

INPLASY PROTOCOL

To cite: Chang. Impact of Sarcopenia on the Prognosis and Treatment of Lung Cancer: a Protocol for an Umbrella Review of Systematic Reviews and Meta-analyses. Inplasy protocol 202270050. doi: 10.37766/inplasy2022.7.0050

Received: 09 July 2022

Published: 09 July 2022

Corresponding author:
Ke-Vin Chang

kvchang011@gmail.com

Author Affiliation:
Department of Physical
Medicine and Rehabilitation,
National Taiwan University
Hospital, Bei-Hu Branch,
Taipei, Taiwan.

Support: TSUM.

**Review Stage at time of this
submission:** Preliminary
searches.

Conflicts of interest:
None declared.

INTRODUCTION

Review question / Objective: To summarize the evidence from systematic reviews and meta-analyses for the impact of sarcopenia on patients with lung cancer.

Condition being studied: Sarcopenia in patients with lung cancer.

METHODS

Search strategy: The keywords used for literature search include “cancer”, “lung cancer”, “lung neoplasm”, “lung tumor”,

Impact of Sarcopenia on the Prognosis and Treatment of Lung Cancer: a Protocol for an Umbrella Review of Systematic Reviews and Meta-analyses

Chang, KV¹.

Review question / Objective: To summarize the evidence from systematic reviews and meta-analyses for the impact of sarcopenia on patients with lung cancer.

Condition being studied: Sarcopenia in patients with lung cancer.

Information sources: Systemic reviews and meta-analyses meeting the inclusion criteria were searched from PubMed, Embase, Medline, Web of Science and Cochrane. Reviews that do not complete a systematic literature search are excluded.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 09 July 2022 and was last updated on 09 July 2022 (registration number INPLASY202270050).

“sarcopenia”, “skeletal muscle”, “muscle loss”, “nutrition”, “systemic review” and “meta-analysis”. The following algorithm is employed: (“cancer” OR “lung cancer” OR “lung neoplasm” OR “lung tumor”) AND (“sarcopenia” OR “skeletal muscle” OR “muscle loss” OR “nutrition”) AND (“systemic review” OR “meta-analysis”).

Participant or population: Patients with lung cancer.

Intervention: Not applicable.

Comparator: Not applicable.

Study designs to be included: Reviews using a systematic way for literature search and meta-analyses.

Eligibility criteria: (1) systemic reviews or meta-analyses, (2) investigating the prevalence, pathophysiology, prognostic capability, or management of sarcopenia in patients with lung cancer.

Information sources: Systemic reviews and meta-analyses meeting the inclusion criteria were searched from PubMed, Embase, Medline, Web of Science and Cochrane. Reviews that do not complete a systematic literature search are excluded.

Main outcome(s): The result of this umbrella review will be shown at the level of systematic reviews or meta-analyses. The similarities and differences in the population, criteria of sarcopenia and relevant outcomes will be addressed.

Quality assessment / Risk of bias analysis: The methodological quality of the included articles will be assessed with the AMSTAR 2 (A Measurement Tool to Assess Systematic Reviews) critical appraisal tool independently by two authors.

Strategy of data synthesis: The extracted data will be narrated at the level of systematic reviews and meta-analyses.

Subgroup analysis: Not applicable.

Sensitivity analysis: Not applicable.

Language: No limitation of languages.

Country(ies) involved: Taiwan.

Keywords: sarcopenia, muscle loss, frailty, lung cancer, lung neoplasm.

Contributions of each author:
Author 1 - Ke-Vin Chang.