INPLASY PROTOCOL

To cite: Huang et al. Nestin and the survival of patients with digestive tract cancers. Inplasy protocol 202280087. doi: 10.37766/inplasy2022.8.0087

Received: 22 August 2022

Published: 22 August 2022

Corresponding author:
Yiming Wang

yiminwang_216@163.com

Author Affiliation:
Chongqing University Cancer Hospital.

Support: **Chongqing NSF.**

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

Conflicts of interest:
None declared.

Nestin and the survival of patients with digestive tract cancers

Huang, LM[1]; Chen, LH[2]; Wang, YM[3].

Review question / Objective: **To comprehensively evaluate the possible link between nestin expression and survival.**
Condition being studied: **Digestive tract cancers (DTCs) are a group of heterogeneous cancers including esophagus cancer (EC), gastric cancer (GC), colorectal cancer (CRC), as well as hepatobiliary and pancreatic cancers. The prognoses for patients with DTCs are still poor, particularly for those in the developing countries.. Nestin is a class VI intermediate filament protein which could be detected in neural progenitor cells within the process of embryonic development and in various cancer tissues, including DTCs. However, controversy over the association between nestin expression and survival outcomes in patients with DTCs. Thus, a meta-analysis of patients with DTC was conducted in order to comprehensively evaluate the possible link between nestin expression and survival. Additionally, subgroup analyses examined influences of cancer types and ethnicity of the patients.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 22 August 2022 and was last updated on 22 August 2022 (registration number INPLASY202280087).

INTRODUCTION

Review question / Objective: **To comprehensively evaluate the possible link between nestin expression and survival.**

Condition being studied: **Digestive tract cancers (DTCs) are a group of heterogeneous cancers including esophagus cancer (EC), gastric cancer (GC), colorectal cancer (CRC), as well as hepatobiliary and pancreatic cancers. The prognoses for patients with DTCs are still poor, particularly for those in the developing countries.. Nestin is a class VI intermediate filament protein which could be detected in neural progenitor cells within the process of embryonic**

development and in various cancer tissues, including DTCs. However, controversy over the association between nestin expression and survival outcomes in patients with DTCs. Thus, a meta-analysis of patients with DTC was conducted in order to comprehensively evaluate the possible link between nestin expression and survival. Additionally, subgroup analyses examined influences of cancer types and ethnicity of the patients.

METHODS

Search strategy: (1) "nestin"; (2) "esophagus" OR "esophageal" OR "esophagus" OR "gullet" OR "colon" OR "colorectal" OR "rectal" OR "anal" OR "pancreas" OR "pancreatic" OR "liver" OR "hepatic" OR " biliary duct" OR "bile duct" OR "gastric" OR "stomach" OR "cardia" OR "digestive tract"; and (3) "cancer" OR "carcinoma" OR "adenoma" OR "adenocarcinoma" OR "malignancy" OR "tumor" OR "tumour" OR "neoplasm".

Participant or population: Patients with confirmed diagnosis ofDTCs.

Intervention: Tumor expression of nestin was detected for each patients (tumor with high nestin expression).

Comparator: Tumor with low nestin expression.

Study designs to be included: Cohort studies.

Eligibility criteria: Potential associations between nestin and overall survival (OS) and/or disease-free survival (DFS)

Information sources: PubMed, Web of Science, and Embase, from their inception to March 28, 2022, were searched.

Main outcome(s): Potential associations between nestin and overall survival (OS) and/or disease-free survival (DFS) were investigated; and (5) hazard ratio (HR).

Additional outcome(s): None.

Data management: Data collection and quality assessment were also independently conducted by two researchers for each study included according to predetermined criteria.

Quality assessment / Risk of bias analysis: The Newcastle-Ottawa Scale (NOS) was used for the assessment of the study quality.

Strategy of data synthesis: A random-effect model was chosen for the synthesis of the HRs because this model has incorporated the possible influence of between-study heterogeneity.

Subgroup analysis: Subgroup analyses according to the types of DTCs, patient ethnicity, and analytic models (univariate or multivariate) were also conducted.

Sensitivity analysis: Sensitivity analyses omitting one individual study at a time were also performed to test the robustness of the findings.

Language restriction: English.

Country(ies) involved: China.

Other relevant information: None.

Keywords: Digestive tract cancer; Nestin; Immunohistochemistry; Survival; Meta-analysis.

Dissemination plans: Not applicable.

Contributions of each author:
Author 1 - Lumi Huang.
Author 2 - Lihui Chen.
Author 3 - Yiming Wang.