

# Research Poster Awards 2023



## Varenicline alone or in combination with nicotine lozenges for smoking cessation

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### INTRODUCTION

Smoking cessation support offered within hospitals remains limited and interventions are *ad hoc*.

Newer strategies are essential to facilitate long-term abstinence.

The effectiveness of the combination of varenicline and acute release forms of nicotine replacement therapy (NRT) is unknown.

### OBJECTIVES

To determine if hospitalised smokers treated with varenicline and NRT lozenges achieve a higher prolonged smoking abstinence rate compared with those treated with varenicline alone.

### METHOD

**Design:** Double-blind, placebo controlled, randomised controlled trial.

**Inclusion criteria:** Adult medical/surgical hospital in-patients self-reporting smoking  $\geq 10$  cigarettes per day, who were interested in quitting and available for follow-up for.

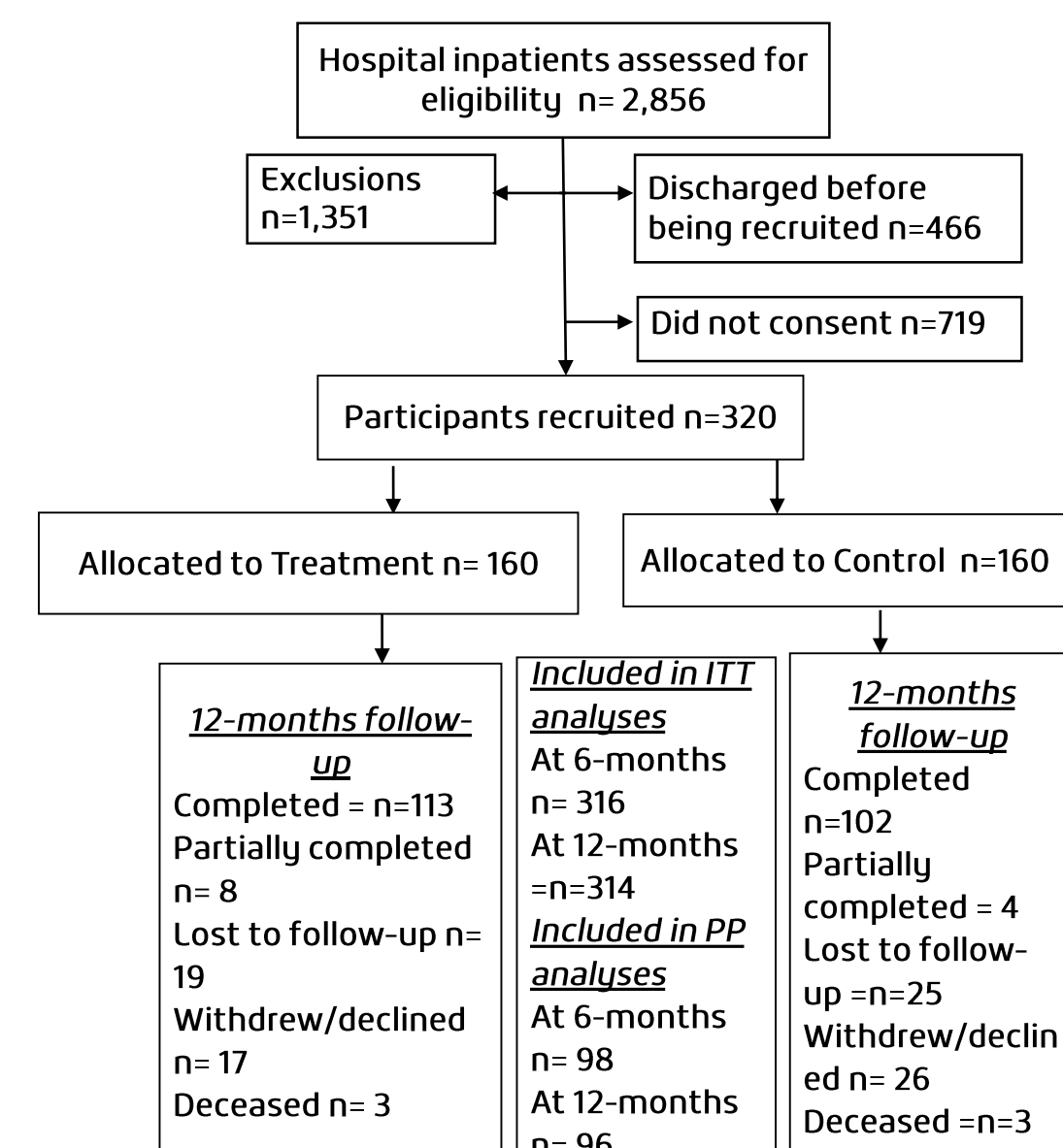
**Exclusion criteria:** Patients already receiving NRT/varenicline (or with contraindications) e.g. terminal disease, unstable cardiovascular condition or a major psychiatric illness.

**Intervention:** 12-week varenicline was initiated during hospitalization. 320 participants were randomised to use varenicline with NRT (2-mg) lozenges or placebo lozenges should there be an urge to smoke. Behavioural support (Quitline) was offered to all participants.

#### Outcome measures:

**Primary endpoint:** Biochemically verified abstinence at 12 months.

**Secondary endpoints:** Self-reported prolonged abstinence; 7-day point prevalence abstinence (6 and 12-months) and medicine-related adverse events.



### RESULTS

Outcome	Intervention (n=160) n (%)	Control (n=160) n (%)	P-value	Odds ratio (95% CI)
<b>Smoking abstinence at 3-months</b>				
Self-reported prolonged abstinence	70 (44.3)	52 (32.7)	<b>0.018</b>	<b>1.87 (1.11 – 3.14)</b>
Self-reported 7-day point prevalence abstinence	57 (36.1)	40 (25.2)	<b>0.022</b>	<b>1.88 (1.09 – 3.24)</b>
<b>Smoking abstinence at 6-months</b>				
Biochemically verified prolonged abstinence	3 (1.9)	10 (6.3)	0.078	0.21 (0.036 – 1.19)
Self-reported prolonged abstinence	61 (38.6)	47 (29.7)	<b>0.032</b>	<b>1.78 (1.05 – 3.02)</b>
Self-reported 7-day point prevalence abstinence	54 (34.2)	37 (23.4)	<b>0.011</b>	<b>2.06 (1.18 – 3.60)</b>
<b>Smoking abstinence at 12-months</b>				
Biochemically verified prolonged abstinence	13 (8.3)	6 (3.8)	<b>0.035</b>	<b>3.49 (1.09 – 11.16)</b>
Self-reported prolonged abstinence	47 (29.9)	30 (19.1)	<b>0.016</b>	<b>2.07 (1.15 – 3.73)</b>
Self-reported 7-day point prevalence abstinence	48 (30.6)	31 (19.7)	<b>0.008</b>	<b>2.21 (1.23 – 3.94)</b>

### DISCUSSION

#### Strengths:

Blinded outcome assessment, losses to follow up analysed as smokers.  
Pragmatic trial conducted in public hospitals during pandemic.

#### Limitations:

Nicotine lozenges might have been recognised by some participants.  
Biochemical validation was affected by COVID-19 pandemic restrictions.

### CONCLUSION

- The combination of varenicline and NRT lozenge was well tolerated and improved self-reported abstinence rates.
- Varenicline may be used in combination with an acute release oral dose form of NRT for better cessation outcomes, without compromising its safety.

### REFERENCES & ACKNOWLEDGEMENTS

Gobarani RK, Abramson MJ, Bonevski B, et al., *The efficacy and safety of varenicline alone versus in combination with nicotine lozenges for smoking cessation among hospitalised smokers (VANISH): study protocol for a randomised, placebo-controlled trial.* BMJ Open 2020. **10**(10): e038184