# The impact of demographics, dependence, and biomarkers on transitions in tobacco product use in a cohort of smokers and dual users Fatema Shafie-Khorassani<sup>1</sup>, Megan E. Piper<sup>2</sup>, Douglas E. Jorenby<sup>2</sup>, Timothy B. Baker<sup>2</sup>,

## TCORS 2.0

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# Introduction

- Electronic nicotine delivery systems (ENDS) have the potential to help people who smoke cigarettes transition to a less harmful product.
- It is uncertain how much ENDS facilitate cigarette cessation in real-world settings.
- A better understanding of what personal and product characteristics are associated with ENDS-facilitated cigarette cessation could improve tobacco control interventions.

# Data

### Exhale Study

- Longitudinal cohort study in Wisconsin from 2015–2017
- 422 adult daily cigarette users and dual cigarette and ENDS users
- Followed up every 2 months for 2 years
- Tobacco product use states determined every two months by self-reported abstinence over the past 30 days

### Variable Definitions

Biomarkers	NNAL, Cotinine, 3HC Low: 1 <sup>st</sup> tertile, Moderate/High: 2 <sup>nd</sup> -3 <sup>rd</sup> tertiles
Demographics	Age, sex, race, Hispanic ethnicity, education (defined in 25+), psychiatric history, partner smokes/vapes
Cigarette Dependence	CPD (high10+), FTND* (high5+), motivation to quit (high5+), smoking within 30 minutes of waking, WISDM† primary (PDM), secondary (SDM) (low<3, moderate3-4, high5+), total (low<40, moderate40-54, high55+)
ENDS Dependence	Frequency, E-FTND (high5+), motivation to quit (high5+), vaping within 30 minutes of waking, E-WISDM primary (PDM), secondary (SDM) (low<3,moderate3-4,high5+), E-WISDM total (low<40, moderate40-54, high55+)
ENDS Descriptors	Flavor, nicotine content (low0-6, medium4-10, high11+ mg) * Fagerstorm Test for Nicotine Dependence † Wisconsin Inventory of Smoking Dependence Motives

# EPIDEMIOLOGY



**UW** Center for **V** Tobacco Research and Intervention UNIVERSITY OF WISCONSIN SCHOOL OF MEDICINE AND PUBLIC HEALTH

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