Table #. Meta-epidemiological study items checklist

Section/Topic	Item in research	Complete – Page Number
Title		
Title	Identify the report as a meta-epidemiologic study	Yes No N/A - Page 1 ☒ ☐ ☐
Abstract		
Structured Summary	Provide a structured summary that includes the background of the topic, goal of the study, data sources, method of data selection, appraisal and synthesis methods, results, limitations, conclusions and implications of key findings	Yes No N/A - Page 3 ☒ ☐ ☐
Introduction		
Rationale	Describe the rationale for the meta-epidemiological study in the context of what is already known	Yes No N/A - Page 4 ☒ ☐ ☐
Objectives	Provide an explicit statement of the goal of the meta-epidemiological study and the hypothesis being empirically tested	Yes No N/A - Page 4 ☒ ☐ ☐
Methods		
Protocol	Indicate if a protocol exists, if and where it can be accessed (eg, Web address). Registration of a protocol is not mandatory	Yes No N/A - Page ☐ ☐ ☒
Eligibility Criteria	Specify study characteristics used as criteria for eligibility with a rationale	Yes No N/A - Page 6 ☒ ☐ ☐
Information Sources	Describe all information sources (eg, databases with dates of coverage, contact with experts to identify additional studies, Internet searches) and search date	Yes No N/A - Page 9 ☒ ☐ ☐
Search	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated. Search is commonly not driven by a clinical question	Yes No N/A - Supplement ☒ ☐ ☐
Study Selection	Describe the process for selecting studies for inclusion (ie, how many reviewers selected studies, reviewing in duplicate or by single individuals)	Yes No N/A - Page 7 ☒ ☐ ☐
Data Collection Process	Describe method of data extraction from reports (eg, piloted forms, independently, in duplicate) and any processes used for manipulating data or obtaining and confirming data from investigators	Yes No N/A - Page 8 ☒ ☐ ☐
Data Items	List and define all variables for which data were sought and any assumptions and imputations made	Yes No N/A - Page 9 ☒ ☐ ☐
Risk of bias in individual studies	If risk of bias assessment of individual studies was relevant to the analysis, describe the items used and how this information is to be used during data synthesis	Yes No N/A ☐ ☐ ☒
Summary measures	State the principal summary measures (eg, ratio of risk ratios, difference in means) and explain its meaning and direction to readers	Yes No N/A - Page 9 ☒ ☐ ☐
Synthesis of results	Describe the statistical or descriptive methods of synthesis including measures of consistency if relevant. If applicable, describe the development of statistical or simulation modelling based on theoretical background. Describe and justify assumptions and computational approximations. Describe methods of additional analyses (eg, sensitivity or subgroup analyses, meta-regression), if done, indicating which were prespecified	Yes No N/A - Page 10 ☒ ☐ ☐
Results		
Study selection	Give numbers of studies assessed for eligibility and included in the study, with reasons for exclusions at each stage, ideally with a flow diagram. Present a	Yes No N/A - Page 11 ☒ ☐ ☐

	measure of inter-reviewer agreement (eg, kappa statistic)		
Study characteristics	For each study, present characteristics for which data were extracted and provide the citations. Clinical characteristics may not always be relevant	Yes ☒ No ☐ N/A ☐	- Page 11
Risk of bias within studies	If risk of bias assessment of individual studies was used in the meta-epidemiological analysis, report risk of bias indicators of each study to allow replication of findings	Yes ☐ No ☐ N/A ☒	
Results of individual studies	Present data elements used in the meta-epidemiological analysis from each study (results of clinical outcomes may not be relevant)	Yes ☒ No ☐ N/A ☐	- Supplement
Synthesis of results	Present results of statistical analysis done, including measures of precision and measures of consistency. Present validity of assumptions and fit of statistical or simulation modelling, if applicable	Yes ☒ No ☐ N/A ☐	- Page 11
Additional analysis	Give results of additional analyses, if done (eg, sensitivity or subgroup analyses, metaregression)	Yes ☒ No ☐ N/A ☐	- Page 16
Discussion			
Summary of evidence	Summarise the main findings and compare them with existing knowledge about the topic. The quality of evidence may not be relevant; however, investigators should describe their certainty in the results to readers	Yes ☒ No ☐ N/A ☐	- Page 17
Limitations	Discuss limitations at research methodology level (eg, likelihood of reporting or publication bias)	Yes ☒ No ☐ N/A ☐	- Page 19
Conclusions	Provide general interpretation of the results and implications for future research. Provide any plausible impact on clinical practice	Yes ☒ No ☐ N/A ☐	- Page 20
Funding			
Funding	Describe sources of funding for the methodology research and role of funders	Yes ☒ No ☐ N/A ☐	- Page 2

Adapted from Murad and Wang (2017) (https://ebm.bmj.com/content/ebmed/22/4/139.full.pdf).