

INPLASY PROTOCOL

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GLIM-defined malnutrition and overall survival in cancer patients: A systematic review and meta-analysis

Yin, LY¹; Chong, FF²; Huo, ZY³; Li, N⁴; Liu, J⁵; Xu, HX⁶.

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Corresponding author:
Liangyu Yin

liangyuyin1988@qq.com

Author Affiliation:
Daping Hospital, Army Medical University (Third Military Medical University).

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Conflicts of interest:
None declared.

Review question / Objective: The PICO statement of the study was: patient problem or population (patients with cancer), intervention or exposure (malnutrition with/without severity grading as defined by the GLIM), comparison or control (well-nourished status as defined by the GLIM) and outcome measure (overall survival/all-cause mortality).

Condition being studied: The Global Leadership Initiative on Malnutrition (GLIM) framework was proposed recently to unify the diagnostic criteria for malnutrition. Some studies have shown that the GLIM-defined malnutrition is associated with increased risk of all-cause mortality in patients with cancer while the effect is limited and inconsistent. We performed this meta-analysis aiming to assess this relationship in patients with cancer.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 27 July 2022 and was last updated on 27 July 2022 (registration number INPLASY202270113).

INTRODUCTION

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METHODS

Participant or population: Patients with cancer.

Intervention: Patients with malnutrition as defined by the Global Leadership Initiative on Malnutrition (GLIM) framework.

Comparator: Patients without malnutrition as defined by the Global Leadership Initiative on Malnutrition (GLIM) framework.

Study designs to be included: Cohort study.

Eligibility criteria: We included retrospective and prospective cohort studies that met the following selection criteria: (1) observational design investigating the association between GLIM-defined malnutrition and all-cause mortality / overall survival (OS) in any type of malignancy; (2) follow up \geq one year; (3) available data on hazard ratio (HR) with 95% confidence interval (CI) that support the calculation of effect size; and (4) availability of full text.

Information sources: Embase, PubMed, Web of Science, Cochrane, CINAHL, CNKI, Wanfang and VIP.

Main outcome(s): Overall survival and all-cause mortality.

Quality assessment / Risk of bias analysis: The Newcastle-Ottawa Scale.

Strategy of data synthesis: A fixed effects model.

Subgroup analysis: Not applicable.

Sensitivity analysis: Sensitivity analysis was conducted using a “leave-one-out” approach.

Country(ies) involved: China.

Keywords: GLIM; Malnutrition; Cancer; Survival; Meta-analysis.

Contributions of each author:

Author 1 - Liangyu Yin.

Author 2 - Feifei Chong.

Author 3 - Zhenyu Huo.

Author 4 - Na Li.

Author 5 - Jie Liu.

Author 6 - Hongxia Xu.