

## Supplementary Material 1

### Search strategies

MEDLINE, Embase, CENTRAL

Note: Searches were conducted using an Ovid multi-database search and duplicate records were removed online giving preference to MEDLINE, then Embase, with no field preference. Lines 1-3 are optimized for MEDLINE and the main question constructs are broken out in separate lines for clarity. Lines 4-7 are optimized for Embase and lines 8-10 are optimized for CENTRAL. The next lines isolate the records to the database the search was designed for, combine those sets and then remove duplicate records and final isolate the records from each database again so each can be downloaded and imported into the citation manager using a database-specific import filter.

1. Electronic Nicotine Delivery Systems/ or (e cig\* or electr\* cigar\* or electronic nicotine).mp. or (vape or vaper or vapers or vaping or non-combustible nicotine-containing product).ti,ab,kf.
2. exp "Tobacco Use Cessation Devices"/ or NRT.ti,ab,kf. or (nicotine adj2 (patch\* or gum or nasal spray or mouth spray or mouth strips or lozenge\* or tablet\* or microtab\* or sublingual or replac\*)).mp. or (nicotine adj3 therapy).mp.
3. (1 and 2 and ((randomized controlled trial or controlled clinical trial).pt. or randomized.ab. or placebo.ab. or drug therapy.fs. or randomly.ab. or trial.ab. or groups.ab.)) not exp animals/ not humans.sh.
4. Electronic Cigarette/ or (e cig\* or electr\* cigar\* or electronic nicotine).mp. or (vape or vaper or vapers or vaping or non-combustible nicotine-containing product).ti,ab,kw.
5. Nicotine Replacement Therapy/ or NRT.ti,ab,kw. or (nicotine adj2 (patch\* or gum or nasal spray or mouth spray or mouth strips or lozenge\* or tablet\* or microtab\* or sublingual or replac\*)).mp. or (nicotine adj3 therapy).mp.
6. 4 and 5 and (Crossover-Procedure/ or Double-Blind Procedure/ or Randomized Controlled Trial/ or Single-Blind Procedure/ or (random\* or factorial\* or crossover\* or cross over\* or cross-over\* or placebo\* or (doubl\* adj blind\*) or (singl\* adj blind\*) or assign\* or allocat\* or volunteer\*).ti,ab,kw.)
7. limit 6 to embase
8. (e cig\* or electr\* cigar\* or electronic nicotine).mp. or (vape or vaper or vapers or vaping or non-combustible nicotine-containing product).ti,ab,kw.
9. NRT.ti,ab,kw. or (nicotine adj2 (patch\* or gum or nasal spray or mouth spray or mouth strips or lozenge\* or tablet\* or microtab\* or sublingual or replac\*)).mp. or (nicotine adj3 therapy).mp.
10. 8 and 9
11. 3 use medall
12. 7 use emczd
13. 10 use cctr
14. 11 or 12 or 13
15. remove duplicates from 14
16. 15 use medall
17. 15 use emczd
18. 15 use cctr

ClinicalTrials.gov

(electronic cigarette OR vape OR vaping OR electronic nicotine) AND (nicotine replacement OR NRT OR patch OR gum OR nasal spray OR mouth spray OR mouth strips OR lozenge OR tablet OR microtab OR microtablet OR sublingual) | Interventional Studies

91 records retrieved

WHO ICTRP

electronic cigarette OR vape or vaping OR electronic nicotine

153 records retrieved with 20 remaining after records with a TrialID starting with NCT were removed prior to screening

Note: As the ICTRP registry has limited search capabilities<sup>35</sup>, only terms related to the intervention were used and protocols with a NCT number were removed from the retrieval, as those protocols would also be included in ClinicalTrials.gov.