

Supplementary Appendix A. MOOSE Checklist

Checklist items		Page no. of reported item
Reporting of background should include		
1	Problem definition	5-6
2	Hypothesis statement	5-6
3	Description of study outcome(s)	5-6
4	Type of exposure or intervention used	5-6
5	Type of study designs used	5-6
6	Study population	5-6
Reporting of search strategy should include		
7	Qualifications of searchers (eg, librarians and investigators)	7
8	Search strategy, including time period included in the synthesis and keywords	7
9	Effort to include all available studies, including contact with authors	7
10	Databases and registries searched	7
11	Search software used, name and version, including special features used (eg, explosion)	7
12	Use of hand searching (eg, reference lists of obtained articles)	7
13	List of citations located and those excluded, including justification	7
14	Method of addressing articles published in languages other than English	7
15	Method of handling abstracts and unpublished studies	7
16	Description of any contact with authors	7
Reporting of methods should include		
17	Description of relevance or appropriateness of studies assembled for assessing the hypothesis to be tested	7-8
18	Rationale for the selection and coding of data (eg, sound clinical principles or convenience)	7-8
19	Documentation of how data were classified and coded (eg, multiple raters, blinding, and interrater reliability)	8
20	Assessment of confounding (eg, comparability of cases and controls in studies where appropriate)	8
21	Assessment of study quality, including blinding of quality assessors; stratification or regression on possible predictors of study results	8
22	Assessment of heterogeneity	9
23	Description of statistical methods (eg, complete description of fixed or random effects models, justification of whether the chosen models account for predictors of study results, dose-response models, or cumulative meta-analysis) in sufficient detail to be replicated	9
24	Provision of appropriate tables and graphics	8-9
Reporting of results should include		
25	Graphic summarizing individual study estimates and overall estimate	10
26	Table giving descriptive information for each study included	10-11
27	Results of sensitivity testing (eg, subgroup analysis)	11-13

28	Indication of statistical uncertainty of findings	11-13
Reporting of discussion should include		
29	Quantitative assessment of bias (eg, publication bias)	12
30	Justification for exclusion (eg, exclusion of non-English-language citations)	7
31	Assessment of quality of included studies	11
Reporting of conclusions should include		
32	Consideration of alternative explanations for observed results	14-15
33	Generalization of the conclusions (ie, appropriate for the data presented and within the domain of the literature review)	14-15
34	Guidelines for future research	16-17
35	Disclosure of funding source	22

Adapted from: Stroup DF, Berlin JA, Morton SC, et al. Meta-analysis of observational studies in epidemiology: a proposal for reporting. Meta-analysis Of Observational Studies in Epidemiology (MOOSE) group. JAMA. 2000; 283(15):2008-2012.

Supplementary Appendix B. Detailed search strategy

Database	Search strategy
PubMed	(((((((("Colonoscopy"[Mesh]) OR "Endoscopy"[Mesh]) OR colonoscopy) OR endoscopy)) AND (((((((colorectal) OR colon) OR rectum) OR "large bowel"))) AND (((((((cancer) OR carcinoma) OR neoplasm) OR tumor) OR tumour) OR adenocarcinoma))) OR "Colorectal Neoplasms"[Mesh])) AND (((((((("relative risk") OR "relative risks") OR "odds ratio") OR "odds ratios") OR "rate ratio") OR "rate ratios") OR "risk ratio") OR "risk ratios") OR "hazard ratio") OR "hazard ratios")) AND (((("Case-Control Studies"[Mesh]) OR "Cohort Studies"[Mesh]) OR cohort) OR "case control") Filters: Publication date to 2015/04/30
EMBASE	colonoscopy OR endoscopy OR 'colonoscopy'/exp OR 'endoscopy'/exp AND (colorectal OR 'colon'/exp OR colon OR 'rectum'/exp OR rectum OR 'large bowel'/exp OR 'large bowel' AND ('cancer'/exp OR cancer OR 'carcinoma'/exp OR carcinoma OR 'neoplasm'/exp OR neoplasm OR 'tumor'/exp OR tumor OR 'tumour'/exp OR tumour OR 'adenocarcinoma'/exp OR adenocarcinoma) OR 'colorectal cancer'/exp OR 'colorectal tumor'/exp) AND ('relative risk' OR 'relative risks' OR 'odds ratio' OR 'odds ratios' OR 'rate ratio' OR 'rate ratios' OR 'risk ratio' OR 'risk ratios' OR 'hazard ratio' OR 'hazard ratios') AND (cohort OR 'case control' OR 'cohort analysis'/exp OR 'case control study'/exp) AND ([embase]/lim OR [embase classic]/lim) AND [1-1-1945]/sd NOT [30-4-2015]/sd

Supplementary Appendix C. Study quality assessment for cohort studies (Newcastle-Ottawa Scale)

Study	Selection				Comparability	Outcome			Total no. of stars
	Exposed cohort	Nonexposed cohort	Ascertainment of exposure	Outcome of interest		Assessment of outcome	Length of follow-up	Adequacy of follow-up	
Eldridge <i>et al</i> , 2013 (60)	-	*	-	*	**	*	*	-	6
Nishihara <i>et al</i> , 2013 (18)	-	*	-	*	**	*	*	*	7
Morois <i>et al</i> , 2014 (61)	*	*	-	*	**	-	*	*	7
Jacob <i>et al</i> , 2012 (62)	*	*	*	*	**	*	*	*	9
Wang <i>et al</i> , 2013(63)	-	*	*	*	**	*	*	-	7

-, no star(s) awarded.

Supplementary Appendix D. Study quality assessment for case-control studies (Newcastle-Ottawa Scale)

Study	Selection				Comparability	Exposure			Total no. of stars
	Definition of cases	Representativeness of cases	Selection of controls	Definition of controls		Ascertainment of exposure	Method of ascertainment	Non-response rate	
Brenner <i>et al</i> , 2014 (19)	-	*	*	*	**	-	*	*	7
Baxter <i>et al</i> , 2012 (28)	-	-	*	*	**	-	*	*	6
Kahi <i>et al</i> , 2014 (29)	-	-	-	*	**	-	*	*	5
Müller <i>et al</i> , 1995 (64)	-	-	-	*	**	-	*	-	4
Müller <i>et al</i> , 1995 (65)	-	-	-	*	**	-	*	-	4
Mulder <i>et al</i> , 2010 (66)	*	*	*	*	**	-	*	-	7

-, no star(s) awarded.