

# Effectiveness of switching smoking cessation medications following relapse: A population-based study

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## Abstract

**Introduction:** Nicotine dependence is a chronic disorder often characterized by multiple failed quit attempts (QAs). Yet, little is known about the sequence of methods used across multiple QAs or how this may impact future ability to abstain from smoking. This prospective cohort study examines the effectiveness of switching smoking-cessation medications (SCMs) across multiple QAs.

**Methods:** Adult smokers (aged  $\geq 18$  years) participating in International Tobacco Control surveys in the United Kingdom, U.S., Canada, and Australia (N=795) who: (1) completed two consecutive surveys between 2006 and 2011; (2) initiated a QA at least 1 month before each survey; and (3) provided data for the primary predictor (SCM use during most recent QA), outcome (1-month point prevalence abstinence), and relevant covariates. Analyses were conducted in 2016.

**Results:** Five SCM user classifications were identified: (1) non-users (43.5%); (2) early users (SCM used for initial, but not subsequent QA; 11.4%); (3) later users (SCM used for subsequent, but not initial QA; 18.4%); (4) repeaters (same SCM used for both QAs; 10.7%); and (5) switchers (different SCM used for each QA; 14.2%). Abstinence rates were lower for non-users (15.9%, OR=0.48,  $p=0.002$ ), early users (16.6%, OR=0.27,  $p=0.03$ ), and repeaters (12.4%, OR=0.36,  $p=0.004$ ) relative to switchers (28.5%).

**Conclusions:** Findings suggest smokers will be more successful if they use a SCM in QAs and vary the SCM they use across time. That smokers can increase their odds of quitting by switching SCMs is an important message that could be communicated to smokers.

## Recommended Citation

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