

# A Survey in the United States of Attitudes to Nicotine Cessation in Smokers: Smokers' Satisfaction with Available Treatments

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## BACKGROUND

Tobacco use is currently the leading cause of preventable death that is responsible for more than eight million deaths worldwide and nearly half a million deaths in the U.S. annually.<sup>1,2</sup> More than 87% of lung cancer deaths, 61% of all pulmonary disease deaths, and 32% of all deaths from coronary heart disease are attributable to smoking and exposure to secondhand smoke.<sup>2</sup> Despite the widespread availability of smoking cessation therapies, there remain 1.1 billion smokers worldwide and more than 34.5 million smokers in the U.S. alone.<sup>3,4</sup>



(-)-Cytisine or cytisinicline is a naturally occurring plant-based alkaloid isolated from seeds of *Cytisus laburnum* (Golden chain). Studies have shown that cytisinicline is effective in helping smokers

to quit. Achieve Life Sciences' ongoing research program aims to generate the data required for regulatory approvals in the U.S. and elsewhere. A simplified dosing regimen of 3 mg three times daily (TID) will be recommended. The duration of dosing (6 or 12 weeks) will be determined by ongoing Phase 3 clinical trials.

Achieve's focus is to address the global smoking health and nicotine addiction epidemic through the development and commercialization of cytisinicline. The aim of this research was to better understand smokers' perceptions on available treatments.

## METHODS

We conducted a 15-minute online survey in adult respondents (aged 19 to 64 years) who were current daily smokers or smokers who quit within the past year (but not in the past month). It was planned to enroll 1,000 respondents over 2 weeks. An honorarium of \$9.00 was paid for completing the survey.

## RESULTS

1,122 Respondents took part in the study between 27 August and 3 September 2019. The population included "current smokers" (n=986) and "recent quitters" (n=136). All must have used an FDA-approved prescription (R) pill (varenicline or bupropion) and/or nicotine replacement therapy (NRT) either as an R or over-the-counter (OTC), at least once during a prior quit attempt.

Details of the medications used are shown in Table 1. Overall, almost half of the respondents had tried using an R pill.

The full course (12-weeks) of treatment was not completed in a majority of R pill users (both varenicline and bupropion). Of the 325 prior R pill users who responded, 53% completed ≤ 1 month of therapy (Figure 1). Side effects (61%) and lack of efficacy (27%) were the commonest reasons for discontinuation. Prior claims data analyses indicate 76% of patients on varenicline do not complete a 3-month course of therapy.

## RESULTS, Continued

Of the 591 participants who had not used an R pill, fear of side effects (49%), cost (46%), risk of suicidal thoughts (44%), and lack of efficacy (42%) were stated as reasons for not initiating R therapies.

Both the effectiveness and overall satisfaction with available therapies was poor – the best performing treatments were considered effective or led to satisfaction with treatment in less than one-third of respondents (Table 2).

## CONCLUSIONS

- Overall satisfaction and perceived efficacy with available treatments was low with OTC NRT being the lowest on both metrics.
- A majority of R pill users do not complete the full, 3-month course of therapy. Concerns about side effects was the most common reason reported for discontinuation or lack of initiation of R pill therapy with varenicline/bupropion.
- New, more tolerable and efficacious treatment options are needed to help smokers succeed in quitting.

## DISCLOSURES

This survey was sponsored by Achieve Life Sciences. The authors are paid employees of Achieve Life Sciences.

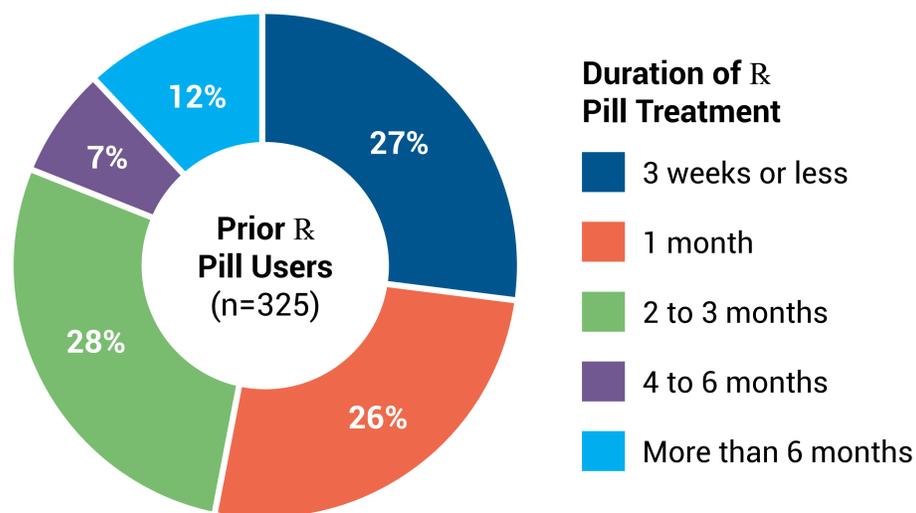
TABLE 1: Medications Used to Quit

Status	R Pill	R NRT	OTC NRT	Total
Current Smokers	467	281	238	986
Recent Quitters	64	37	35	136
<b>Total</b>	<b>531</b> (47.3%)	<b>318</b> (28.3%)	<b>273</b> (24.3%)	<b>1,122</b>

TABLE 2: Effectiveness & Satisfaction with Treatment

	Effectiveness	Satisfaction
Chantix (varenicline)	29%	30%
Zyban (bupropion)	22%	24%
e-cigarettes	30%	33%
Behavioral counselling	28%	30%
R NRT	22%	23%
OTC NRT	17%	18%

Figure 1: Compliance to R Treatment



## REFERENCES

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