

Table 2 Summary of main findings.

Outcome	Study design Number of studies (with unadjusted + adjusted data) Number of participants	Results, Odds ratio (95% CI)	GRADE	Comment
Snus and initiation of tobacco smoking	Longitudinal observational design 5 (5+3) 23 472	Unadjusted: 2.09 (1.57 to 2.79) Adjusted: 2.48 (1.79 to 3.44)	⊕⊕○○ ^{a b c d}	It is possible that Swedish snuff may be a risk factor for later initiation of cigarette smoking
Snus and current tobacco smoking	Longitudinal observational design 3 (3+3) 3443	Unadjusted: 2.16 (1.08 to 4.31) Adjusted: 2.48 (1.79 to 3.44)	⊕○○○ ^{a b c d f}	Not enough data to draw conclusions about associations
Snus and quitting smoking	Longitudinal observational design 2 (2+0) 6350	Unadjusted: 1.98 (1.72 to 2.28) Adjusted: No data	⊕○○○ ^{a c d f h}	Not enough data to draw conclusions about associations
Snus and increased tobacco smoking	Longitudinal observational design 1 (0+1) No information	Unadjusted: No data Adjusted: 6.21 (3.20 to 12.05)	⊕○○○ ^{a c d h}	Not enough data to draw conclusions about associations
E-cigarettes and initiation of tobacco smoking	Longitudinal observational design 22 (17+20) 89 076	Unadjusted: 4.68 (3.64 to 6.02) Adjusted: 3.37 (2.68 to 4.24)	⊕⊕⊕○ ^a	It is probable that e-cigarettes may be a risk factor for later initiation of cigarette smoking
E-cigarettes and current tobacco smoking	Longitudinal observational design 10 (7+9) 39 086	Unadjusted: 3.51 (2.87 till 4.29) Adjusted: 3.89 (2.16 till 7.00)	⊕⊕⊕○ ^a	It is probable that e-cigarettes may be a risk factor for later current cigarette smoking
E-cigarettes and quitting smoking*	Longitudinal observational design 28 (18+14) 39 147 RCT 8 3202	Unadjusted: 0.99 (0.78 till 1.33) Adjusted: 0.95 (0.70 till 1.28) RCT: 1.78 (1.41 till 2.25) Data not included in the meta-analyses ¹	⊕○○○ ^{a b e g i}	Data to diverse to draw conclusions about associations
E-cigarettes and quitting smoking at least 30 days*	Longitudinal observational design 17 (9+9) 13 588 RCT 4 2368	Unadjusted: 0.96 (0.77 till 1.19) Adjusted: 0.86 (0.59 till 1.25) RCT: 2.04 (1.51 till 2.77) Data not included in the meta-analyses ¹	⊕○○○ ^{a b c e g i k}	Data to diverse to draw conclusions about associations
E-cigarettes and decreased tobacco smoking*	Longitudinal observational design 13 (7+12) 14817 RCT 7 2851	Unadjusted: 1.22 (0.89 till 1.66) Adjusted: 1.46 (1.03 till 2.08) RCT: OR:1.79 (1.26 till 2.55) Mean Difference: 1.08 (-0.38 till 2.54) Data not included in the meta-analyses ^{2,3}	⊕○○○ ^{a b e g i j}	Data to diverse to draw conclusions about associations

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Table 2 continued

Outcome	Study design Number of studies (with unadjusted + adjusted data) Number of participants	Results, Odds ratio (95% CI)	GRADE	Comment
E-cigarettes and increased tobacco smoking*	Longitudinal observational design 11 (6+9) 13 286 RCT 3 891	Unadjusted: 1.79 (1.40 till 2.29) Adjusted: 1.91 (1.36 till 2.69) RCT: OR: No data Mean Difference: 1.08 (-0.38 till 2.54) Data not included in the meta-analyses: ^{2,3}	⊕○○○ ^{abcegi}	Data to diverse to draw conclusions about associations

^a Material with several deficits and limitations.

^b The confidence interval for one or several of the included studies include the value for no association.

^c The analysis is based on a limited amount of studies or participants

^d One or several of the included studies include only one subcategory of the general population e.g. only men or only individuals younger than 18 years.

^e Some of the included studies show a positive association, while others show a negative one.

^f The time to follow-up is long, or varies a lot between studies, which makes the association between exposure and outcome less clear.

^g The confidence interval of the meta-analysis (unadjusted/adjusted/ continuous/ dichotomous) include the value for no association.

^h Unadjusted data or data adjusted for confounders is lacking.

ⁱ Limitations in transferability for results from clinical study of smoking cessation to behaviour in the general population (refers to, among other things, differences in population, availability of intervention, comparison alternatives).

^j Variations in the way to define the outcome.

^k The adjusted and unadjusted analyses differ both regarding which studies that are included in the meta-analyses, and their results.

* Also studies with data presented in forms that could not be transformed to either odds ratios or mean differences, were considered during the grading of evidence. These studies were not included in the meta-analyses but were incorporated narratively when appropriate, as follows:

¹ Continuous abstinence rate measured between 9–24 weeks [8]. Smoking cessation was achieved by 28.0 percent of the participants in the group who were allocated to nicotine chewing gum and by 21.3 percent of the participants allocated to e-cigarettes. No statistically significant difference was seen between the groups.

² Unadjusted data: One study (persons 12–17 years) indicates an association between e-cigarette use and increased use of smoking tobacco (frequency), the association is not statistically significant [9]. One study (adults) indicates an association between e-cigarette use and reduced use of smoking tobacco (quantity), the connection is statistically significant [10]. Two studies (adults) indicate an association between e-cigarette use and reduced use of smoking tobacco (quantity), the associations are not statistically significant [11,12].

³ Adjusted data: Two studies show an association between e-cigarette use and reduced use of smoking tobacco (frequency and quantity) [13] or (quantity) [10], the associations are statistically significant. Three studies indicate a link between e-cigarette use and reduced use of smoking tobacco (quantity), the links are not statistically significant [11,12,14]. One study indicates an association between e-cigarette use and increased use of smoking tobacco (frequency and quantity), the link is statistically significant [15]. One study indicates a link between e-cigarette use and increased use of smoking tobacco (frequency) [16,17], the link is not statistically significant.