

INPLASY PROTOCOL

To cite: Wang et al. Diagnostic value of different components of liquid biopsy in ovarian cancer: A Systematic Review and Meta-Analysis. Inplasy protocol 202270124. doi: 10.37766/inplasy2022.7.0124

Diagnostic value of different components of liquid biopsy in ovarian cancer: A Systematic Review and Meta-Analysis

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Received: 29 July 2022

Published: 29 July 2022

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Support: None.

Review Stage at time of this submission: Preliminary searches.

Conflicts of interest:
None declared.

Review question / Objective: The aim of the study is to investigate the diagnostic value of liquid biopsy for ovarian cancer.

Condition being studied: Ovarian cancer (OV) is the second most common malignant tumor in women after breast cancer, the seventh most common female cancer in the world, and the fifth leading cause of cancer-related deaths in women, with 21, 410 new cases and 13, 770 deaths projected to occur in the United States in 2021. The survival rate of ovarian cancer depends significantly on the stage of the disease with the early stage disease having more than 90% 5 year survival rate compared with less than 30% in advance stage disease.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 29 July 2022 and was last updated on 29 July 2022 (registration number INPLASY202270124).

INTRODUCTION

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seventh most common female cancer in the world, and the fifth leading cause of cancer-related deaths in women, with 21, 410 new cases and 13, 770 deaths projected to occur in the United States in 2021. The survival rate of ovarian cancer depends significantly on the stage of the disease with the early stage disease having more than 90% 5 year survival rate

compared with less than 30% in advance stage disease.

METHODS

Participant or population: Included ovarian cancer, healthy controls.

Intervention: Not applicable.

Comparator: Not applicable.

Study designs to be included: Original article.

Eligibility criteria: Studies were included if they met the following criteria: (1) the study participants were ovarian cancer patients; (2) assessed the diagnostic value of liquid biopsy for ovarian cancer. The exclusion criteria were as follows: (1) review articles, case reports, letters, or posters, conference abstracts or animal experiments; (2) duplicated publications or studies without extractable data; and (3) case reports, editorials, or conference records.

Information sources: PubMed, MEDLINE, Embase, the Cochrane Central Register of Controlled Trials (CENTRAL) and Web of Science.

Main outcome(s): Sensitivity; Specificity; AUC.

Quality assessment / Risk of bias analysis: QUADAS (Quality Assessment of Diagnostic Accuracy Studies)-2.

Strategy of data synthesis: sensitivity, specificity, DOR, SROC.

Subgroup analysis: Study design such as randomised/non-randomised trial, retrospective/prospective study, detection methods, cut-off value, participant characteristics such as male/female, stages of ovarian cancer, age.

Sensitivity analysis: We conducted a sensitivity analysis to investigate the influence of a single study on the overall risk estimate by omitting one study. All data were collected using Stata software

(version 14.0; Stata Corp., College Station, TX, USA).

Country(ies) involved: China.

Keywords: liquid biopsy, ovarian cancer, diagnose.

Contributions of each author:

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