INPLASY PROTOCOL

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None declared.

The anti-inflammatory and haemodynamic effects of levosimendan on advanced heart failure patients : a meta-analysis of randomized controlled trials

Zhou, SZ[1]; Li, DH[2]; Zhang, LL[3]; Li, JX[4].

Review question / Objective: **A meta-analysis was performed to assess interleukin -6 (IL-6), cardiac index (CI), pulmonary artery pressure (PAP) and New York Heart Association (NYHA) functional class.**
Condition being studied: **Advanced heart failure.**
Information sources: **the MEDLINE, PubMed, ClinicalTrials.com and Cochrane Library databases for RCTs published in English up to April 2019. The data were extracted from applicable articles. 211 patients for levosimendan and 193 patients for control groups met inclusion criteria in 11 prospective RCTs. Meta-analysis showed that levosimendan exerted anti-inflammatory and improved hemodynamic effects.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 15 May 2022 and was last updated on 15 May 2022 (registration number INPLASY202250097).

INTRODUCTION

Review question / Objective: **A meta-analysis was performed to assess interleukin -6 (IL-6), cardiac index (CI), pulmonary artery pressure (PAP) and New York Heart Association (NYHA) functional class.**

Condition being studied: **Advanced heart failure.**

METHODS

Participant or population: **Advanced heart failure patients.**

Intervention: **Levosimendan using.**

Comparator: **Placebo/blank.**

Study designs to be included: **We systematically searched the MEDLINE,**

PubMed, ClinicalTrials.com and Cochrane Library databases for RCTs published in English up to April 2019. The data were extracted from applicable articles. A meta-analysis was performed to assess interleukin -6 (IL-6), cardiac index (CI), pulmonary artery pressure (PAP) and New York Heart Association (NYHA) functional class.

Eligibility criteria: 211 patients for levosimendan and 193 patients for control groups met inclusion criteria in 11 prospective RCTs. The data were extracted from applicable articles. A meta-analysis was performed to assess interleukin -6 (IL-6), cardiac index (CI), pulmonary artery pressure (PAP) and New York Heart Association (NYHA) functional class.

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Main outcome(s): Interleukin -6 (IL-6), cardiac index (CI), pulmonary artery pressure (PAP) and New York Heart Association (NYHA) functional class.

Quality assessment / Risk of bias analysis: Yes.

Strategy of data synthesis: Yes.

Subgroup analysis: Yes.

Sensitivity analysis: No

Country(ies) involved: China.

Keywords: Levosimendan, Heart failure, Meta-analysis, Randomized controlled trial.

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