

The E-Cigarette Saga – PHE statement: “ 95% safer than smoking”

<https://www.gov.uk/government/publications/e-cigarettes-an-evidence-update>;

E-cigarettes: an evidence update From: [Public Health England](#) First published: 19 August 2015 Last updated: 28 August 2015, [see all updates](#)

McNeill, A, Brose, LS, Calder, R, Hitchman, SC, Hajek, P, and McRobbie, H. E-cigarettes: an evidence update. Public Health England. August 2015. can help smokers to quit.

Documents



[E-cigarettes: an evidence update](#)

Ref: PHE publications gateway number: 2015260 PDF, 2.07MB, 113 pages

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[E-cigarettes: a new foundation for evidence-based policy and practice](#)

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[Authors' note on evidence for 'around 95%' safer estimate](#)

Ref: PHE publications gateway number 2015260 PDF, 181KB, 2 pages

CTA Comment: The PHE report penned by A McNeill et al was based on (non dissenting self interest ‘Nutt report’ authors, with a dubious tobacco linked funding source) evidence from the ‘Nutt Report’ *“Estimating the harms of nicotine-containing products using the MCDA approach”* which was funded from a source close to Big Tobacco. The report authors were all like minded individuals without dissenting opinions.

<http://www.ncbi.nlm.nih.gov/pubmed/24714502?dopt=Abstract> [Eur Addict Res.](#) 2014;20(5):218-25. doi: 10.1159/000360220. Epub 2014 Apr 3. *“Estimating the harms of nicotine-containing products using the MCDA approach.” (The Nutt Report)*

[Nutt DJ¹](#), [Phillips LD](#), [Balfour D](#), [Curran HV](#), [Dockrell M](#), [Foulds J](#), [Fagerstrom K](#), [Letlape K](#), [Milton A](#), [Polosa R](#), [Ramsey J](#), [Sweanor D](#)

<http://tobacco.cleartheair.org.hk/?p=8962>

BMJ investigation examines bitter dispute over e-cigarettes in the public health community

<http://tobacco.cleartheair.org.hk/?p=8877>

E-cigarette industry funded experts who ruled vaping is safe

<http://tobacco.cleartheair.org.hk/?p=9623>

Delon Human /Euroswiss/Wise Nicotine /Nicolife / GTNF – funding source of the Nutt report & its associated author linking to Human & BAT funding of Human – Wisenicotine book /previous tobacco industry funding of Polosa

<http://tobacco.cleartheair.org.hk/?p=8978>

So, who is Euroswiss Health's Delon Human?

<http://tobacco.cleartheair.org.hk/?p=9146>

Did Public Health England get it right over e-cigarettes?

Random links of relevance from the Clear the Air website

[E-cigarettes and smoking cessation in real-world and clinical settings](#) [Jan 14th, 2016](#)

[E-cigarettes and the tobacco companies](#) [Jan 6th, 2016](#)

[E-cigarette Ads and Youth](#) [Jan 5th, 2016](#)

[E-cigarette ads entice U.S. youth, could undo tobacco prevention efforts -CDC](#) [Jan 5th, 2016](#)

[More evidence e-cigarettes may be bad for you, scientists say](#) [Dec 31st, 2015](#)

[E-Cigarettes 'No Better' Than Smoking Tobacco, Scientists Warn](#) [Dec 30th, 2015](#)

[Scientist Debunks Latest Claim That E-Cigarettes Are As Dangerous As Tobacco](#) [Dec 30th, 2015](#)

[E-cigarettes are NO better than regular smoking: Devices can 'cause cancer even when they're nicotine FREE'](#) [Dec 29th, 2015](#)

[E-cig users warned they are as well smoking normal fags as vaporizers can cause cancer too](#) [Dec 29th, 2015](#)

[E-cig or cig, smoking is haraam: Scholars](#) [Dec 27th, 2015](#)

RESPONSE TO PHE'S OVERLY PREMATURE E-CIGARETTES '95% SAFER' THAN SMOKING POSTED IN THE LANCET

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(15\)00042-2/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)00042-2/fulltext)

E-cigarettes: Public Health England's evidence-based confusion

The Lancet Editorial DOI: [http://dx.doi.org/10.1016/S0140-6736\(15\)00042-](http://dx.doi.org/10.1016/S0140-6736(15)00042-)

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(15\)00146-4/fulltext?rss%3Dyes](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)00146-4/fulltext?rss%3Dyes)

Electronic cigarettes: we need evidence, not opinions

[Martin McKee](#) Affiliations London School of Hygiene & Tropical Medicine, London WC1H 9SH, UK

[Simon Capewell](#) Affiliations University of Liverpool, Department of Public Health & Policy, Institute of Psychology, Health & Society, Liverpool, UK Published Online: 04 September 2015

Google searches for the following terms produce self-explanatory results:

'e-cigarettes youth'
'e-cigarettes aircraft'
'e-cigarettes safety' (note 16.2 million results)
'e-cigarettes fire'
'e-cigarettes explosion'
'e-cigarettes dead'
'e-cigarettes barmaid'
'e-cigarettes dual use'
'e-cigarettes inhalation toxins diacetyl and acetyl propionyl'
'e-cigarettes popcorn lung'
'e-cigarettes popcorn lung bronchiolitis obliterans'
'e-cigarettes formaldehyde and acetaldehyde'
'e-cigarettes time.com research'
'e-cigarettes regulation fda'
'e-cigarettes cancer'
'e-cigarettes lung immune'

CTA Comment: research into the effects of smoking is ongoing and literally tens of thousands of research papers exist in the public domain dating back over decades. E-cigarettes do not have as many toxins as combustible cigarettes but precious little research has been done on these e-cig products which have a vast disparity in quality control (or rather, lack thereof) nicotine content, safety, battery explosion, charging mishaps, varying alcohol contents with other irritant ingredients and almost total lack of Governmental regulation. At least 75% of them contain diacetyl, a product intended for flavoring in foods, not for inhalation direct to the lungs as well as other known lung irritants. Recent reports show US teenagers are adding cannabis to vaping units and a re-normalisation of smoking is resurgent. Dual use is another concern where the use of e-cigarettes has become complementary to cigarette smoking and a convenience in places where cigarettes are banned. It seems obvious that regulation is required with detailed research on hardware and ingredient safety. Such regulation will be costly, probably handing the e-cigarette industry to those who can afford to pay USD 2 million or more to test each item = the Tobacco Industry will be gifted.

The latest response from respected US researchers finds that e-cigarettes have the opposite effect to the PHE finding:

UCSF Center for Tobacco Control
Research and Education

[http://www.thelancet.com/pdfs/journals/lanres/PIIS2213-2600\(15\)00521-4.pdf](http://www.thelancet.com/pdfs/journals/lanres/PIIS2213-2600(15)00521-4.pdf)

E-cigarettes and smoking cessation in real-world and clinical settings: a systematic review and meta-analysis

Sara Kalkhoran, Stanton A Glantz

Summary

Background Smokers increasingly use e-cigarettes for many reasons, including attempts to quit combustible cigarettes and to use nicotine where smoking is prohibited. We aimed to assess the association between e-cigarette use and cigarette smoking cessation among adult cigarette smokers, irrespective of their motivation for using e-cigarettes.

Methods PubMed and Web of Science were searched between April 27, 2015, and June 17, 2015. Data extracted included study location, design, population, definition and prevalence of e-cigarette use, comparison group (if applicable), cigarette consumption, level of nicotine dependence, other confounders, definition of quitting smoking, and odds of quitting smoking. The primary endpoint was cigarette smoking cessation. Odds of smoking cessation among smokers using e-cigarettes compared with smokers not using e-cigarettes were assessed using a random effects meta-analysis. A modification of the ACROBAT-NRSI tool and the Cochrane Risk of Bias Tool were used to assess bias. This meta-analysis is registered with PROSPERO (number CRD42015020382).

Findings 38 studies (of 577 studies identified) were included in the systematic review; all 20 studies with control groups (15 cohort studies, three cross-sectional studies, and two clinical trials) were included in random effects meta analysis and sensitivity analyses. Odds of quitting cigarettes were 28% lower in those who used e-cigarettes compared with those who did not use e-cigarettes (odds ratio [OR] 0· 72, 95% CI 0· 57–0· 91). Association of e-cigarette use with quitting did not significantly differ among studies of all smokers using e-cigarettes (irrespective of interest in quitting

cigarettes) compared with studies of only smokers interested in cigarette cessation (OR 0· 63, 95% CI 0· 45–0· 86 vs 0· 86, 0· 60–1· 23; $p=0· 94$). Other study characteristics (design, population, comparison group, control variables, time of exposure assessment, biochemical verification of abstinence, and definition of e-cigarette use) were also not associated with the overall effect size ($p\geq 0· 77$ in all cases).

Interpretation As currently being used, e-cigarettes are associated with significantly less quitting among smokers.

Funding National Institutes of Health, National Cancer Institute, FDA Center for Tobacco Products.

This above report resulted in the following Science Media Centre online comments thereon:

From: Deborah Arnott [<mailto:Deborah.Arnott@ash.org.uk>] **Sent:** 14 January 2016 17:31 **To:** Deborah Arnott

Subject: Response to Lancet article on ecigarettes and smoking cessation

See below for **Science Media Centre expert reaction** to the Lancet Respiratory Medicine report on smoking cessation and ecigarettes. See comments by Robert West, Linda Bauld, Peter Hajek, Ann McNeill and PHE.

Deborah Arnott MBA FRCP (Hon)

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Science Media Centre

EMBARGOED UNTIL 17:00 UK time on Thursday 14 January 2016

Expert reaction to meta-analysis looking at e-cigarette use and smoking cessation, as published in the *Lancet Respiratory Medicine**

NEW COMMENT Prof Robert West, Professor of Health Psychology, UCL, said:

“If use of e-cigarettes caused fewer smokers to quit, the quit rate in England would have decreased as use of e-cigarettes has increased. Data from The Smoking Toolkit Study – a large ongoing population survey of smoking in England – shows, if anything, the opposite (www.smokinginengland.info).

“Publication of this study represents a major failure of the peer review system in this journal.”

NEW COMMENT Prof Linda Bauld, Professor of Health Policy, University of Stirling; Deputy Director, UK Centre for Tobacco and Alcohol Studies; Chair in Behavioural Research for Cancer Prevention, Cancer Research UK, said:

“E-cigarettes have been called a ‘disruptive technology’ not just because of the controversy they have created but also because they pose significant challenges for research. The current paper represents the latest attempt to bring together the existing literature on e-cigarettes for smoking cessation. While its breadth is to be commended, its conclusions (that e-cigarettes don't work for smoking cessation) are at best tentative and at worst incorrect. The main reason for this is that attempting to directly compare the results of a body of literature that uses such a wide range of study designs and includes such variable (and often poorly defined) populations and outcomes is difficult, if not impossible. Some of the observational studies included in the review, in particular, suffer from a range of limitations that don't allow us to reliably assess whether e-cigarettes help smokers quit.

“For example, these studies: don't properly assess whether participants have used e-cigarettes enough to make a difference for smoking cessation (such as including measures of 'ever' rather than 'regular' use); may be biased in how participants in the studies were selected (i.e. not representative of e-cigarette users in the population): and, perhaps most importantly, have confounding factors including that smokers in the studies are these who have tried to quit many times in the past and may therefore be more likely to try the remaining new product (e-cigarettes), or that they gave up using these devices early in the conduct of the study but were still included in the final results with the assumption that e-cigarettes didn't 'work' for them whereas there could be multiple reasons why they stopped using the devices.

“Some of the more recent studies included in the review do point to the types of measures that should be used to assess e-cigarettes for smoking cessation. These categorise the type of device (as e-cigarettes are many products not one product), look

carefully at when and for how long e-cigarettes were used, and ask whether participants were using them to stop smoking or for other reasons. These more carefully conducted studies shed light on how e-cigarettes could help smokers stop – for example if they contain sufficient nicotine, are used often and for long enough, and are more advanced ('tank') devices than earlier 'ciga-like' e-cigarettes. However, the current review does not separate out these studies or draw these distinctions but treats the body of evidence as a consistent and comparable set of studies when in fact it is not.

“The review also omits an important part of the picture when assessing any benefits of e-cigarettes in helping smokers quit – and that is the sheer reach of these devices. They are now the most popular aid to stopping smoking in the UK, for example, used by over 2.6 million people. Even low quit rates (which, it has to be said, are also found for licensed smoking cessation aids like Nicotine Replacement Therapy) for groups in studies could translate to many smokers quitting when applied at the population level.

“Other systematic reviews of the literature on e-cigarettes for smoking cessation are underway as this is such a rapidly moving area of research. These should not repeat the mistake of this current review which is to not take account of the huge variability in the characteristics of e-cigarette users, the devices themselves, and patterns of use. Alternative, more carefully conducted, reviews are needed if we are to provide health professionals and, most importantly, smokers with high quality information about the circumstances in which e-cigarettes may help people to move away from the more deadly alternative – combustible tobacco.”

NEW COMMENT Rosanna O' Connor, Director of Tobacco, Alcohol & Drugs, Public Health England, said:

“There are over a million ex-smokers using an e-cigarette in Britain and we need to provide those who continue to smoke with accurate, balanced information on different quitting methods.

“Evidence from practice in England shows that two out of three smokers who combined e-cigarettes with additional expert support from a local stop smoking service quit successfully and while dual use is a complex issue, many vapers report using an e-cigarette to cut down and ultimately quit. Smokers who have struggled to quit in the past could try vaping, and we encourage vapers to take that next step and stop smoking completely.”

Prof Peter Hajek, Director of the Tobacco Dependence Research Unit, Queen Mary University of London (QMUL), said:

“This review is grossly misleading in my opinion. There are several problems with the way studies were selected and used, but the main flaw is simple, though not easy to spot. The studies that are presented as showing that vaping does not help people quit only recruited people who were currently smoking and asked them if they used e-cigarettes in the past. This means that people who used e-cigarettes and stopped smoking were excluded. The same approach would show that proven stop-smoking medications do not help or even undermine quitting.

“Here is an analogy: Imagine you recruit people who absolutely cannot play piano. There will be some among them who had one piano lesson in the past. People who acquired any skills at all are not in the sample, only those that were hopeless at it are included. You compare musical ability in those who did and those who did not take a lesson, find a difference, and report that taking piano lessons harms your musical ability. The reason for your finding is that all those whose skills improved due to the lessons are not in the sample, but it would not necessarily be obvious to readers.

“E-cigarettes are a major development in public health. It is unfortunate that their potentially huge positive impact is being hindered by excessive regulations triggered by misleading suggestions.”

Prof Ann McNeill, Professor of Tobacco Addiction, National Addiction Centre, Institute of Psychiatry Psychology & Neuroscience, King's College London (IoPPN), said:

“This review is not scientific. The information included about two studies that I co-authored is either inaccurate or misleading. In addition, the authors have not included all previous studies they could have done in their meta-analysis. I believe the findings should therefore be dismissed. I am concerned at the huge damage this publication may have – many more smokers may continue smoking and die if they take from this piece of work that all evidence suggests e-cigarettes do not help you quit smoking; that is not the case.

“The problems with the authors' interpretation of the two papers mentioned above are as follows: The first study (Adkison *et al*) is not longitudinal as has been reported here – e-cigarette use was measured at follow up, the same time as quit status was ascertained. The second study (Hitchman *et al*) included smokers who were using e-cigarettes at baseline and therefore

included smokers who may have tried to use e-cigarettes to quit and failed, and excluded smokers who successfully used e-cigarettes to quit. The authors of this meta-analysis had been previously informed by the authors of the Adkison paper that they were misreporting the findings.”

* ‘E-cigarettes and smoking cessation in real-world and clinical settings: a systematic review and meta-analysis’ by Sara Kalkhoran and Stanton A Glantz will be published in the *Lancet Respiratory Medicine* at 17:00 UK time on Thursday 14 January 2016, which is also when the embargo will lift.

All our previous output on this subject can be seen at this weblink:

<http://www.sciencemediacentre.org/tag/e-cigarettes/>

The SMC also produced a Factsheet on electronic cigarettes which is attached and available here: <http://www.sciencemediacentre.org/electronic-cigarettes/>

Declared interests

Prof Robert West: “I have not and will not accept any kind of funds, payments or hospitality from companies that make e-cigarettes because of the risk of being perceived as tainted on that count. I undertake research and consultancy for companies that manufacture smoking cessation medications and licensed nicotine replacement products. My salary is funded by Cancer Research UK.”

Prof Linda Bauld: “No conflicts of interest to declare.”

Rosanna O’ Connor: No COIs to declare.

Prof Peter Hajek: “PH has no links with any e-cigarette or tobacco manufacturers.”

Prof Ann McNeill: “I was the author of the recent e-cigarette PHE report.”

Note to editors

The **Science Media Centre** is an independent venture working to promote the voices, stories and views from the scientific community to the news media when science is in the headlines. Over 80 supporters including scientific institutions, media groups, charities, universities, corporate organisations and individuals fund the Centre, with donations capped at 5% of the running costs to preserve its independence. This press release contains the personal opinions of those acknowledged, and represents neither the views of the SMC nor any other organisation unless specifically stated.

The Science Media Centre can also help you find an expert on a topical area of science, we have over 2000 media friendly scientists and engineers on our database and you can call us on 020 7611 8300 if you need an expert to interview.

The SMC has asked the experts in the above Roundup to declare any interests which may be regarded by a reasonable and objective third party as giving rise to a conflict, and their responses are included above.

For more details see our website www.sciencemediacentre.org, please e-mail the Science Media Centre with your comments on our service at smc@sciencemediacentre.org

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<https://companycheck.co.uk/company/07560997/SCIENCE-MEDIA-CENTRE/financial-accounts>

Whereas: re: Declared Interest of Robert West above:

Robert West undertakes research & consultancy for companies that develop and manufacture smoking cessation medications.

He has a share of a patent for a novel nicotine delivery device.

He is a trustee of QUIT.

<http://velvetgloveironfist.blogspot.hk/2013/08/the-jewel-in-crown.html>

Declaration of interest: Robert West has undertaken research and consultancy for companies that develop and manufacture smoking cessation medications.

Robert West has a share of a patent in a novel nicotine delivery device.

http://www.uknsc.org/uknsc2013_presentation_240.php

Espacenet patents registry: Robert West

2. [Nicotine inhaler with flavour source](#)

Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
MCEWEN ANDREW [GB] WEST ROBERT [GB] (+1)	EXCHANGE SUPPLIES LTD [GB]	A24F47/002 A61M15/06	A61M15/06	GB2461008 (A) 2009-12-23 GB2461008 (B) 2011-08-10	2006-12-08

3. [Variable dosage nicotine inhaler](#)

Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
WEST ROBERT JEREMY [GB] WEST MATTHEW ROBERT [GB] (+1)	WEST ROBERT JEREMY [GB] WEST MATTHEW ROBERT [GB] (+1)	A61M15/0045 A61M15/005 A61M15/06	A61M15/00 A61M15/06 (IPC1-7): A61M15/00 (+1)	GB2388040 (A) 2003-11-05 GB2388040 (B) 2005-12-14	2002-05-02

4. [Method to aid smoking cessation](#)

Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
WEST ROBERT [GB] HAJEK PETER [GB]	WEST ROBERT [GB] HAJEK PETER [GB]	A61K2300/00 (+6)	A61K31/341 A61K31/351 A61K31/7004 (+4)	GB2376885 (A) 2002-12-31	2001-06-26

5. [Helping smokers stop](#)

Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
HAJEK PETER [GB] WEST ROBERT [GB]	HAJEK PETER [GB] WEST ROBERT [GB]	A61K31/465 A61K9/0043 A61K9/7023	A61K31/465 A61P25/34 A61K9/00 (+3)	GB2376884 (A) 2002-12-31	2001-06-26

It is noticeable that Peter Hajek is a also co-author of the PHE report.

So just who are Science Media Centre Ltd independent venture ?

http://www.sourcewatch.org/index.php/Science_Media_Centre

The **Science Media Centre** (SMC) is an "independent" media briefing centre for scientific issues in the UK, conceived and hosted by the [Royal Institution](#) starting in 2002, and enjoying close links with the British government. It is now based at the [Wellcome Trust](#).^[1] Its stated position is that it is not neutral, but "unashamedly pro-science."^[2] Although it initially promised to "provide an anti-GM scientist and a pro-GM scientist, a pro-legalisation of cannabis scientist and an anti-, etc, etc."^[2] its record since then has shown otherwise. Connie St. Louis, the director of the Science Journalism MA program at City University London and president of the Association of British Science Writers, wrote in *Columbia Journalism Review* that SMC **"has cast biased press briefings such as one on GMOs, funded by Monsanto and invited unwitting and time-starved journalists. The results have been catastrophic. The quality of science reporting and the integrity of information available to the public have both suffered, distorting the ability of the public to make decisions about risk. The result is a diet of unbalanced cheerleading and the production of science information as entertainment.** A July 2013 profile in *Nature* explained the controversial nature of SMC's efforts: "Perhaps the biggest criticism of Fox and the SMC is that they push science too aggressively -- acting more as a PR agency than as a source of accurate science information"

In January 2014, *Independent Science News* reported, "Imagine if the New York Times or NBC published, under appropriately scathing headlines, a full and detailed analysis of how GMO corporations perennially manipulate the scientific literature? . . . It is for just this reason that [BASF](#), [Coca-Cola](#), [Merck](#), [L'Oreal](#), [Monsanto](#), [Syngenta](#), Smith & Nephew, the [Nuclear Industry Association](#) and their competitors now support coordinated attempts to manage scientific news coverage in the form of the UK's **Science Media Centre**. And now, having decided that this method of information control is effective, or maybe that the threat from the internet is sufficiently serious, they are adding some international offshoots."^[10]



Fiona Fox SMC Headed by Rwanda Genocide Apologist: SMC's director is [Fiona Fox](#), a contributor to [Living Marxism](#) (which closed in March 2000 following a libel lawsuit brought by British news agency ITN) and an apologist for the 1994 mass slaughter of Tutsi and moderate Hutu by the Hutu majority in Rwanda. Under the pseudonym Fiona Foster, she wrote a 1995 article arguing that "this was not a pre-planned genocide of one tribe by another" (Living Marxism/the [LM Group](#) also denied Serbian war crimes).^{[21][22]} SMC and the related [Institute of Ideas](#) (headed by Fiona Fox's sister [Claire Fox](#)) and [Spiked Online](#) (both of which also have ties to the LM Group) all push [genetically modified organisms](#) (GMOs).^[23]

Funding: follow the money – <http://www.sciencemediacentre.org/about-us/funding/>

Professor Stanton Glantz has already (15 Jan 2016) replied online to the commenters on the above [Expert reaction to meta-analysis looking at e-cigarette use and smoking cessation, as published in the *Lancet Respiratory Medicine*](#)



<https://tobacco.ucsf.edu/our-new-meta-analysis-entire-relevant-literature-shows-e-cigarettes-used-are-associated-less-not-more-quit>

Our new meta-analysis of the entire relevant literature shows that e-cigarettes, as used, are associated with less not more quit

Submitted by [sglantz](#) on Thu, 2016-01-14 09:00

Here is the press release UCSF sent out about it:

E-Cigarettes, As Used, Aren't Helping Smokers Quit, Study Shows

New Analysis by UCSF Found "Vapers" Are 28 Percent Less Likely to Stop Smoking

Electronic cigarettes are widely promoted and used to help smokers quit traditional cigarettes, but a new analysis from UC San Francisco found that adult smokers who use e-cigarettes are actually 28 percent less likely to stop smoking cigarettes.

The study -- a systematic review and meta-analysis of published data -- is the largest to quantify whether e-cigarettes assist smokers in quitting cigarettes. The findings will be published online **January 14, 2016** in *The Lancet Respiratory Medicine*.

(CTA : [http://www.thelancet.com/pdfs/journals/lanres/PIIS2213-2600\(15\)00521-4.pdf](http://www.thelancet.com/pdfs/journals/lanres/PIIS2213-2600(15)00521-4.pdf))

“As currently being used, e-cigarettes are associated with significantly less quitting among smokers,” concluded first author Sara Kalkhoran, MD who was a clinical fellow at the UCSF School of Medicine when the research was conducted. She is now at Massachusetts General Hospital and Harvard Medical School.

“E-cigarettes should not be recommended as effective smoking cessation aids until there is evidence that, as promoted and used, they assist smoking cessation,” Kalkhoran wrote.

Electronic cigarettes, known by a variety of names including vapor pens, are battery-powered devices that heat nicotine and flavorings to deliver an aerosol inhaled by the user. While they are promoted as a way to quit traditional cigarettes, they also are promoted as a way to get nicotine in environments where traditional cigarettes are prohibited, even though more than 430 cities and several states ban their use in smoke free sites where conventional cigarettes are also prohibited.

In 2015, the U.S. Preventive Services Task Force concluded that there was insufficient evidence to recommend the devices to help adults quit smoking. No e-cigarette company has submitted an application to the U.S. Food and Drug Administration to approve e-cigarettes for smoking cessation, and the FDA has not taken any action against companies that claim e-cigarettes are effective for quitting smoking.

In their analysis, the UCSF team reviewed 38 studies assessing the association between e-cigarette use and cigarette cessation among adult smokers. They then combined the results of the 20 studies that had control groups of smokers not using e-cigarettes in a meta-analysis that concluded that **the odds of quitting smoking were 28 percent lower in smokers who used e-cigarettes compared to those who did not.** There were no language restrictions imposed on the studies, which included both real-world observational as well as clinical studies. The studies included smokers who both were and were not interested in quitting, and included people as young as 15 years old.

The studies included in the analysis controlled for many variables, including demographics, past attempts to quit, and level of nicotine dependence.

“The irony is that quitting smoking is one of the main reasons both adults and kids use e-cigarettes, but the overall effect is less, not more, quitting,” said co-author Stanton A. Glantz, PhD, UCSF professor of medicine and director of the UCSF Center for Tobacco Control Research and Education. “While there is no question that a puff on an e-cigarette is less dangerous than a puff on a conventional cigarette, the most dangerous thing about e-cigarettes is that they keep people smoking conventional cigarettes.”

“The fact that they are freely available consumer products could be important,” Glantz added.

E-cigarette regulation has the potential to influence marketing and reasons for use, the authors wrote:

“The inclusion of e-cigarettes in smoke-free laws and voluntary smoke-free policies could help decrease use of e-cigarettes as a cigarette substitute, and, perhaps, increase their effectiveness for smoking cessation. The way e-cigarettes are available on the market – for use by anyone and for any purpose – creates a disconnect between the provision of e-cigarettes for cessation as part of a monitored clinical trial and the availability of e-cigarettes for use by the general population.”

Kalkhoran’s research was supported by the National Institutes of Health National Research Service Award T32HP19025. Glantz’s work in the project was supported by grant 1P50CA180890 from the National Cancer Institute and the FDA Center for Tobacco Products.

The paper is available on Lancet’s website [here](#).

By the way, [Clive Bates](#) published a preemptive attack on this paper (before reading it) on his blog. People who carefully read our paper, particularly the sensitivity analysis (Table 2), will see that we anticipated and dealt with his predictable criticisms.

[sglantz’s blog](#)

[Add new comment](#)

Comments

Submitted by [sglantz](#) on Fri, 2016-01-15 07:11.

[Specific responses to the "expert" criticism](#)

Several people have emailed asking for our reaction to the “Expert reaction to meta-analysis looking at e-cigarette use and smoking cessation” released on the website ScienceMediaCenter.org the minute that the embargo on our *Lancet Respiratory Medicine* paper lifted.

The most remarkable thing about these criticisms is their generality rather than engaging the specific substance of the paper.

Careful readers will find that the paper considers all these issues (and more), including extensive discussion of the limitations of the available data.

Despite these limitations, it is possible to draw important conclusions based on the available studies.

In particular, we conducted a formal sensitivity analysis of the factors (and other factors) that the experts raise, which appears in Table 2 of the paper.

None of the factors that the "experts" raise affected the overall conclusion of the analysis that smokers who use e-cigarettes are less, not more, likely to stop smoking.

Here are our responses to the experts' comments:

Prof. Robert West, Professor of Health Psychology, UCL, said:

"If use of e-cigarettes caused fewer smokers to quit, the quit rate in England would have decreased as use of e-cigarettes has increased. Data from The Smoking Toolkit Study – a large ongoing population survey of smoking in England – shows, if anything, the opposite (www.smokinginengland.info). "Publication of this study represents a major failure of the peer review system in this journal."

Cigarette use rates have been declining since the 1970s in the UK, prior to the introduction of e-cigarettes. Simply comparing rates of cigarette and e-cigarette use does not allow for evaluation of the association between e-cigarette use and quitting.

Prof. Linda Bauld, Professor of Health Policy, University of Stirling; Deputy Director, UK Centre for Tobacco and Alcohol Studies; Chair in Behavioural Research for Cancer Prevention, Cancer Research UK, said:

"E-cigarettes have been called a 'disruptive technology' not just because of the controversy they have created but also because they pose significant challenges for research. The current paper represents the latest attempt to bring together the existing literature on e-cigarettes for smoking cessation. While its breath is to be commended, its conclusions (that e-cigarettes don't work for smoking cessation) are at best tentative and at worst incorrect. The main reason for this is that attempting to directly compare the results of a body of literature that uses such a wide range of study designs and includes such variable (and often poorly defined) populations and outcomes is difficult, if not impossible. Some of the observational studies included in the review, in particular, suffer from a range of limitations that don't allow us to reliably assess whether e-cigarettes help smokers quit.

The goal for this systematic review and meta-analysis was to be comprehensive in terms of the included literature. We recognize there is variation in study design; these differences are summarized in Table 1, evaluated in the sensitivity analysis (Table 2), and discussed in detail in the appendix. In the current regulatory environment, e-cigarettes are not prescription medicines that are only available for use in supervised smoking cessation attempts. In addition, e-cigarette use outside a quit attempt can still affect quitting behavior. The relationship between e-cigarette use and smoking cessation is important in all these situations. Most important, as the sensitivity analysis showed, these differences do not materially affect the conclusion in the paper.

"For example, these studies: don't properly assess whether participants have used e-cigarettes enough to make a difference for smoking cessation (such as including measures of 'ever' rather than 'regular' use); may be biased in how participants in the studies were selected (i.e. not representative of e-cigarette users in the population); and, perhaps most importantly, have confounding factors including that smokers in the studies are those who have tried to quit many times in the past and may therefore be more likely to try the remaining new product (e-cigarettes), or that they gave up using these devices early in the conduct of the study but were still included in the final results with the assumption that e-cigarettes didn't 'work' for them whereas there could be multiple reasons why they stopped using the devices.

Table 1 and the detailed descriptions of the studies in the appendix describe what potential confounders were considered in the different studies. Our sensitivity analysis showed that whether e-cigarette use was defined as current use or ever use did not significantly affect the results.

"Some of the more recent studies included in the review do point to the types of measures that should be used to assess e-cigarettes for smoking cessation. These categorise the type of device (as e-cigarettes are many products not one product), look carefully at when and for how long e-cigarettes were used, and ask whether participants were using them to stop smoking or for other reasons. These more carefully conducted studies shed light on how e-cigarettes could help smokers stop – for example if they contain sufficient nicotine, are used often and for long enough, and are more advanced ('tank') devices than earlier 'ciga-like' e-cigarettes. However, the current review does not separate out these studies or draw these distinctions but treats the body of evidence as a consistent and comparable set of studies when in fact it is not.

The studies of more intensive users of e-cigarettes and users of higher generation devices were specifically discussed in the Discussion as populations who might have increased rates of smoking cessation. It is important to emphasize that these people represent a small fraction of all e-cigarette users.

"The review also omits an important part of the picture when assessing any benefits of e-cigarettes in helping smokers quit – and that is the sheer reach of these devices. They are now the most popular aid to stopping smoking in the UK, for example, used by over 2.6 million people. Even low quit rates (which, it has to be said, are also found for licensed smoking cessation aids like Nicotine Replacement Therapy) for groups in studies could translate to many smokers quitting when applied at the population level.

The fact that e-cigarettes are popular as quit aids does not make them effective. The overall conclusion from all the available data suggests

that e-cigarette use is depressing quitting.

“Other systematic reviews of the literature on e-cigarettes for smoking cessation are underway as this is such a rapidly moving area of research. These should not repeat the mistake of this current review which is to not take account of the huge variability in the characteristics of e-cigarette users, the devices themselves, and patterns of use. Alternative, more carefully conducted, reviews are needed if we are to provide health professionals and, most importantly, smokers with high quality information about the circumstances in which e-cigarettes may help people to move away from the more deadly alternative – combustible tobacco.”

We look forward to reading these studies when they are published. We hope that such studies are not simply limited to e-cigarettes used under “ideal” conditions, but rather are studied as actually promoted and used in the real world.

Rosanna O’ Connor, Director of Tobacco, Alcohol & Drugs, Public Health England, said:

“There are over a million ex-smokers using an e-cigarette in Britain and we need to provide those who continue to smoke with accurate, balanced information on different quitting methods.

“Evidence from practice in England shows that two out of three smokers who combined e-cigarettes with additional expert support from a local stop smoking service quit successfully and while dual use is a complex issue, many vapers report using an e-cigarette to cut down and ultimately quit. Smokers who have struggled to quit in the past could try vaping, and we encourage vapers to take that next step and stop smoking completely.”

Our paper is based on all the available data as of the time we wrote the paper.

Peter Hajek, Director of the Tobacco Dependence Research Unit, Queen Mary University of London (QMUL), said:

“This review is grossly misleading in my opinion. There are several problems with the way studies were selected and used, but the main flaw is simple, though not easy to spot. The studies that are presented as showing that vaping does not help people quit only recruited people who were currently smoking and asked them if they used e-cigarettes in the past. This means that people who used e-cigarettes and stopped smoking were excluded. The same approach would show that proven stop-smoking medications do not help or even undermine quitting.

The studies included are divided into study type and time of e-cigarette assessment in longitudinal studies. The sensitivity analysis showed no significant difference in the results based on whether e-cigarette use was assessed at baseline or at follow-up.

“Here is an analogy: Imagine you recruit people who absolutely cannot play piano. There will be some among them who had one piano lesson in the past. People who acquired any skills at all are not in the sample, only those that were hopeless at it are included. You compare musical ability in those who did and those who did not take a lesson, find a difference, and report that taking piano lessons harms your musical ability. The reason for your finding is that all those whose skills improved due to the lessons are not in the sample, but it would not necessarily be obvious to readers.

The methods and interpretations in our paper follow standard statistical methods for analyzing and interpreting data.

“E-cigarettes are a major development in public health. It is unfortunate that their potentially huge positive impact is being hindered by excessive regulations triggered by misleading suggestions.”

As our paper concludes, the evidence to date indicates that smokers who use e-cigarettes are less, not more, likely to stop smoking.

Prof. Ann McNeill, Professor of Tobacco Addiction, National Addiction Centre, Institute of Psychiatry Psychology & Neuroscience, King’s College London (IoPPN), said:

“This review is not scientific. The information included about two studies that I co-authored is either inaccurate or misleading. In addition, the authors have not included all previous studies they could have done in their meta-analysis. I believe the findings should therefore be dismissed. I am concerned at the huge damage this publication may have – many more smokers may continue smoking and die if they take from this piece of work that all evidence suggests e-cigarettes do not help you quit smoking; that is not the case.

The problems with the authors’ interpretation of the two papers mentioned above are as follows: The first study (Adkison et al) is not longitudinal as has been reported here – e-cigarette use was measured at follow up, the same time as quit status was ascertained. The second study (Hitchman et al) included smokers who were using e-cigarettes at baseline and therefore included smokers who may have tried to use e-cigarettes to quit and failed, and excluded smokers who successfully used e-cigarettes to quit. The authors of this meta-analysis had been previously informed by the authors of the Adkison paper that they were misreporting the findings.”

In the Adkison study, the measurement of cigarette use was longitudinal (from one wave to another), while the assessment of e-cigarette use was at follow-up. For the longitudinal studies, the paper was clear about the time of e-cigarette assessment, i.e. whether it was at baseline or follow-up (Table 1 and the discussion of individual studies in the appendix). The results in the Hitchman study, like any such study, are based on the behavior reported during the time of the study. In any event, the sensitivity analysis did not show an effect of the timing of e-cigarette measurement on results.

reply

Submitted by Anonymous on Fri, 2016-01-15 13:47.

Re: **Specific responses to the "expert" criticism**

I was struck by the curious unanimity of the "experts" at Science Media Center. 5 different "experts", all 5 are agreed, all 5 are deeply critical. Not one thinks otherwise. Not one.

The Science Media Center doesn't say how these 5 were chosen. Does not present this as "our experts say" or "experts who are critical say" or "there are experts who say". Does not even mention that there are experts in the world with other views. On the contrary, implies there are none: presents these 5 as the expert opinion, this is what experts say, period.

While this is of course misleading, it's also revealing: it goes to the credibility of the Science Media Center. A look at that:

http://www.sourcewatch.org/index.php/Science_Media_Centre

Jon Krueger

reply

Submitted by Anonymous on Fri, 2016-01-15 00:39.

Clinical trials vs observational data

I note that the 2 clinical trials included in your analysis show increased quite rates with e-cigs.

Could you explain why you believe the observational data is more reliable than the clinical trial data?

reply

Submitted by [sglantz](#) on Fri, 2016-01-15 07:49.

Clinical trials vs. observational data

First, we did not treat either kind of data as "more reliable." All studies were included in the main meta-analysis. In addition, the sensitivity analysis (Figure 2) showed that the results from the clinical trials were not significantly different from the observational studies.

The advantage of clinical trials is that they are conducted in highly controlled environments so are easier to interpret.

The advantage of observational studies is that they reflect actual use patterns in the real world.

It is well established that medicines do not work as well in the real world because they are often not used or monitored properly or because they are used by people beyond the kind of people who are in the clinical trials.

It is also important to keep in mind that e-cigarettes are not prescription medicines that are used under close medical supervision, but mass marketed consumer products. For that reason, I think that the observational studies are more relevant to assessing e-cigs. Having said that, as noted above, we treated both kinds of data equally in the analysis.

Submitted by [sglantz](#) on Fri, 2016-01-15 06:56.

Some of the press coverage

<http://www.dailymail.co.uk/health/article-3399947/E-cigarettes-WON-T-help-quit-Smokers-using-vapers-28-likely-ditch-traditional-cigarettes.html>

<http://www.webmd.com/smoking-cessation/news/20160114/e-cigarettes-dont-help-smokers-quit-tobacco-study?page=1>

<http://www.medicalnewstoday.com/articles/305070.php> and this <http://medicalxpress.com/news/2016-01-e-cigarettes-smokers.html>

<http://www.cbsnews.com/news/e-cigarettes-dont-help-smokers-quit-study/>

<http://sanfrancisco.cbslocal.com/2016/01/14/ucsf-study-e-cigarettes-not-...>

<http://www.ndtv.com/health/e-cigarettes-not-helping-people-quit-smoking-study-1266116>

<http://timesofindia.indiatimes.com/home/science/E-cigarettes-dont-help-smokers-quit-Study/articleshow/50588336.cms>

<http://sanfrancisco.cbslocal.com/2016/01/14/ucsf-study-e-cigarettes-not-helping-smokers-quit/>

<http://www.thesun.co.uk/sol/homepage/news/6862506/Study-claims-that-electronic-cigarettes-make-it-harder-to-quit-fags.html> : S.K.

followed by Quote by Hajek – "grossly misleading"

<http://www.christianitydaily.com/articles/7557/20160114/health-news-new-study-reveals-e-cigarettes-don-t-help-smokers-quit.htm#!>

<http://www.socialnews.xyz/e-cigarettes-not-helping-people-quit-smoking-study/>

<http://www.newsnation.in/article/110009-e-cigarettes-dont-smokers-quit.html>

<http://equilibrioinformativo.com/2016/01/e-cigarettes-dont-help-smokers-quit/> : "a major blow to leading health officials in England, who have repeatedly insisted that e-cigarettes are a key tool to reduce smoking rates."

<http://abruzzo.tv/news/2016/01/15/e-cigarettes-dont-help-smokers-quit/> : Cleveland quote links to gateway data in last paragraph . . .

http://www.philly.com/philly/health/topics/HealthDay707049_20160114_E-cigarettes_Don_t_Help_Smokers_Quit_Tobacco__Study.html

<http://www.prnewswire.com/news-releases/validity-of-uc-san-franciscos-meta-analysis-on-e-cigs-and-cessation-brought-into-question-by-researchers-300204918.html> . . . biased report with little balance . . . Cancer Research UK, PHE, SFATA etc all pile in . . .

<http://www.empr.com/news/how-effective-are-e-cigarettes-in-helping-to-quit-smoking/article/465262/>

<http://www.theguardian.com/society/2016/jan/15/e-cigarettes-lower-the-odds-of-quitting-successfully-contested-study-claims>

<http://www.techtimes.com/articles/124597/20160115/e-cigarettes-do-not-help-smokers-quit-tobacco-how-to-effectively-quit-smoking.htm>

<http://www.chiangraimes.com/new-study-shows-e-cigarettes-dont-help-smokers-quit.html>

http://www.ash.org.uk/media-room/news/ash-daily-news/:ash-daily-news-for-15-january-2016#article_11789

http://www.nwitimes.com/niche/get-healthy/e-cigarettes-don-t-help-smokers-quit-tobacco-study/article_4d57f48d-2b7a-58b7-8b91-e42fb4ff0fca.html

Submitted by [sglantz](#) on Fri, 2016-01-15 12:27.

Discussion of the paper on KQED Forum

KQED Forum, a live public affairs talk show, spent 30 minutes on the paper with Dr. Glantz and American Vaping Association head Greg Connolly. Worth a listen at

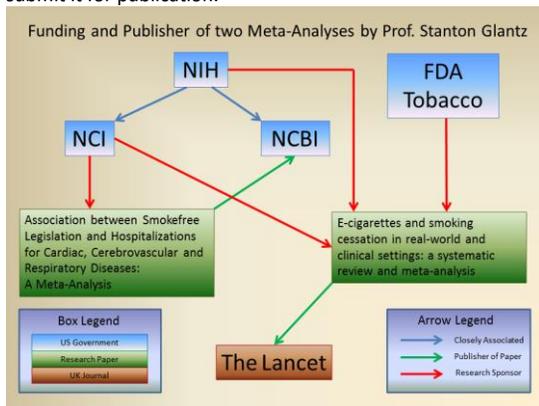
<http://www.kqed.org/a/forum/R201601150930>

reply

Submitted by Anonymous on Fri, 2016-01-15 07:27.

Why not NCBI publisher?

Why was this paper not published through the NCBI? Given the analysis was funded by the US government, it would be the most logical place to submit it for publication.



reply

Submitted by **sglantz** on Fri, 2016-01-15 07:42.

This paper will be published in Pub Med Central (NCBI)

In accordance with the federal rules for such things the paper will appear on Pub Med Central 1 year after it is published in *Lancet Respiratory Medicine*

I, and lots of other academics, think papers should appear there immediately, but that is not the way the rules work.

The paper is available for free right now on the Lancet website (link in original blog post) if you register.

reply

CTA comment: 16 January 2016 - Well there you have it – Vaping is a multi billion dollar international business with a lot at stake – Can vaping stop people smoking or is it just complementary and re-normalises smoking? The jury is not just out, but in another country on that point. There are obvious vested interest parties whose participation is influenced by whomsoever is paying for their puppet actions and there are renowned academics with vastly divergent views. What is certain is that more research is urgently needed from truly independent and recognised sources, without blinkered views and a pre-written report Conclusion. Panels must contain qualified personnel with dissenting views, let the peer reviewed scientific methods decide the report conclusion. What is also crystal clear is the requirement for Government Regulation and a control over mail order items. Stay tuned to Clear the Air’s ongoing reporting on this hot subject.

No Smoke Without Fire?

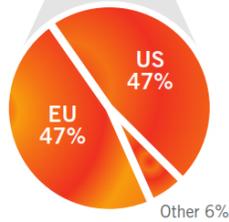
Electronic nicotine delivery systems (ENDS) market gives off the right signals

Just the beginning for ENDS



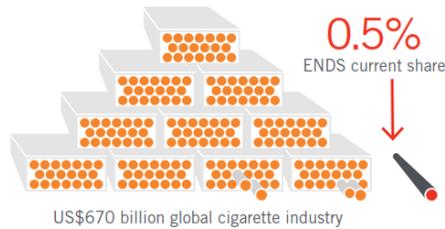
US & EU kickstart the habit

Global ENDS market by region



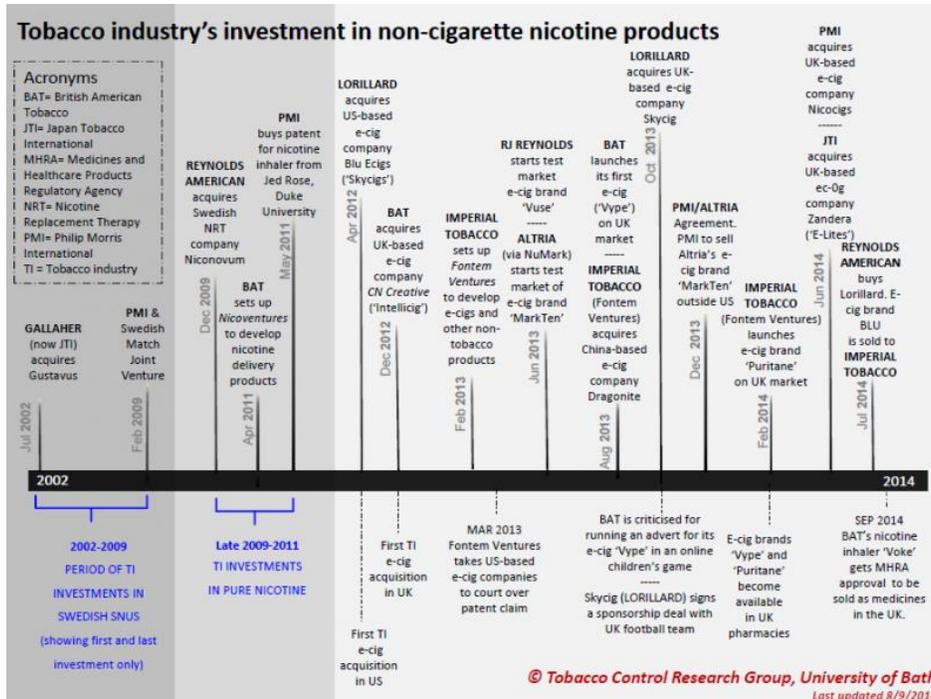
A breath of fresh air?

Very real scope for ENDS to increase market share



Source: The Boston Company Asset Management

<http://www.bnymellonmarketeye.com/media/bny-marketeye-ecigs-stg1.pdf>



<http://www.cnbc.com/2015/09/07/has-the-traditional-cigarette-burned-out.html>

Has the traditional cigarette burned out?

Kalyeena Makortoff | @kalyeena

Monday, 7 Sep 2015 | 7:09 AM ETCNBC.com

COMMENTS Join the Discussion

The chief executive of Philip Morris told CNBC he wants their lines of e-cigarettes eventually to outsell traditional smokes.

Speaking on the sidelines of the European House-Ambrosetti Forum in Italy, CEO Andre Calantzopoulos told CNBC that he was very optimistic about the take-up of iQOS — a Marlboro-branded device that electronically heats, rather than burns, tobacco and differs from the broader range of "e-cigarette" that use nicotine and water vapor to simulate the smoking experience.

Our objective and my personal ambition is that these reduced-risk products will overtake combustible cigarettes as soon as possible. And that's clearly what we're pursuing," Calantzopoulos told CNBC.

He hopes cigarette alternatives will account for at least 15 percent of the company's portfolio in five to 10 years, adding that was his conservative estimate.

But reaching those levels will require regulatory help, Calantzopoulos explained.

"These products have to be regulated — in their way of being developed, risk assessed and marketed — because we need to provide consumers with very clear, and not misleading, information about the benefits of the product, but also [to communicate] that they're not zero risk products," Calantzopoulos told CNBC.

Philip Morris has started clinical trials similar to those deployed by the pharmaceutical industry, to assess the risk profiles of alternatives like iQos, and these trials will be essential to combat a recent backlash against e-cigarettes, Calantzopoulos said.

"Voices say these products are more dangerous than cigarettes. Personally, I think this is rather irresponsible," he explained. The latest World Health Organization (WHO) report on e-cigarettes explains that most products haven't been tested by independent scientists, and that the limited amount of testing that has taken place so far shows "wide variations" around toxicity levels.

However, the WHO said it is "very likely" that there is a lower toxic exposure from e-cigarettes than traditional combustible smokes.

For the time being, Calantzopoulos said he was excited about the technology that was providing an industry-wide transformation.

"It's a very exciting moment actually."