

INPLASY

A Systemic Review on Advances in Management of Oxidative Stress-Associated Cardiovascular Diseases

INPLASY202470064

doi: 10.37766/inplasy2024.7.0064

Received: 15 July 2024

Published: 15 July 2024

Jin, S; Kang, PM.

Corresponding author:

Peter Kang

pkang@bidmc.harvard.edu

Author Affiliation:

BIDMC.

ADMINISTRATIVE INFORMATION

Support - National Institutes of Health, American Heart Association Grant in Aid.

Review Stage at time of this submission - Completed but not published.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202470064

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 15 July 2024 and was last updated on 15 July 2024.

INTRODUCTION

Review question / Objective This review aims to integrate most relevant studies on oxidative stress management in cardiovascular diseases.

Condition being studied Oxidative Stress-Associated Cardiovascular Diseases.

METHODS

Search strategy PRISMA guideline.

Participant or population Both animal and human studies were reviewed. This is a literature review.

Intervention Not applicable.

Comparator Not applicable.

Study designs to be included We followed PRISMA guideline.

Eligibility criteria Both animal and human studies were reviewed.

Information sources Pubmed search.

Main outcome(s) By addressing oxidative stress management and mechanisms, this paper emphasizes the importance of maintaining the balance between oxidants and antioxidants in the progression of cardiovascular diseases.

Quality assessment / Risk of bias analysis We followed the PRISMA guideline.

Strategy of data synthesis PRISMA flowchart is provided in the manuscript.

Subgroup analysis Not applicable.

Sensitivity analysis Not applicable.

Country(ies) involved United States.

Keywords reactive oxygen species; oxidative stress; cardiovascular diseases; antioxidant; vitamins; nanoparticles; biomarkers.

Contributions of each author

Author 1 - Soyeon Jin - Conceptualization; Methodology; Writing – Original Draft Preparation; Writing – Review & Editing.

Email: sjin1@bidmc.harvard.edu

Author 2 - Peter Kang - Conceptualization; Methodology; Writing – Original Draft Preparation; Writing – Review & Editing; Supervision; Funding Acquisition.

Email: pkang@bidmc.harvard.edu