

E-cigarettes for smoking cessation: the latest Cochrane living systematic review evidence

Jamie Hartmann-Boyce*¹, Nicola Lindson,* Ailsa Butler¹, Hayden McRobbie, Chris Bullen, Rachna Begh, Annika Theodoulou, Caitlin Notley, Nancy A Rigotti, Tari Turner, Thomas Fanshawe, Peter Hajek

*joint first authors

¹ Presenting authors: Centre for Evidence-Based Medicine and Cochrane Tobacco Addiction Group, Nuffield Department of Primary Care Health Sciences, University of Oxford. Jamie.hartmann-boyce@phc.ox.ac.uk

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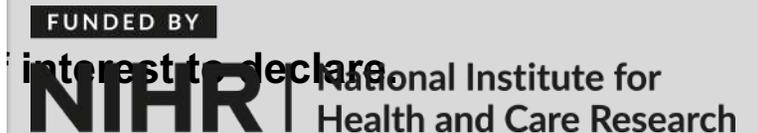
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We have never received industry funding and



Our author team



About Cochrane

WHAT?

- Gathers and combines the best evidence from research to determine the benefits and risks of treatments/interventions

HOW?

- By systematically reviewing the available evidence, with strong emphasis on quality assessment
- Cochrane methods considered gold-standard

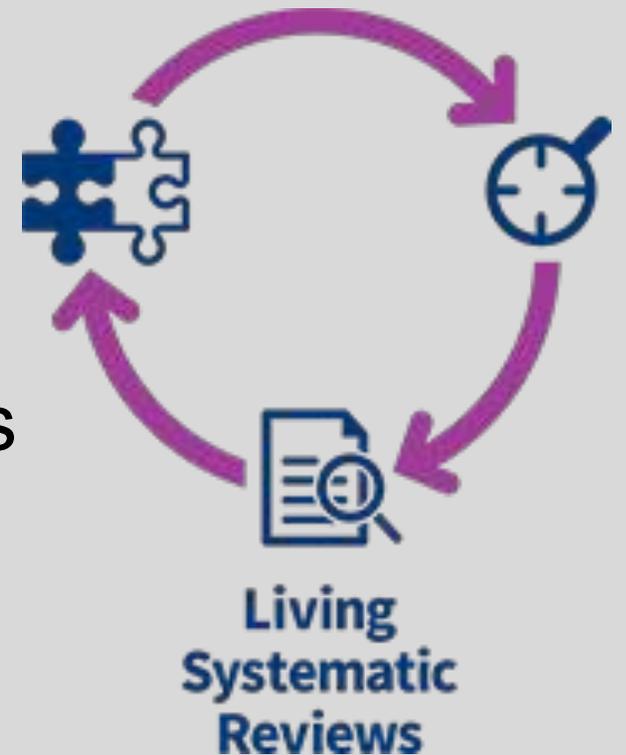
WHY?

- To help healthcare providers, patients, carers, researchers, funders, policy makers, guideline developers improve their knowledge and make decisions



Living systematic review (LSR)

- Search for new evidence monthly
- Publish links to new evidence monthly
- Update full review when new data emerges that changes, strengthens, or weakens existing conclusions, or relates to new comparisons or outcomes



Also as part of the living systematic review project...

Review update published Nov 2022

nicotine e-cigarettes than using nicotine replacement therapy, or nicotine-free e-cigarettes.

- Nicotine e-cigarettes may work better than no support for quitting smoking, or than behavioural support alone.
- Nicotine e-cigarettes may not be associated with serious unwanted effects.
- The unwanted effects reported most often with nicotine e-cigarettes were throat or mouth irritation, headache, cough and

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December 2020

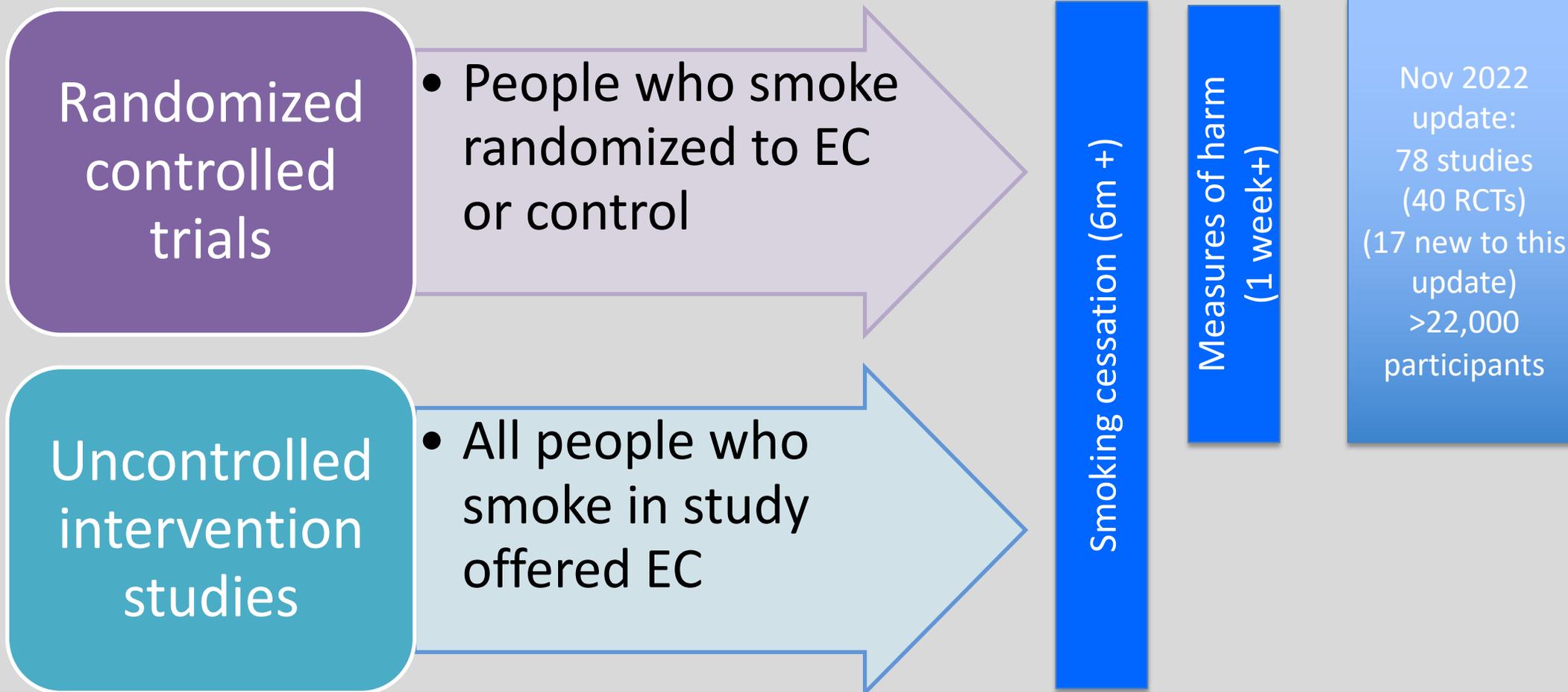
This briefing document brings you the most up to date information on the effects of electronic cigarettes (ECs) to help people who smoke achieve long-term smoking cessation.

Key findings

- Findings across the main comparisons consistently favoured EC for smoking cessation at 6 months or longer. Quit rates were higher with nicotine EC compared to: non-nicotine EC; to nicotine replacement therapy (NRT) and to behavioural support only or no support.

e-cigarettes

Inclusion criteria



Primary comparisons

- Nicotine e-cigarette versus NRT
- Nicotine e-cigarette versus behavioural support only/no-support
- Nicotine e-cigarette versus non-nicotine e-cigarette



Preventive Medicine

Available online 3 August 2022, 107182

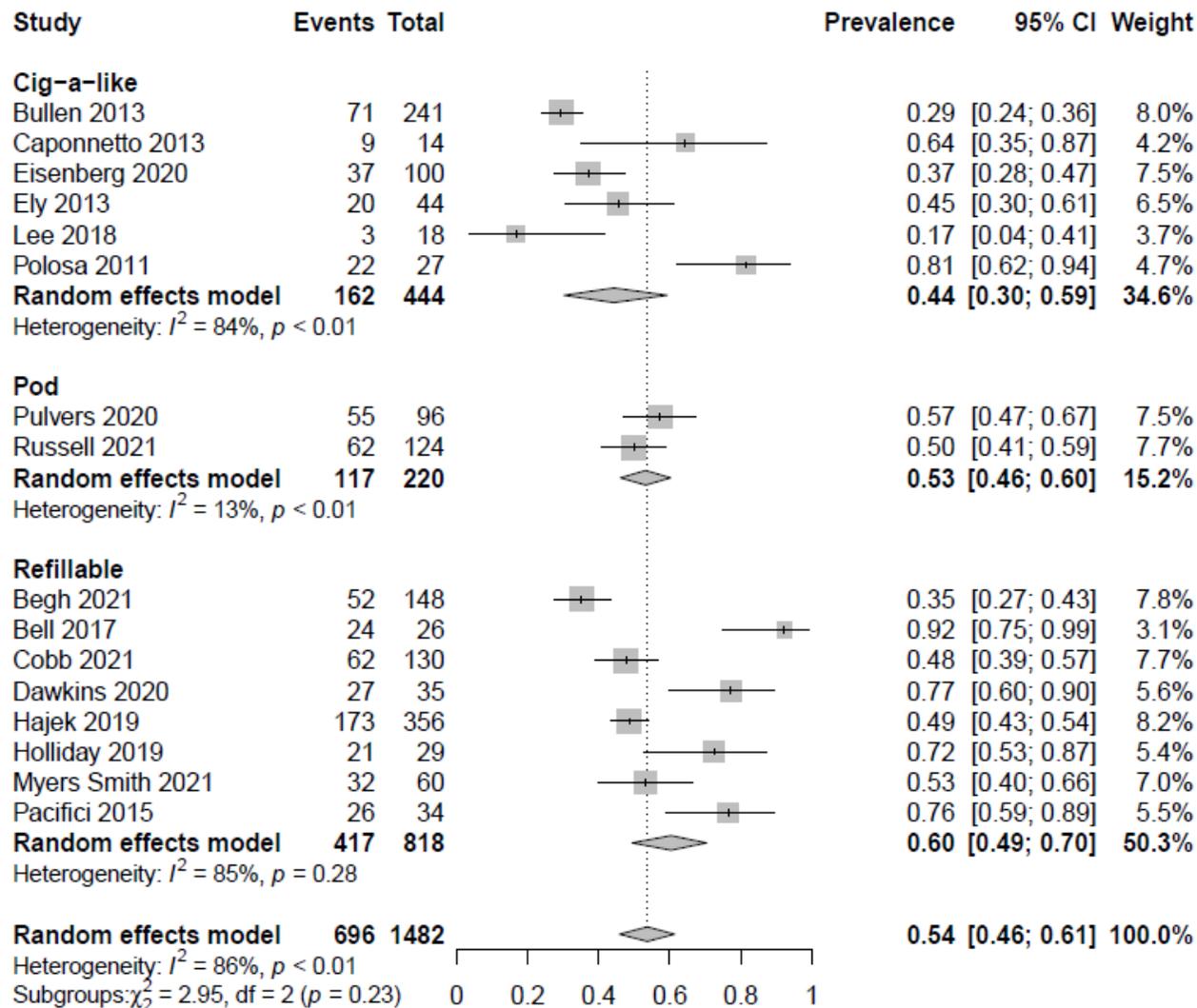
In Press, Corrected Proof



Longer-term use of electronic cigarettes when provided as a stop smoking aid: Systematic review with meta-analyses

Ailsa R. Butler^a, Nicola Lindson^a, Thomas R. Fanshawe^a, Annika Theodoulou^a, Rachna Begh^a, Peter Hajek^b, Hayden McRobbie^c, Chris Bullen^d, Caitlin Notley^e, Nancy A. Rigotti^f, Jamie Hartmann-Boyce^a

Prevalence of EC use at 6+ months grouped by device type





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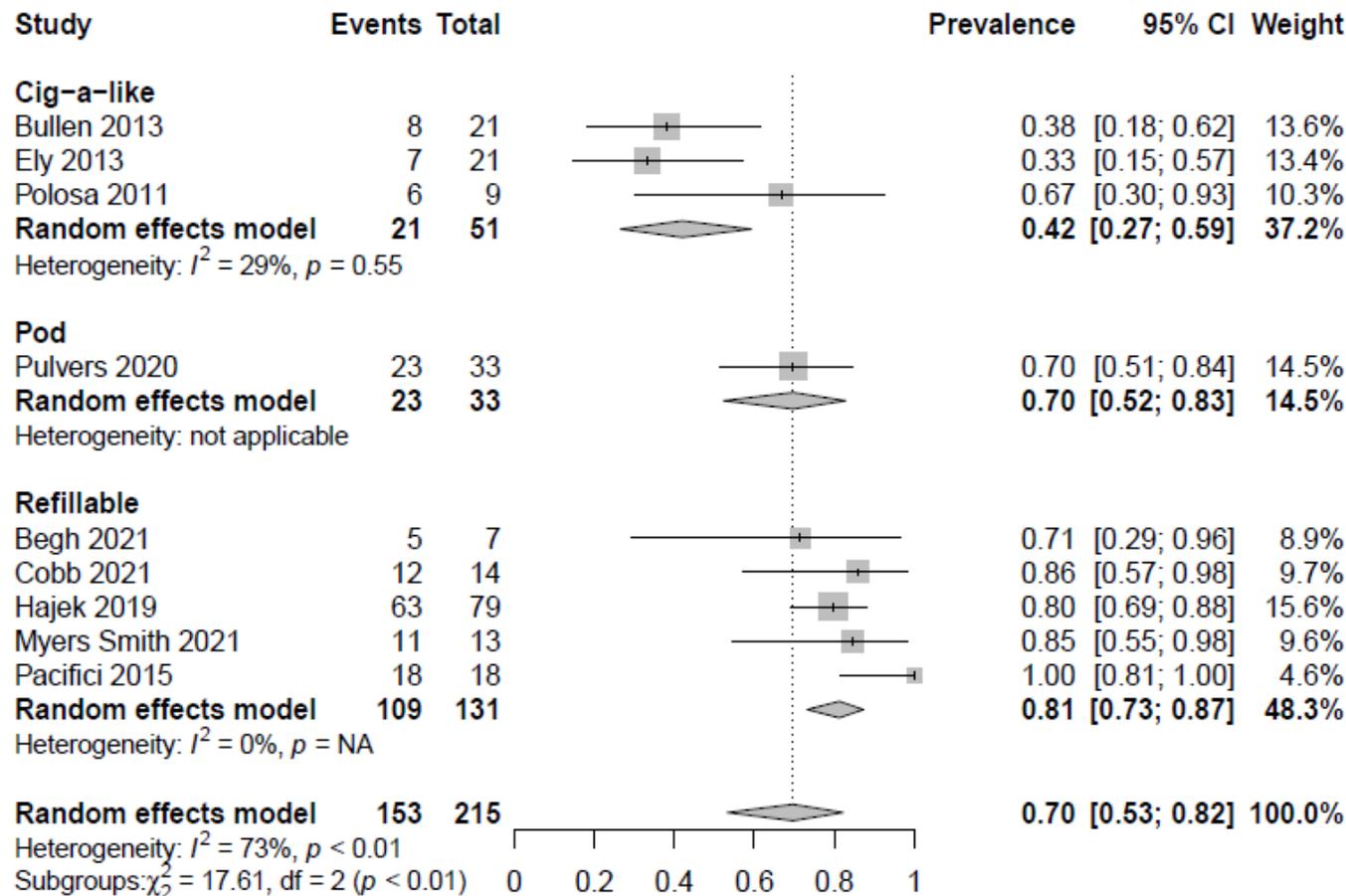
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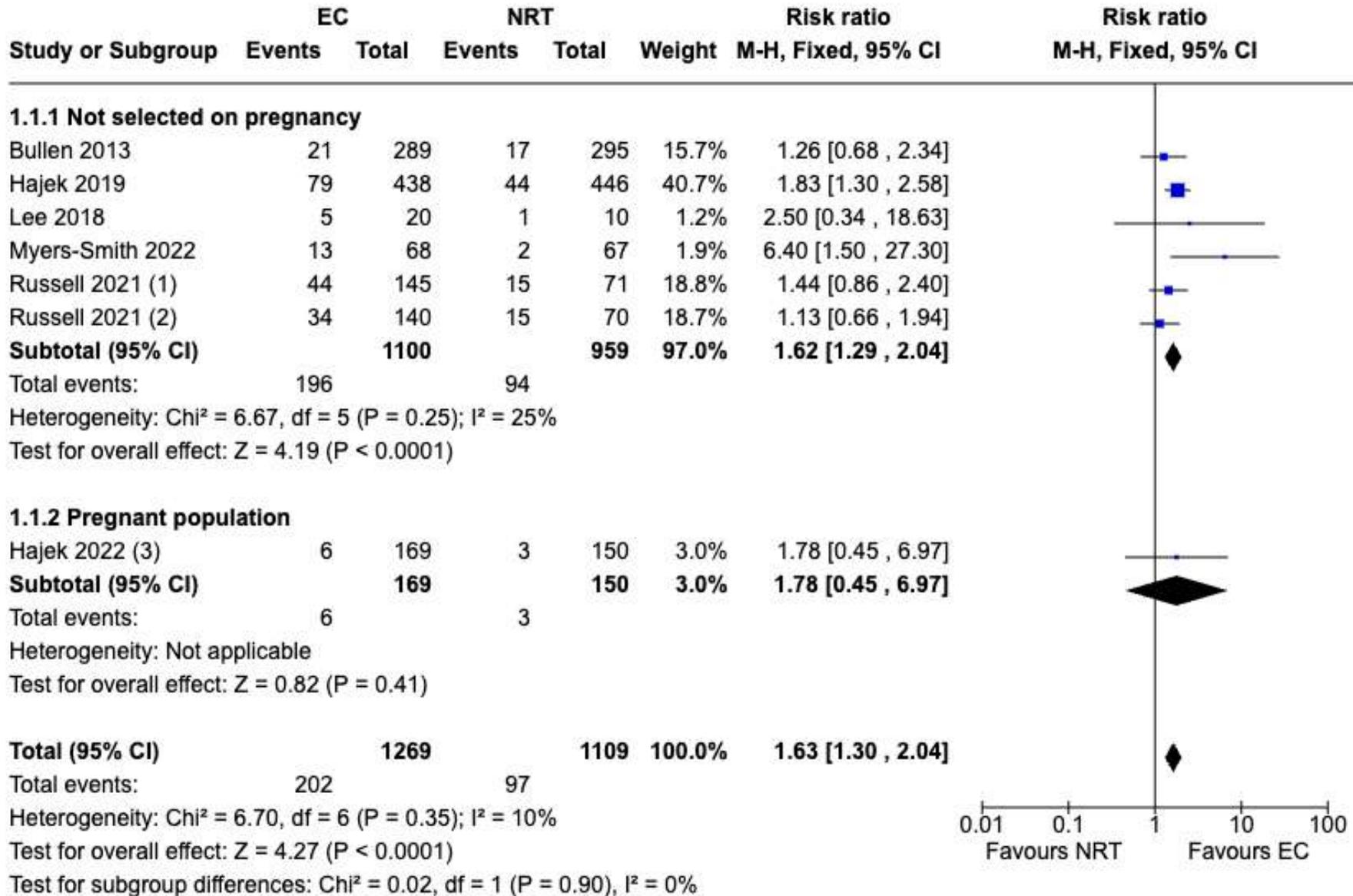
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Of the people who quit tobacco cigarettes what proportion are using ECs at 6+ months grouped by device type



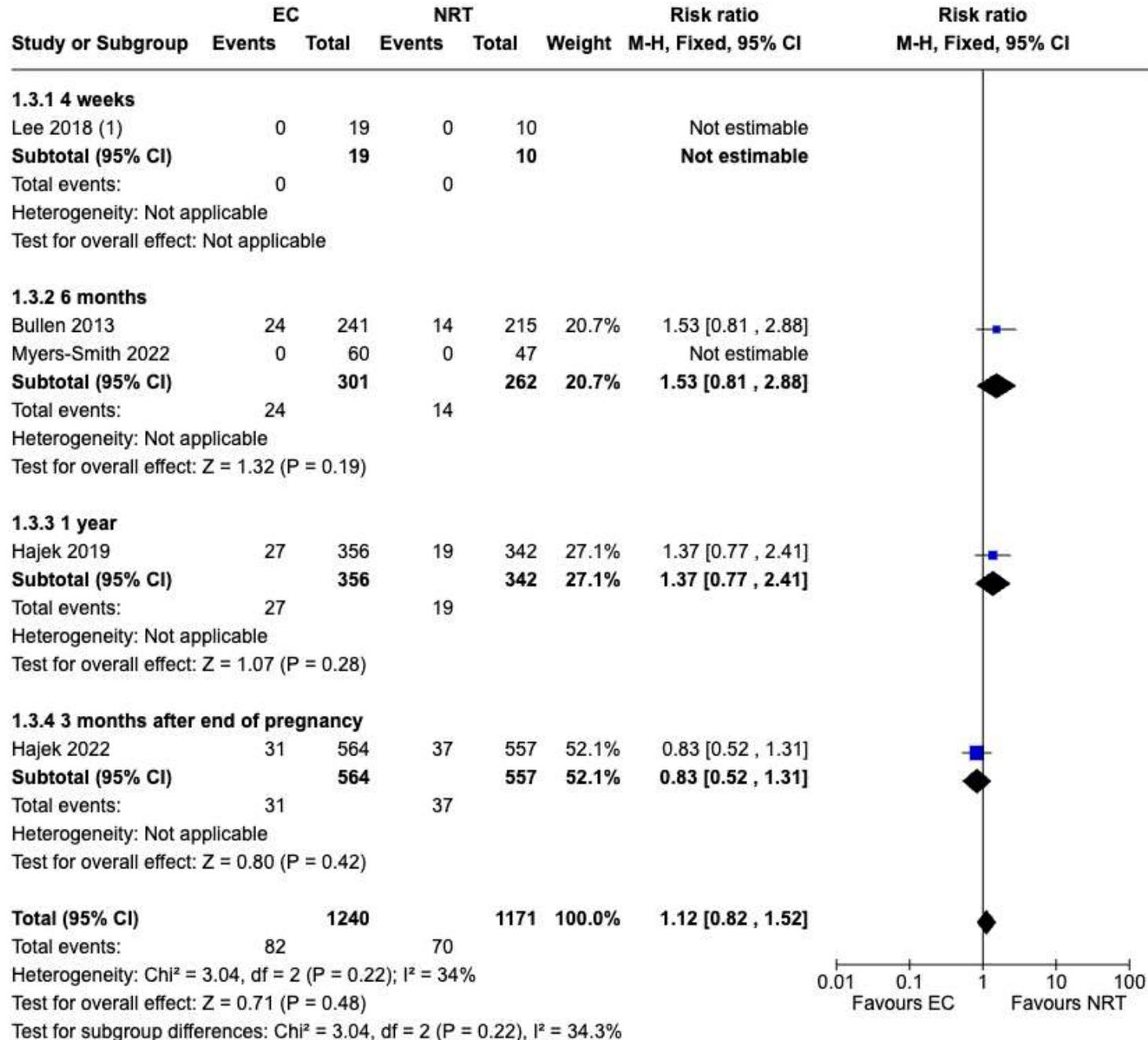
Nicotine e-cigarette versus NRT: Quitting at 6+ months

GRADE
 certainty of
 evidence:
HIGH

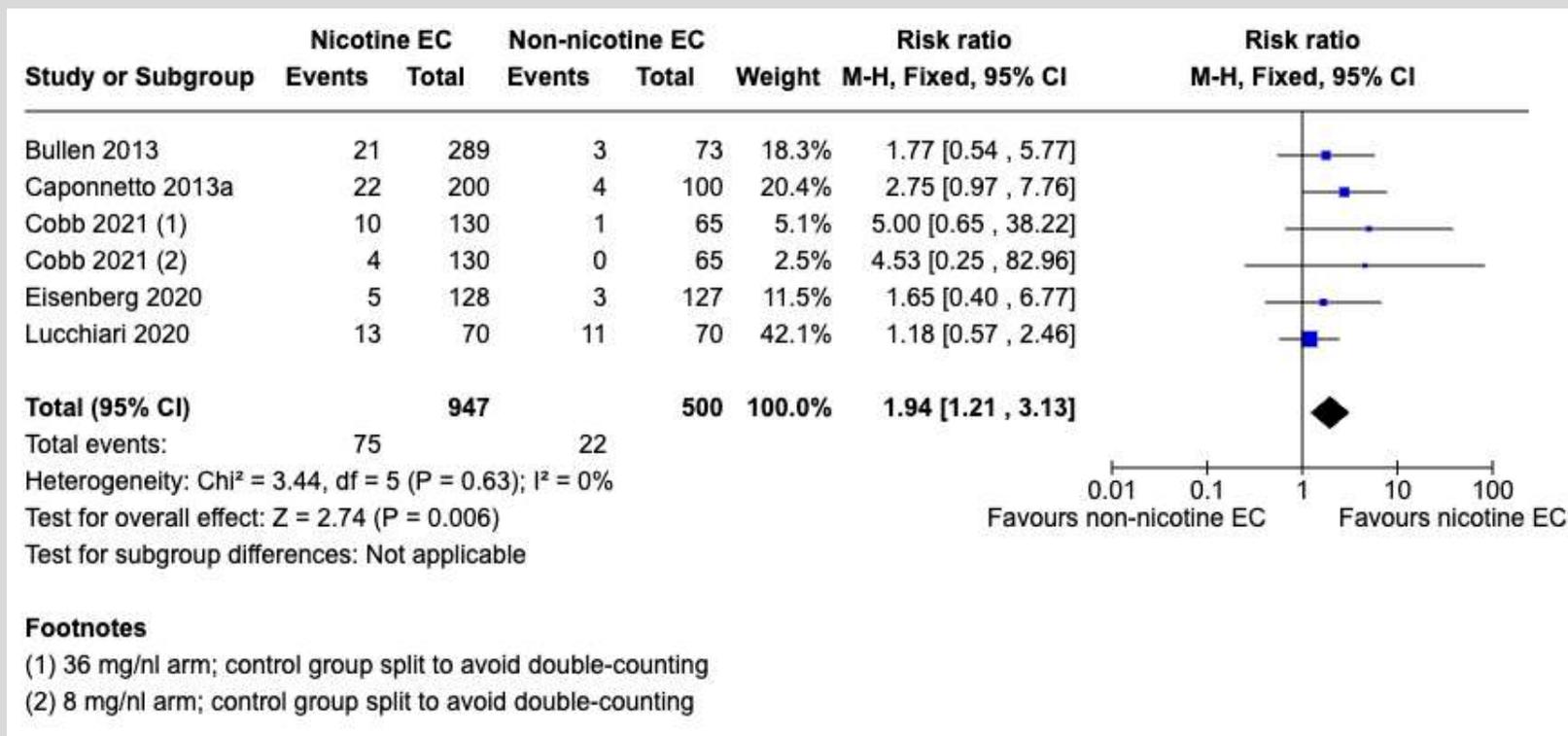


Nicotine e-cig vs. NRT: Serious adverse events at 1+weeks

GRADE certainty of
evidence: LOW
(downgraded 2 levels
due to imprecision)



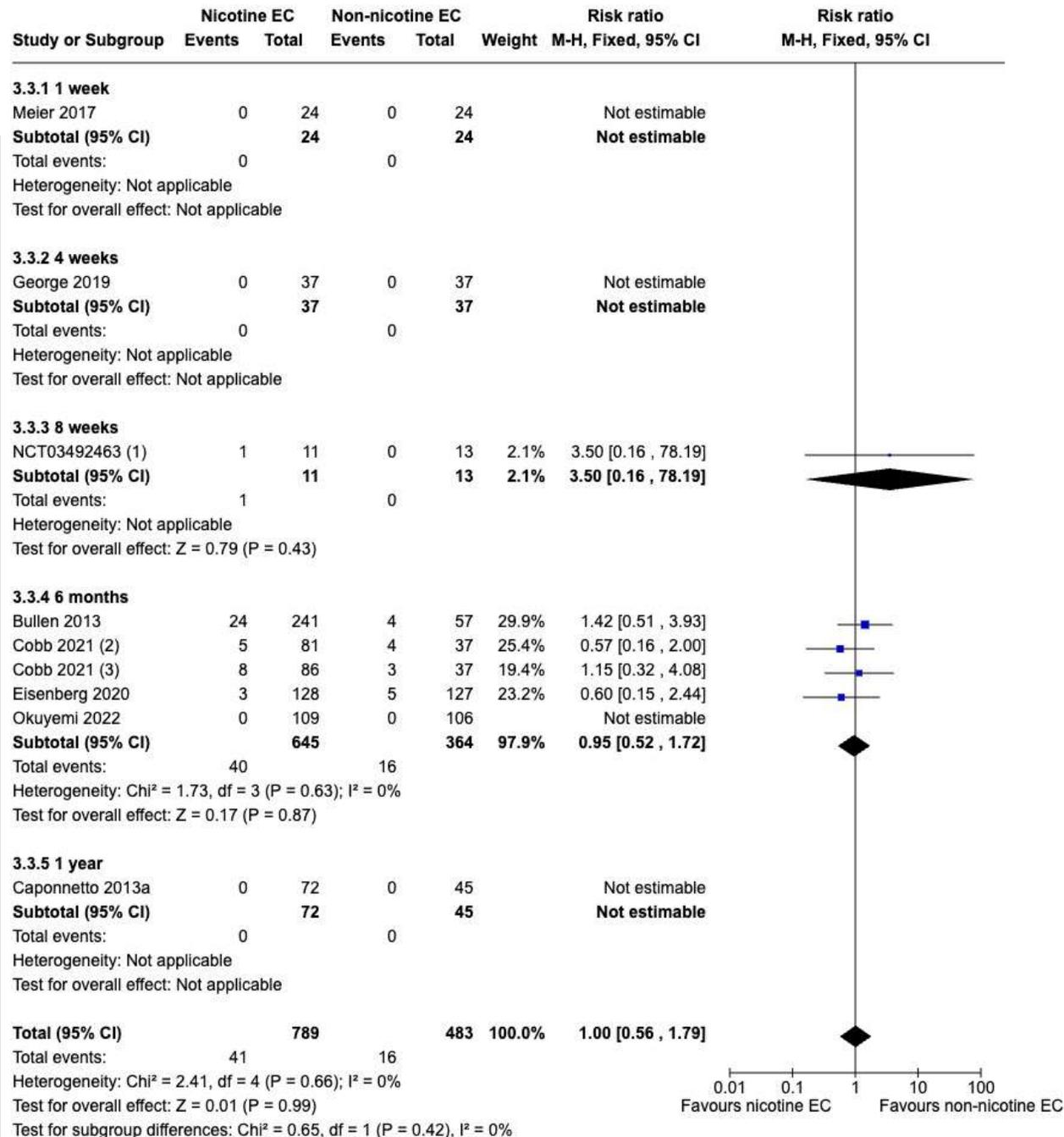
Nicotine e-cigarette versus non-nicotine e-cigarette: Quitting at 6+ months



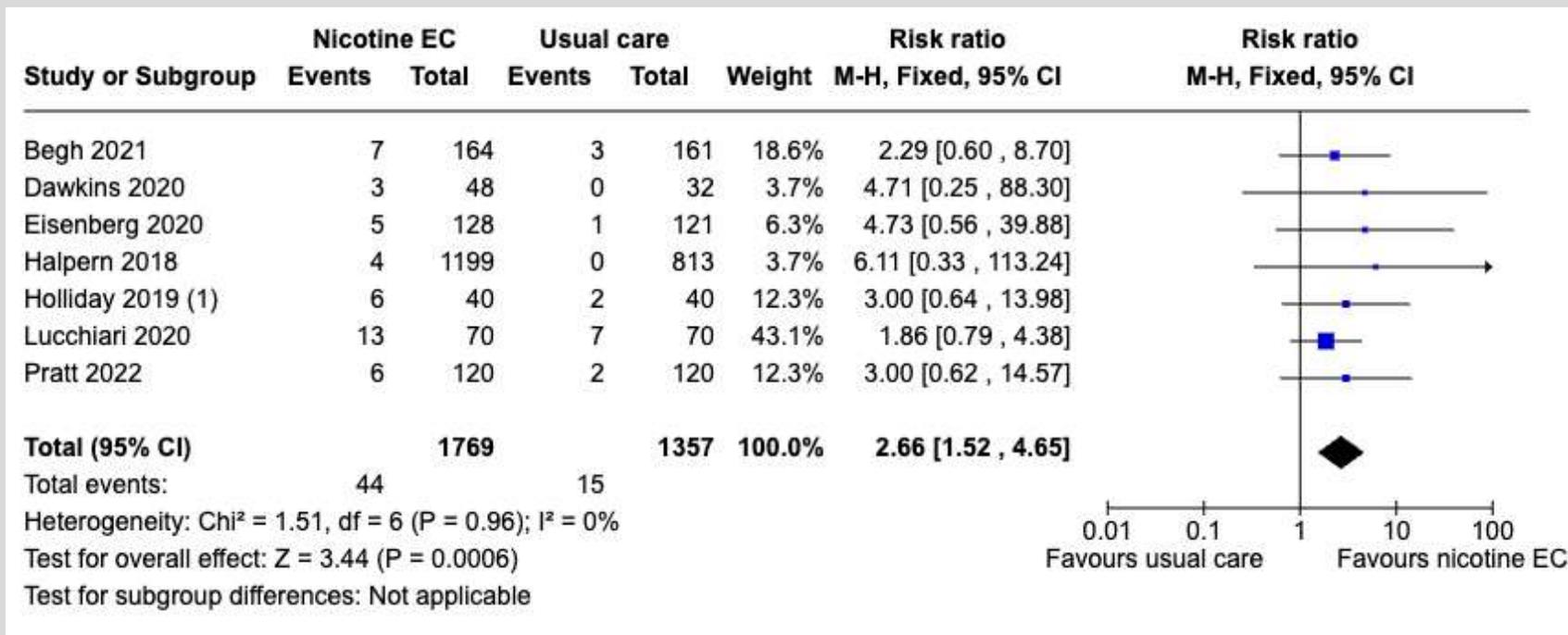
GRADE certainty of evidence: MODERATE (downgraded one level due to imprecision)

Nicotine e-cigarette vs. non-nicotine e-cigarette: Serious adverse events at 1+weeks

GRADE certainty of evidence: LOW (downgraded 2 levels due to imprecision)



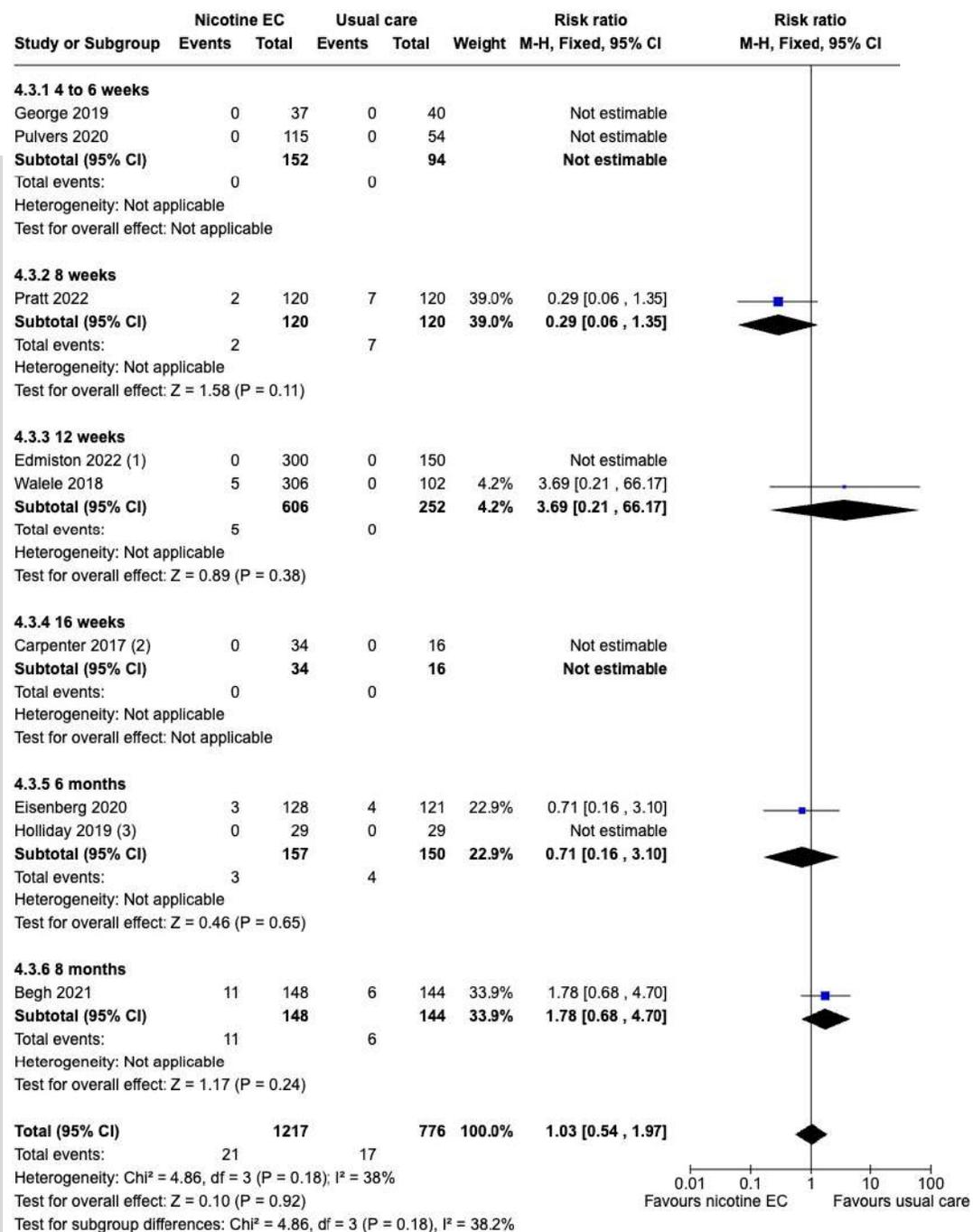
Nicotine e-cigarette versus behavioural support only/no support: Quitting at 6+ months



GRADE certainty of evidence: VERY LOW (downgraded two levels due to risk of bias; one level due to imprecision)

Nicotine e-cigarette versus behavioural support only/no support: Serious adverse events at 1+wks

GRADE certainty of evidence: VERY LOW (downgraded due to risk of bias and imprecision)



Implications for research

Further trials should:

Measure cessation at 6 months or longer.

Collect and report data on continued EC and study product use at 6 months or longer.

Use active comparators

Assess safety profile for as long as possible

Be powered to detect differences in safety outcomes

Present safety in both absolute and relative risk terms (in comparison to the risks of continuing to smoke tobacco).

Offer recent devices to participants, to be most representative of what will be on the market at the time results are released. Data on pod type EC are particularly lacking.

Protocols and statistical analysis plans should be registered in advance and openly available.

Provide EC in a way that would be used in real-world settings.

See full review for

- More detail on everything that's been presented
- Secondary outcomes
- Other comparisons
- Data from uncontrolled studies
- Comparison with other reviews

Updates to and information on the living systematic review:
<https://www.cebm.ox.ac.uk/research/electronic-cigarettes-for-smoking-cessation-cochrane-living-systematic-review-1>