive left ventricular filling in severe heart failure: A combined hemodynamic and Doppler echocardiographic study.

**Kivikko M, Lehtonen L, Colucci WS, et al.**
Sustained hemodynamic effects of intravenous levosimendan.
Circulation 2003;107:81-86.

**Follath F, Cleland JG, Just H, et al.**
Efficacy and safety of intravenous levosimendan compared with dobutamine in severe low-output heart failure (the LIDO study): a randomised double-blind trial.

**Nieminen MS, Akkila J, Hasenfuss G, et al.**
Hemodynamic and neurohumoral effects of continuous infusion of levosimendan in patients with congestive heart failure.

**Slawsky MT, Colucci WS, Gottlieb SS, et al.**
Acute hemodynamic and clinical effects of levosimendan in patients with severe heart failure.

• RIGHT VENTRICULAR FAILURE

**Russ MA, Pronzinsky R, Carter JM, et al.**
Right ventricular function in myocardial infarction complicated by cardiogenic shock: improvement with levosimendan.

**Yilmaz MB, Yontar C, Erdem A, et al.**
Comparative effects of levosimendan and dobutamine on right ventricular function in patients with biventricular heart failure.
Heart Vessels 2009;24:16-21.


Parissis JT, Paraskevaidis I, Bistola V, et al.

INTERMITTENT ADMINISTRATION

Tuomainen PO, Magga J, Timonen P, et al.

Rationale and design of a randomized, double-blind, placebo controlled multicenter trial to study efficacy, security, and long term effects of intermittent repeated levosimendan administration in patients with advanced heart failure: LAICA study. Cardiovasc Drugs Ther 2013;July 27: [Epub ahead of print].


Parle NM, Thomas MD, Dembo L, et al.

Mavrogeni S, Giamouzis F, Papadopoulou E, et al.

Parissis JT, Adamopoulos S, Farmakis D, et al.


RENAI FUNCTION

Bragadottir G, Redfors B, Ricksten SE.


Yilmaz MB, Yalta K, Yontar C, et al.


CARDIAC SURGERY

Levin R, Degrange M, Del Mazo C, et al.

Sponga S, Ivanitskaia E, Potapov E, et al.
Preoperative treatment with levosimendan in candidates for mechanical circulatory support. ASAIO J 2012;58:6-11.


ISCHAEMIC HEART DISEASE


Effect of levosimendan on right ventricular systolic and diastolic functions in patients with ischaemic heart failure.  

Russ MA, Prondzinsky R, Christoph A, et al.  
Hemodynamic improvement following levosimendan treatment in patients with acute myocardial infarction and cardiogenic shock.  

Effects of levosimendan on left ventricular diastolic function after primary angioplasty for acute anterior myocardial infarction: a Doppler echocardiographic study.  

Garcia Gonzales MJ, Dominguez Rodriguez A.  
Pharmacologic treatment of heart failure due to ventricular dysfunction by myocardial stunning: Potential role of levosimendan.  

Levosimendan improves hemodynamics and coronary flow reserve after percutaneous coronary intervention in patients with acute myocardial infarction and left ventricular dysfunction.  

Effects of intravenous levosimendan on human coronary vasomotor regulation, left ventricular wall stress, and myocardial oxygen uptake.  
Circulation 2005;111:1504-1509.


INTENSIVE CARE/ANAESTHESIA

The calcium sensitizer levosimendan improves human diaphragm function.  
Am J Respir Crit Care Med 2012;185:90-95.

Jaber S, Jung B, Matecki S, et al.  
Clinical review: Ventilator-induced diaphragmatic dysfunction - human studies confirm animal model findings.  

Levosimendan for resuscitating the microcirculation in patients with septic shock: a randomized controlled study.  
Crit Care 2010;R232. [Epub ahead of print].

Reducing the risk of major elective non-cardiac surgery: is there a role for levosimendan in the preoperative optimization of cardiac function?  

Prophylactic preoperative levosimendan administration in heart failure patients undergoing elective non-cardiac surgery: a preliminary report.  

Weaning failure from mechanical ventilation due to dilated cardiomyopathy: successful use of levosimendan.  

Effects of levosimendan in acute heart failure and cardiogenic and septic shock.  

Pinto BB, Rehberg S, Ertmer C, et al.  
Role of levosimendan in sepsis and septic shock.  

Levosimendan infusion improves haemodynamics in elderly heart failure patients undergoing urgent hip fracture repair.  

Sterba M, Banerjee A, Mudaliar Y.  
Prospective observational study of levosimendan and weaning of difficult-to-wean ventilator dependent intensive care patients.  

Toller W, Kneiz I.  
Medical support and surgery of the failing heart: levosimendan.  

Effects of levosimendan on right ventricular afterload in patients with acute respiratory distress syndrome: a pilot study.  
Crit Care Med 2006;34:2287-2293.

Effects of levosimendan on systemic and regional hemodynamics in septic myocardial depression.  

PAEDIATRICS

Angadi U, Westrope C, Chowdhry MF.  
Is levosimendan effective in paediatric heart failure and post-cardiac surgeries?  

Ebade AA, Khalil MA, Mohamed AK.  
Levosimendan is superior to dobutamine as an inodilator in the treatment of pulmonary hypertension for children undergoing cardiac surgery.  

Phase 1 study of two inodilators in neonates undergoing cardiovascular surgery.  

De Carolis MP, Piastra M, Bersani I, et al.  
Levosimendan in two neonates with ischemic heart failure and pulmonary hypertension.  
Neonatology 2012;101:201-205.


Suominen PK.


Margossian R.


Lechner E, Moosbauer W, Pinter M, et al.


Namachivayam P, Crossland DS, Butt WW, et al.


Turanlahti M, Boldt T, Paikama T, et al.

META-ANALYSIS

Harrison RW, Hasselblad V, Mehta RH, et al.


Maharaj R, Metaxa V.


HEALTH ECONOMICS


MISCELLANEOUS / REVIEWS


Follath F.
Newer treatments for decompensated heart failure:
focus on levosimendan

Effects of levosimendan on the energy balance:
preclinical and clinical evidence.

Kleber FX, Bollmann T, Borst MM, et al.
Repetitive dosing of intravenous levosimendan improves
pulmonary hemodynamics in patients with pulmonary
hypertension: results of a pilot study.

Levosimendan: from basic science to clinical practice.

Pharmacokinetics of intravenous levosimendan and its
metabolites in subjects with hepatic impairment.

Pollesello P, Papp Z.
The cardioprotective effects of levosimendan:
preclinical and clinical evidence.