

PRISMA 2020 Checklist

Human papillomavirus in oral potentially malignant disorders: a systematic review and meta-analysis of lesion-associated specimens with a framework for clinical interpretation

This checklist uses the PRISMA 2020 item wording. Locations refer to the manuscript and Online Resources prepared for submission.

Section/topic	Item	Checklist item	Location where item is reported
TITLE	1	Identify the report as a systematic review.	Title page.
ABSTRACT	2	See the PRISMA 2020 for Abstracts checklist.	Structured abstract.
INTRODUCTION	3	Describe the rationale for the review in the context of existing knowledge.	Introduction, paragraphs 1–3.
INTRODUCTION	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Introduction, final paragraph.
METHODS	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Eligibility criteria; Analytical classification; Table 2.
METHODS	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	Information sources and search strategy; Online Resource 1.
METHODS	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Online Resource 1.
METHODS	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and, if applicable, details of automation tools used in the process.	Study selection.
METHODS	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and, if applicable, details of automation tools used in the process.	Data extraction.

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METHODS	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought and, if not, the methods used to decide which results to collect.	Outcomes and interpretation; Data extraction.
METHODS	10b	List and define all other variables for which data were sought. Describe any assumptions made about missing or unclear information.	Data extraction.
METHODS	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and, if applicable, details of automation tools used in the process.	Critical appraisal and risk of bias; Online Resource 2.
METHODS	12	Specify for each outcome the effect measure(s) used in the synthesis or presentation of results.	Statistical synthesis.
METHODS	13a	Describe the processes used to decide which studies were eligible for each synthesis.	Analytical classification; Statistical synthesis; Table 2.
METHODS	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics or data conversions.	Data extraction; Statistical synthesis.
METHODS	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Statistical synthesis.
METHODS	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify statistical heterogeneity, and software package(s) used.	Statistical synthesis.
METHODS	13e	Describe any methods used to explore possible causes of heterogeneity among study results.	Statistical synthesis; Sensitivity analyses.
METHODS	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	Sensitivity analyses.
METHODS	14	Describe any methods used to assess risk of bias due to missing results in a synthesis.	Small-study effects.
METHODS	15	Describe any methods used to assess certainty in the body of evidence for an outcome.	Certainty of evidence; no formal certainty assessment was performed.
RESULTS	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Study selection; Figure 1.

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RESULTS	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	Study selection; Figure 1 (full-text exclusion categories and counts).
RESULTS	17	Cite each included study and present its characteristics.	General characteristics; Table 1; References.
RESULTS	18	Present assessments of risk of bias for each included study.	Critical appraisal and risk of bias; Online Resource 2.
RESULTS	19	For all outcomes, present, for each study: summary statistics for each group (where appropriate) and an effect estimate and its precision, preferably using structured tables or plots.	Table 3; Figure 3.
RESULTS	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Analytical classification and primary meta-analysis; Tables 1–3.
RESULTS	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	Primary meta-analysis; Table 4; Figure 3.
RESULTS	20c	Present results of all investigations of possible causes of heterogeneity among study results.	Sensitivity analyses; no meta-regression was performed because data were insufficient.
RESULTS	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	Sensitivity analyses; Table 4; Online Resources 3–5.
RESULTS	21	Present assessments of risk of bias due to missing results for each synthesis assessed.	Small-study effects; Online Resource 6.
RESULTS	22	Present assessments of certainty in the body of evidence for each outcome assessed.	Not performed, as stated in Certainty of evidence and Strengths and limitations.
DISCUSSION	23a	Provide a general interpretation of the results in the context of other evidence.	Discussion.
DISCUSSION	23b	Discuss any limitations of the evidence included in the review.	Sources of heterogeneity; Strengths and limitations.
DISCUSSION	23c	Discuss any limitations of the review processes used.	Strengths and limitations.
DISCUSSION	23d	Discuss implications of the results for practice, policy, and future research.	Clinical interpretation; Research implications; Conclusions.
OTHER INFORMATION	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	Registration and protocol: the review was not registered.

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OTHER INFORMATION	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	Registration and protocol: no protocol was made publicly available.
OTHER INFORMATION	24c	Describe and explain any amendments to information provided at registration or in the protocol.	Not applicable because there was no registration or public protocol.
OTHER INFORMATION	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	Funding.
OTHER INFORMATION	26	Declare any competing interests of review authors.	Competing interests.
OTHER INFORMATION	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	Data availability; Online Resources 1–9. Supporting workbook and analytic code are retained by the authors.

Reference: Page MJ, McKenzie JE, Bossuyt PM, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ. 2021;372:n71. <https://doi.org/10.1136/bmj.n71>