

# Clinical trial shows that giving smokers free e-cigarettes creates more dual users than switchers or quitters

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Carpenter et al. reported a naturalistic randomised controlled trial evaluating the effect of giving smokers free e-cigarettes on stopping cigarettes six months later.<sup>1</sup> Significantly more smokers randomized to e-cigarettes stopped smoking (17% = 9% switchers +8% quitters) than in the control group (stopped smoking: 9% = 3% switchers +6% quitters), but there was no significant difference in having quit completely (e-cigarette: 8%; control: 6%) (Table 1). Significantly more smokers randomized to e-cigarettes (45%) became dual users than in the control group (11%).<sup>2</sup>

For every 1 person given e-cigarettes who stopped smoking cigarettes (switchers plus quitters) 2.7 became dual users (vs. 1.2 in the control group). This difference is bigger for quitters (stopped cigarettes and stopped e-cigs): 5.7 dual users vs. 1.8 in the control group.

Providing free e-cigarettes to smokers was followed by an absolute increase in dual use relative to control of 34 percentage points (ppt) which was larger than the 8 ppt increase in stopping cigarettes and the 2 ppt increase in quitting vs. control.

Carpenter dismissed the increased dual use on the grounds that one-third reduced cigarette consumption by more than 50%, even though a 50% reduction does not have significant mortality benefits.<sup>3</sup>

E-cigarette aerosol and cigarette smoke have different toxic profiles, making it likely that dual use is worse than smoking.<sup>4</sup>

Following Carpenter et al., future studies of the association between e-cigarette use and cigarette

smoking should report complete results, separating switchers and quitters and dual users. Continued e-cigarette use and dual use should be reported as adverse events.

## Contributors

RH and SAG contributed equally.

## Declaration of interests

RH is deputy chair of the German smokefree alliance (unpaid). In the last three years SAG received royalties from McGraw Hill and University of California Press, consulting fees from World Health Organization, American Institutes of Research, George Washington University, and the University of North Carolina, and lecture honoraria from Montgomery Wellness Coalition, Hawaii Public Health Foundation, Thai Health Promotion, Japan Society for Tobacco Control. UCSF supported attending meetings/travel.

## References

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	Free e-cigarettes N = 427	Control no intervention N = 211	P <sup>a</sup>
	N (%)	N (%)	
Switchers (e-cigarette only)	39 (9%)	7 (3%)	0.008
Quitters (neither cigarette nor e-cigarette use)	34 (8%)	13 (6%)	0.52
Stopped cigarettes (switchers plus quitters)	73 (17%)	20 (9%)	0.012
Dual use (cigarette and e-cigarette use)	194 (45%)	23 (11%)	<0.0001
Cigarette only	160 (37%)	168 (80%)	<0.0001

<sup>a</sup>P values from Fisher's exact tests. Source: Carpenter et al.<sup>1</sup> Supplemental Material 6a and 6b.

**Table 1: Product use six months after randomization.**

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