INPLASY PROTOCOL

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Support: **None.**

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

Conflicts of interest:
None declared.

The diagnostic value of liquid biopsy for cervical cancer: A meta-analysis

Chen, XF[1]; Wang, HY[2]; Wang, Y[3].

Review question / Objective: **The aim of the study is to investigate the diagnostic value of liquid biopsy for cervical cancer.**
Condition being studied: **Cervical cancer (CC) is the fourth most common cancer among women all over the world, contributed for 6.5% of the total cases of cancer and 7.7% of the total cancer fatalities of women in 2020, the 5-year survival rate of patients with advanced CC is very low, especially elderly CC patients.**
Eligibility criteria: **Studies were included if they met the following criteria: (1) the study participants were cervical cancer patients; (2) assessed the diagnostic value of liquid biopsy for cervical cancer.The exclusion criteria were as follows: (1) review articles, case ports, letters, or posters, conference abstracts or animal experiments; (2) duplicated publications or studies without extractable data; and (3) case reports, editorials, or conference records.**

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 INPLASY202270122).

INTRODUCTION

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METHODS

Search strategy: (("cervical cancer" OR "cervix cancer" OR "cervical neoplasm" OR "cervix neoplasm" OR "cervical intraepithelial neoplasia" OR "CIN") AND ("specificity" AND "Sensitivity") AND ("liquid biopsy" OR "liquid biopsies" OR ("circulating tumor cells" OR "neoplasm circulating cells" OR "CTCs" OR "CTC") OR ("circulating tumor DNA" OR "cell free tumor DNA" OR "ctDNA" OR "circulating hpv dna") OR "Exosomes" OR ("circulating RNA" OR "cell free RNA" OR "miRNA" OR "microRNA"))) AND ("screening" OR "Diagnosis" OR "detection").

Participant or population: Included healthy controls, cervical cancer patients, and cervical intraepithelial neoplasia (CIN) patients.

Intervention: Not applicable.

Comparator: Not applicable.

Study designs to be included: Original article.

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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 randomized/non-randomized trial, retrospective/prospective study, detection methods, cut-off value, participant characteristics such as male/female, stages of cervical 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; Cervical cancer; Diagnostic.

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