

# INPLASY PROTOCOL

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None declared.

## Ki67 can evaluate the prognosis of gastrointestinal stromal tumors: A systematic review and meta-analysis

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**Review question / Objective:** Whether Ki67 can evaluate the prognosis of gastrointestinal stromal tumors: A systematic review and meta-analysis.

**Condition being studied:** This study collected relevant literatures and examine the associations between Ki67 levels and gastrointestinal stromal tumors GIST malignancy with Meta-analysis, in order to explore relationship between KI67 and prognosis of gastrointestinal stromal tumors.

**Information sources:** Studies reporting gastrointestinal stromal tumor and Ki67 were found by searching Cochrane Library, PubMed, and Embase until October 14, 2021.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 09 March 2022 and was last updated on 09 March 2022 (registration number INPLASY202230038).

### INTRODUCTION

**Review question / Objective:** Whether Ki67 can evaluate the prognosis of gastrointestinal stromal tumors: A systematic review and meta-analysis.

**Condition being studied:** This study collected relevant literatures and examine the associations between Ki67 levels and gastrointestinal stromal tumors GIST

malignancy with Meta-analysis, in order to explore relationship between KI67 and prognosis of gastrointestinal stromal tumors

### METHODS

**Participant or population:** Twenty studies that fulfilled the inclusion criteria were finally included in the analysis. The average

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score of quality evaluation was 6.4 points according to Newcastle-Ottawa Scale. In all, 1682 patient cases were included.

**Intervention:** Expression of KI 67.

**Comparator:** NIH VL group, NIH L group, NIH I group, NIH H group.

**Study designs to be included:** Cohort study.

**Eligibility criteria:** Inclusion criteria: The criteria for inclusion were (1) patients must be assessed for Ki67 expression by immunohistochemistry and biological behavior; (2) The prognostic risk of GIST was assessed by the NIH Risk System; (3) The full text or original data could be retrieved during October2021.

**Information sources:** Studies reporting gastrointestinal stromal tumor and Ki67 were found by searching Cochrane Library, PubMed, and Embase until October 14, 2021.

**Main outcome(s):** The main outcome were the expression of Ki67 in different groups.

**Quality assessment / Risk of bias analysis:** The Newcastle-Ottawa Scale (NOS) was used to verify the quality of the evidence.

**Strategy of data synthesis:** The odds ratio (OR) estimates for each publication were determined by a fixed-effects (Mantel-Haenszel) model. Alternatively, a random-effect (DerSimonian and Laird) model was applied. The significance of combined ORs was measured using the z-test.

**Subgroup analysis:** When heterogeneity is detected, subgroup analysis will be used.

**Sensitivity analysis:** Examination of the effects of changes in inclusion criteria on the final results was done by sensitivity analysis.

**Country(ies) involved:** China.

**Keywords:** gastrointestinal stromal tumors, Ki-67, meta-analysis, malignant risk.

#### **Contributions of each author:**

Author 1 - Ji Li.

Author 2 - An-Ran Wang.

Author 3 - Shi-Qiang Li.

Author 4 - Xiao-Dong Chen.

Author 5 - Hong Pan.