

SELECT COMMITTEE ON TOBACCO HARM REDUCTION

Professor Emily Banks
Responses to Questions on Notice from
Hearing on Friday, 13 November 2020

QUESTION ON NOTICE 3: Could you take on notice the eligibility criteria, just to be clear, and take on notice whether you have done a sensitivity analysis on the Lee study and whether taking that out would make a difference. [Senator Canavan]

Response: eligibility criteria, consideration of nicotine dose and exclusion of data from specific study

My team has been commissioned by the Department of Health to conduct an independent public health assessment of e-cigarettes – nicotine-delivering and non-nicotine-delivering – for Australia and, within this, an independent review of the efficacy of nicotine- and non-nicotine-delivering e-cigarettes for smoking cessation.

In keeping with current best practice, the methods for this review, including eligibility criteria, were publicly registered on PROSPERO (registration CRD42020170692)¹ prior to the conduct of the review and as cited in the pre-print materials online and made available to the committee;² additional details are included in the supplementary material, which is also online and was made available to the committee.² ^{supplementary material} The analyses conducted as part of this review, including sensitivity analyses, are reported in the review that was part of our submission.

As noted in our submission, we are acutely aware of the limitations of the body of evidence regarding e-cigarettes and smoking cessation, including the multiple issues with the available trials; in our review the overall quality of the evidence was rated as low.² Of the nine trials that were found to be eligible, six had quality issues leading to them being rated as having a high risk of bias, three were pilot studies that were designed primarily to investigate trial feasibility rather than the effectiveness of the intervention and four had information indicating potential competing interests. Additional issues include wide variation in settings, policy environments, device characteristics, doses of nicotine, and the populations considered. However, as noted previously, there are promising signs, with the one study that was rated as being of high quality also being the only one to find a significant benefit of e-cigarettes for smoking cessation compared to nicotine-replacement therapy.³ This was conducted in the setting where smokers used the e-cigarettes within medical quit-smoking services and saw a health professional regularly for behavioural support.³

Consideration of the *total* body of evidence underpins the main finding of the review cited in our submission: that there is insufficient evidence whether or not nicotine-delivering e-cigarettes are an effective aid for smoking cessation.² However, some results are promising, particularly for therapeutic use. Evidence in this area is continuing to accrue and updated reviews incorporating emerging evidence will be necessary.

The scientific elements of this review, including the analyses, are necessarily independent – including being independent of government, industry and political pressure. A paper on the review is currently under consideration by a peer-reviewed journal.

References

1. Banks E, Lucas R, Harris M, et al. A systematic review of the efficacy of e-cigarettes as combustible tobacco smoking and nicotine cessation aids. *PROSPERO 2020 CRD42020170692* Available from: https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42020170692
2. Banks E, Yazidjoglou A, Brown S, et al. Systematic review and meta-analysis of evidence on the efficacy of e-cigarette use for sustained smoking and nicotine cessation. *medRxiv* 2020
3. Hajek P, Phillips-Waller A, Przulj D, et al. A randomized trial of e-cigarettes versus nicotine-replacement therapy. *N Engl J Med* 2019;380(7):629-37.