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Unpredictable intermittent access exacerbates loss of control over ethanol drinking

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Abstract

Background: Loss of control over drinking is a hallmark feature of alcohol use disorder (AUD)

that is modeled preclinically through escalation of ethanol consumption and aversion-resistant

drinking. Prior work with other reinforcers suggests that within-session unpredictable, intermittent

access (uIntA) promotes loss of control over intake. However, the effect of uIntA on voluntary

ethanol consumption is unknown.

Methods: Male and female Long-Evans rats (n=9-10/group) underwent seven weeks of daily

voluntary ethanol (20% v/v) drinking sessions under either a continuous access (ContA) or uIntA

schedule. Following four weeks of baseline, rats were rendered dependent using a two-week

chronic intermittent ethanol vapor exposure procedure. Daily testing was maintained through one

week into withdrawal from vapor exposure. On the final day of testing, ethanol was adulterated

with quinine (30 mg/L) to assess aversion-resistant drinking.

Results: Rats drinking under ContA and uIntA exhibited similar levels of average daily ethanol

consumption at baseline. However, uIntA elicited a more robust dependence-induced escalation

of ethanol consumption compared to ContA, with uIntA sustaining escalation through early

protracted withdrawal. Additionally, while rats with ContA to ethanol remained sensitive to quinine

even after chronic ethanol vapor exposure, uIntA promoted aversion-resistant drinking in ethanol

dependent rats.

Conclusions: These results demonstrate that, compared to ContA, uIntA maintains ethanol

drinking and exacerbates AUD-related symptomatology while also providing researchers with the

ability to capture additional measures of motivation and drinking patterns without increasing

experimental burden. This work positions uIntA as a powerful tool to assess psychological and

neurobiological factors underlying loss of control over drinking.

Keywords: dependence-induced escalation, aversion-resistant drinking, estimated blood ethanol

concentration, continuous access, lick microstructure, discriminative stimulus, ethanol availability

Introduction

Alcohol use disorder (AUD) is a chronic, relapsing disorder characterized by several hallmark

symptoms, including loss of control over drinking and drinking despite negative consequences

(American Psychiatric Association, 2022; Koob, 2024; MacKillop et al., 2022). These symptoms

are often investigated preclinically using models of escalated ethanol intake (Becker, 2013;

Bowen et al., 2022) and aversion-resistant drinking, respectively (De Oliveira Sergio et al., 2023;

Hopf & Lesscher, 2014). These phenotypes are thought to reflect the transition from moderate to

intense, problematic intake characteristic of AUD and other substance use disorders (SUD)

(Edwards & Koob, 2013). In attempts to more accurately model patterns of human drug intake

and seeking to inform the development of SUD-related phenotypes, a bevy of prior work has

shown that variable, intermittent timing of reinforcer access can promote uncontrolled intake and

responding for both drug and non-drug reinforcers (Allain & Samaha, 2019; Becker, 2013; Clark

& Zack, 2023; Spear, 2020). With respect to ethanol, perhaps the most well-characterized effect

of schedule on drinking has been observed in the *ad libitum* two bottle choice (2BC) home cage

drinking paradigm, which consists of concurrent access to water and ethanol (Bowen et al., 2022;

Carnicella et al., 2014; Spear, 2020). Intermittent access 2BC (IA2BC), often defined as limiting

24 hr 2BC sessions to non-consecutive days of the week, can drive significantly higher intake and

promote a more robust binge drinking phenotype than continuous 2BC, defined as consecutive

24 hr 2BC sessions (Kimbrough et al., 2017; Lindell et al., 2017; Loi et al., 2010; Melendez, 2011;

Rosenwasser et al., 2013; Simms et al., 2008, 2010; Spoelder et al., 2015). Additionally, 2BC

home cage drinking causes a gradual increase in ethanol intake over the course of weeks, often

thought to reflect a clinically relevant binge drinking phenotype, which is augmented in IA2BC

compared to a continuous 2BC procedure (Lindell et al., 2017; Loi et al., 2010; Rosenwasser et

al., 2013; Simms et al., 2008, 2010; Spoelder et al., 2015). Importantly, these features increase

the translational relevance of IA2BC by reflecting cycles of binge and withdrawal observed in the

clinical population (Bowen et al., 2022; Carnicella et al., 2014; Spear, 2020).

While evidence suggests that IA2BC has superior face validity to continuous 2BC paradigms,

subjects in both paradigms typically retain *ad libitum* access to ethanol. Thus, while the access

schedule differs *between* drinking sessions, both paradigms have continuous access (ContA) to

ethanol *within* a session. While useful, this does not reflect the dynamic settings and associated

factors that can drive variable rates of within-session consumption, and related craving, in the

clinical population (Dvorak et al., 2014; Fischer et al., 2023; Fridberg et al., 2021; King et al.,

2025; Pelloux et al., 2019; Prignitz et al., 2024; Wray et al., 2014). Clinical research makes it

increasingly clear that the rate of ethanol consumption within a drinking session, not just the total

amount, has clinical utility for informing risk of AUD development and severity of AUD symptoms

(Carpenter et al., 2017, 2019; Gowin et al., 2017; Simons et al., 2015; Sloan et al., 2020). As

such, within-session intermittent access (IntA), defined as providing discrete reinforcer access

periods interspersed with periods of no reinforcer access within a given drinking session, may

serve to better model dynamic settings and drinking patterns associated with AUD that are

observed in clinical populations (Ardinger et al., 2022; Leeman et al., 2010).

While not studied extensively in the context of ethanol consumption, within-session IntA for

cocaine and opioids consistently elicits greater reward seeking, increases cue-induced

reinstatement, and heightens SUD-related phenotypes including escalation and aversion-

resistant intake compared to ContA schedules (often denoted as long access [LgA]) (Allain &

Samaha, 2019; Beasley et al., 2023; Calipari et al., 2013, 2015; Calipari & Jones, 2014; D'Ottavio

et al., 2023; Fragale et al., 2020; James et al., 2019; Nicolas et al., 2019; Rakowski et al., 2025;

Samson et al., 2022; Singer et al., 2018). This effect is thought to be driven, in large part, by

dynamic, fluctuating drug concentrations and full clearance of drug between intoxication sessions,

which mimic human patterns of binge intake (Allain & Samaha, 2019; Kawa et al., 2019; Zimmer

et al., 2011, 2012). These data suggest that within-session IntA may also be able to promote

increased ethanol consumption and exacerbate AUD-relevant phenotypes. However, this

possibility has not been widely assessed due to the fact that, unlike psychostimulants and opioids,

ethanol is metabolized at much slower rates (Wilson & Matschinsky, 2020), precluding the ability

of within-session IntA to drive dynamic, fluctuating blood ethanol concentrations (BECs) thought

to be required for these effects. However, recent work found that within-session IntA for non-drug

reinforcers engenders more robust reward seeking, cue-induced reinstatement, and higher

motivation than within-session ContA procedures (Beasley et al., 2022; Muñoz-Escobar et al.,

2019; M. J. F. Robinson et al., 2023). Interestingly, this effect was greater when periods of

reinforcer access and interval were unpredictable (M. J. F. Robinson et al., 2023). These data

imply that the effects of within-session IntA drug cannot be fully explained by reinforcer

pharmacokinetics, suggesting that these effects may in fact generalize to ethanol. In line with this,

two studies have shown that within-session IntA to ethanol promotes higher voluntary intake,

ethanol seeking, and aversion-resistant seeking compared to within-session ContA (Gage et al.,

2023; Tomie et al., 2006).

Altogether, these data imply that within-session IntA, and unpredictable IntA (uIntA) in particular,

to ethanol could exacerbate ethanol intake and AUD-related symptomatology to a greater degree

than within-session ContA paradigms. However, prior work has yet to examine the effect of uIntA

on ethanol consumption or AUD-related phenotypes associated with ethanol dependence,

including escalation of ethanol consumption and aversion-resistant drinking. As such, the present

study sought to examine voluntary ethanol consumption prior to and following the induction of

ethanol dependence under an uIntA schedule and directly compare this to a ContA schedule. We

hypothesized that uIntA would promote higher ethanol intake and patterns of consumption that

drove higher within-session BECs prior to the development of dependence than ContA.

Furthermore, we hypothesized that uIntA would exacerbate dependence-induced escalation and

aversion-resistant intake compared to ethanol-dependent rats drinking under a ContA schedule.

Methods

Animals

Adult male and female Long-Evans rats (Envigo, Indianapolis, IN) were utilized for all experiments

(n=24/sex). Rats were ~P60 on arrival and allowed one week of acclimation in the vivarium prior

to testing. Rats were singly housed in standard Plexiglas cages in a temperature-controlled room

under a 12:12 hr reverse light/dark cycle (lights on at 22:00). Rats were provided *ad libitum* access

to standard enrichment, chow (Teklad 7912, Envigo), and water throughout the duration of the

study. All experimental procedures were approved by the University of Illinois Chicago Institutional

Animal Care and Use Committee and adhered to the NIH Guidelines for the Care and Use of

Laboratory Animals.

Schedules of ethanol access

Rats were trained to drink ethanol (20% v/v) in 1 hour drinking sessions using a lickometer-

equipped apparatus (MED Associates). For the first session of drinking, all rats experienced a

continuous access (ContA) schedule. After the first drinking session, rats were randomly assigned

to either ContA or unpredictable intermittent access (uIntA) schedules and experienced the same

schedule for the remainder of testing. ContA consisted of 60 minutes of uninterrupted access to

the ethanol-containing sipper (**Fig. 1A**). uIntA consisted of sipper access spread across 26

epochs of variable duration (15s, 20s, 30s, 40s, 60s, 90s, 120s) and interval (30s, 60s, 2.5 min,

5 min, 10 min) (**Fig. 1B**). Sipper access in both schedules was accompanied by house light

illumination, which served as a discriminative stimulus (DS) signaling ethanol availability. For

uIntA sessions, DS and interval (or inter-trial interval [ITI]) durations occurred a fixed number of

times per session, as described in **Table 1**. Individual DS and ITI durations were pulled randomly

without replacement from the list of all possible durations within each session, leading to a

Figure 1. Experimental design. (**A**) Rats that underwent daily continuous access (ContA) sessions were allowed 60 min of uninterrupted ethanol access paired with house light illumination. (**B**) Rats that underwent daily unpredictable intermittent access (uIntA) sessions experienced variable periods of ethanol availability (amounting to 15 min) signaled by house light illumination. separated by variable periods without ethanol access (amounting to 45 min). (**C**) Rats underwent a total of seven weeks of voluntary drinking sessions. After a four-week baseline period, rats underwent two weeks of chronic intermittent ethanol or air vapor exposure during which drinking sessions continued Mon-Fri. Drinking sessions continued into withdrawal after completion of vapor exposure. On the final day of withdrawal testing, ethanol was adulterated with 30 mg/L quinine to assess aversion-resistant drinking. For each experimental timepoint, data was averaged across the final four sessions (indicated by dotted squares).

	Duration (s)	# of occurrences	Total time (min)
Discriminitive Stimulus (DS) *(ethanol access)*	15	10	2.5
	20	5	1.67
	30	2	1
	40	2	1.33
	60	5	5
	90	1	1.5
	120	1	2
Intertrial Interval (ITI) *(no ethanol access)*	30	11	5.5
	60	7	7
	150	3	7.5
	300	3	15
	600	1	10

Table 1. Discriminative stimulus (ethanol access) and intertrial interval (no ethanol access) periods within the uIntA schedule.

pseudorandom order of DS presentations (or ethanol access periods) that amount to 15 min per

session.

Chronic intermittent ethanol vapor exposure

After four weeks of daily ethanol drinking sessions, rats were rendered dependent using a

standard 14-day chronic intermittent ethanol vapor exposure procedure as previously described

(Glover et al., 2019, 2021; Przybysz et al., 2024; Ramirez et al., 2024). Rats experienced either

vaporized ethanol (EtOH-exposed group) or room air (Air-exposed group) for 14 hr/day (18:00-

8:00) for 14 consecutive days. Behavioral signs of intoxication were assessed daily in EtOH-

exposed rats using a previously published subjective rating scale (Glover et al., 2021; Ramirez et

al., 2024) ranging from 1 (no signs of intoxication) to a 5 (total loss of consciousness). Blood

samples (40 uL) from EtOH-exposed rats were extracted immediately upon removal from

chambers via tail vein nick on days 2, 6, 10, and 14 ($\pm$1 day) of the exposure period for the

measurement of blood ethanol concentration (BEC) as a result of ethanol vapor exposure. Air-

exposed counterparts were administered a tail pinch on the same schedule to mimic the

temporary discomfort evoked by blood collection experienced by intoxicated rats.

Timeline of experiments

A schematic describing the experimental timeline is shown in **Fig. 1C**. Voluntary ethanol drinking

sessions occurred daily, excluding weekends, throughout all experimental timepoints for a total

of seven weeks. Baseline (BL) data was collected during the first four weeks of testing. Daily

drinking sessions continued during the day while rats underwent vapor exposure overnight. This

was followed by one week of data collection during withdrawal (WD) after vapor exposure was

completed. On the final day of testing (WD day 5), ethanol was adulterated with quinine (30 mg/L)

to assess aversion-resistant drinking. Blood samples (40 uL) were collected from all rats

immediately following completion of the last baseline, first WD, and last WD drinking sessions to

measure [actual] blood ethanol concentration (aBEC) achieved as a result of voluntary ethanol

consumption.

Blood ethanol concentration

Upon collection, blood samples were immediately centrifuged (10,000 rcf, 10 min, 4°C). Plasma

supernatant (20 uL) was aliquoted into 0.5 mL microcentrifuge tubes and stored at -20°C. BECs

was measured using an Analox Alcohol Analyzer (Analox Instruments Ltd, United Kingdom) within

30 days of sample collection.

Estimated blood ethanol concentration (eBEC) was calculated at each experimental timepoint

using the Widmark equation (Widmark, 1981):

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$$eBEC = \frac{A}{W * R} - (\beta * t)$$

where A is defined as the amount of ethanol (g) consumed, W indicates the weight (kg) of the rat,

t is defined as the amount of time (hr) since the start of drinking, R is defined as the Widmark

volume constant (L/kg) that informs the volume diffusion of ethanol in the body, and β is the linear

elimination rate (g/L/hr) for ethanol. The final eBEC output from the Widmark equation was

multiplied by 100 to convert from g/L to mg/dL (i.e. mg%) for all calculations. For these

experiments, R was set at 0.72 L/kg for males and 0.74 L/kg for females based on prior work in

Sprague-Dawley rats (Crippens et al., 1999). To individually define β for each rat, we identified

the final eBEC value corresponding to the three timepoints where aBEC was measured after

voluntary drinking. Final eBECs for these sessions were generated using a range of β elimination

values (0.1 g/L/hr to 1.5 g/L/hr) determined from prior work defining ethanol elimination rates in

Long Evans (Chung et al., 2008; Doherty & Gonzales, 2015; Kharbouche et al., 2010; Leasure &

Nixon, 2010; B. Webb et al., 2002) and Sprague-Dawley (Aull et al., 1956; Crippens et al., 1999;

Little et al., 1996; Varlinskaya & Spear, 2004) rats. Using these values, the β elimination rate that

produced the smallest residual between the final eBEC and the final aBEC measured for each rat

for each of the three sessions where aBEC was measured was identified. These three β

elimination rates (1 for each session) were then averaged to produce an individualized β

elimination rate for calculation of eBEC across all timepoints. For *A,* the total number of licks was

divided by the total ethanol intake (in g) for each session to obtain a "gperlick" [or "mgperlick"]

measurement that was used to calculate the total amount of ethanol consumed based on the

number of licks performed at any given timepoint within the session. eBEC curves throughout the

session were then calculated from the accumulation of ethanol intake via this "mgperlick"

measurement in 1 min bins.

Lick microstructure analysis

Lick microstructure analysis was utilized as described previously (Hou et al., 2024; Patwell et al.,

2021; Pitock et al., 2025; Wheeler et al., 2025). In brief, bouts within a session were defined as

three or more licks with an interlick interval of less than 1 second. Importantly, periods when

ethanol was not available were subtracted from uIntA analyses, allowing us to analyze lick

microstructure in a pseudo-consecutive 15-minute (900 sec) period of ethanol availability. Bout

probability for each analyzed session was defined by delineating bout "on" (1)/ bout "off" (0)

periods during ethanol availability at the sampling rate of our lickometer-equipped apparatus (100

Hz; 1 sample/10 ms). Bout probability timeseries were then averaged across the final four

sessions within each timepoint for each animal. To ensure the ability to perform direct

comparisons between ContA and uIntA schedules, bout probability timeseries for each animal

were binned so as to generate an equivalent number of datapoints (76 total datapoints for each

session; ContA [48 sec bins; amounting to 3600 sec of ethanol availability]; uIntA [12 sec bins;

amounting to 900 sec of ethanol availability]). A similar method was utilized for analyses of bout

probability across the time of a DS presentation by binning bout probability curves within each DS

presentation to 100 points (1% of DS presentation time per datapoint [ranging from 0.15s – 1.2s

of real time depending on total DS duration]).

Statistical analysis

Unless otherwise indicated, data from the final four voluntary drinking sessions at each timepoint

were averaged together for each rat for statistical analyses. Data were pooled across sexes for

all analyses due to insufficient power to determine significant effects of sex in the current

experiments. Rats exhibiting an average intake of <0.1 g/kg at baseline (n = 2-3/group) were

excluded due to insufficient ethanol consumption. Importantly, there was no significant difference

in the proportion of rats excluded in either schedule of access (Fisher's exact test, p>0.9999).

Upon collection of all experimental data, statistical outlier analyses (ROUT) were performed on

all datasets with a False Discovery Rate (Q) of 0.02%. Comparisons for group differences after

baseline were performed using omnibus multifactorial repeated measures (RM) ANOVAs with

time, schedule, and vapor exposure as primary independent variables. This was followed by two-

way RM ANOVAs to further identify effects of vapor and schedule on dependence-induced

escalation of ethanol consumption and aversion-resistant drinking. Upon detection of an

interaction, Tukey's or Šidàk's multiple comparisons test were utilized to identify simple main

effects as described. For traditional data structures not analyzed by two-way RM ANOVA,

unpaired t-test/Mann-Whitney test, Spearman's correlation, and Fisher's exact test were utilized

as appropriate. All analyses were conducted using Prism 10 (Graphpad) with the significance

threshold for all experiments set at p < 0.05. Data in **Table 2** presents the test statistics and

significance of all conventional statistical analyses that are not reported in-text. For all graphs,

ContA is depicted with solid lines and closed datapoints, whereas uIntA is depicted with dotted

lines and open datapoints, unless otherwise described. Circles indicate data from male rats and

triangles indicate data from female rats.

Functional linear mixed modeling (FLMM) was used to assess bout probability within DS

presentations for rats drinking under the uIntA schedule. This approach allows for robust detection

of trial-to-trial (i.e. DS presentation) level differences within a heavily nested experimental design

that could be obscured during analysis using average or summary measures. To perform FLMM,

the R package "fastFMM" (Loewinger et al., 2025) was utilized in custom R scripts (version 4.4.2)

to model the functional fixed effects for subject i at trial j at time s (regression coefficients denoted

by β(s)) of covariates (i.e. vapor exposure, experimental timepoint, etc.; denoted by $X_{i,j}$) on

functional outcomes (i.e. bout probability within a DS presentation; denoted by $Y_{i,j}(s)$). For all

models, we included a subject-specific random intercept (denoted by $\gamma_{0,i}(s)$) to account for

subject-level variation associated with the nested nature of the data structure. We generated two

models to uncover the effects of three primary covariates: 1) latency of DS onset from session

start, 2) EtOH consumption (g/kg) during the prior DS presentation, 3) prior ITI duration, and 4)

current DS duration, as well as their interaction with vapor exposure. For both models, the first

DS presentation was excluded from the data structure due to an inability to properly interpret

covariates associated with experience prior to the current DS presentation.

Baseline Model (Fig. 8A-C): Data were pooled across vapor exposure groups to identify effects

exhibited during baseline drinking sessions prior to vapor exposure. Effects of three primary

variables on bout probability during DS presentations were modeled with:

$$\mathbb{E}[Y_{i,j}(s)|X_{i,j},\gamma_i(s)] = \beta_0(s) + \gamma_{0,i}(s) + \beta_1(s)\text{DSLatency}_{i,j} + $$

$$\beta_2(s)\text{PriorEtOH}_{i,j} + \beta_3(s)\text{PriorITI}_{i,j} + \beta_4(s)\text{DSduration}_{i,j}$$

With the covariates defined as:

DSlatency: continuous variable denoting the onset of the DS presentation within the

session, scaled 0 [indicating earliest DS presentation] to 1 [indicating latest DS presentation].

PriorEtOH: continuous variable denoting the amount of ethanol (g/kg) consumed in the

prior DS presentation, z-scored to all trials from all subjects [0 = average g/kg intake within a DS]

PriorITI: continuous variable denoting the duration of ITI's experienced just prior to the

current DS, scaled 0 [indicating shortest ITI duration] to 1 [indicating longest ITI duration]

DSduration: continuous variable denoting the current DS duration, scaled 0 [indicating

shortest DS duration] to 1 [indicating longest DS duration]

Vapor/Withdrawal Model (Fig 8E-I): Data were pooled across the final four voluntary drinking

sessions during vapor exposure and withdrawal (eight sessions total) to capture the entire period

where dependence-induced escalation was observed and compared between Air-exposed and

EtOH-exposed groups. The interaction between ethanol dependence and our primary covariates

on bout probability during DS presentations was modeled as follows:

$$\mathbb{E}\big[\boldsymbol{Y_{i,j}}(s)\big|\boldsymbol{X_{i,j}}, \boldsymbol{\gamma_i}(s)\big] = \beta_0(s) + \gamma_{0,i}(s) + \beta_1(s)\mathrm{Vapor}_{i,j}^{(1)} + \beta_2(s)\mathrm{DSLatency}_{i,j} +$$

$$\beta_3(s)\mathrm{PriorEtOH}_{i,j} + \beta_4(s)\mathrm{PriorITI}_{i,j} + \beta_5(s)\mathrm{DSduration}_{i,j} + \beta_6(s)\mathrm{Vapor}_{i,j}^{(1)}\mathrm{DSLatency}_{i,j} +$$

$$\beta_7(s)\mathrm{Vapor}_{i,j}^{(1)}\mathrm{PriorEtOH}_{i,j} + \beta_8(s)\mathrm{Vapor}_{i,j}^{(1)}\mathrm{PriorITI}_{i,j} + \beta_9(s)\mathrm{Vapor}_{i,j}^{(1)}\mathrm{DSduration}_{i,j}$$

With additional covariates defined as:

Vapor: factor variable with 0 denoting Air-exposed and 1 denoting EtOH-exposed

Results from all FLMM related analyses are presented in **Table 3**.

Results

Validation of estimated blood ethanol concentration (eBEC) analysis

Prior work has shown that rate of ethanol consumption, and resultant pharmacokinetics, can

predict risk for binge drinking and development of AUD (Carpenter et al., 2017, 2019; Gowin et

al., 2017; Simons et al., 2015; Sloan et al., 2020). Clinical assessments often use eBECs to

identify how within-session pharmacokinetics relate to the subjective effects of ethanol, relative

intoxication, and expression of AUD symptomatology (Hultgren et al., 2025; Piasecki, 2019).

Surprisingly, eBEC analyses have not been widely adopted in preclinical assessments despite its

translational value and ability to provide a deeper understanding of how ethanol intake patterns,

and resultant eBEC dynamics, drive AUD-relevant symptomatology (Grahame, 2026). As such,

we sought to develop a rigorous eBEC analysis pipeline to allow for within-session estimation of

BECs across our experimental timepoints.

BECs measured from blood samples obtained at the termination of three separate drinking

sessions across the experimental timeline (**Fig. 1C**), individually defined β ethanol elimination

rates, and 'mgperlick' values were used in combination to calculate eBECs utilizing using the

Widmark equation. Individually defined β ethanol elimination rates were determined as the rate

that produced the smallest residual between final eBEC and aBEC of the drinking sessions (**Fig**

2A-B). Importantly, residuals ranged from -10 to +20 mg/dL (ave: +3.7 mg/dL $\pm$ 1.083 mg/dL) and

were not significantly different between groups (**Fig 2C**). Estimated β ethanol elimination rates

across sexes ranged from 0.15 g/L/hr to 1.1 g/L/hr (ave: 0.61 g/L/hr). Females tended to have a

higher average estimated β ethanol elimination rate (~0.68 g/L/hr) than males (~0.55 g/L/hr)

although this difference did not reach statistical significance (t(35)=1.728 p=0.0928). Importantly,

there was no significant effect of schedule on individually estimated β ethanol elimination rates

(**Fig 2D**). We also do not observe a significant effect of schedule on the average mg of EtOH

Figure 2: Validation of estimated blood ethanol concentration (eBEC) analysis. (**A**) eBECs were calculated using the Widmark equation and validated with end-of-session aBECs. (**B**) Representative eBEC curve (blue line) plotted with number of licks occurring within each minute of the session (black bars) to exemplify use of 'mgperlick' measurement in eBEC calculation. Average residual [final eBEC – final aBEC] (**C**), individually defined estimated β ethanol elimination rates (**D**), and mg of EtOH consumed per lick (**E**) for ContA and uIntA rats. (**F-H**) Identical parameters as displayed in **C-E** separated by schedule and vapor group assignment. (**I**) Correlation between average final eBEC and average final aBEC for drinking sessions where tail blood was collected. (**J**) Correlation between average peak eBEC and average ethanol intake across sessions within each experimental timepoint. (**K**) Correlation between total number of licks and total intake for all sessions.

consumed per lick ['mgperlick'] (**Fig 2E**). In addition, no significant between group differences

were observed in the average residual (**Fig 2F**), estimated β ethanol elimination rate (**Fig 2G**), or

calculated mg of EtOH per lick (**Fig 2H**) when data were examined by ethanol vapor group in

addition to schedule. Spearman's correlations examining the relationship between eBECs and

measured variables revealed a significant positive correlation between final (or "end-of-session")

calculated eBECs and measured aBECs corresponding to the timepoints when tail blood was

collected (**Fig 2I**). As expected, we also observed a significant positive correlation between

average peak eBEC and average intake achieved at each experimental timepoint (**Fig 2J**). A

significant positive correlation was also observed between total number of licks and total intake

within each session (**Fig 2K**), confirming the fidelity of the lickometer-equipped apparatus to

accurately reflect intake throughout the session. Altogether, these data support the validity of the

current eBEC calculation to accurately reflect aBECs achieved as a result of voluntary ethanol

drinking throughout a session using a lickometer-equipped apparatus.

Intoxication as a result of chronic intermittent ethanol vapor exposure

Average intoxication scores during chronic intermittent ethanol vapor exposure were not

significantly different between schedules (ContA: 2.086±0.059, uIntA: 2.087±0.069,

t(17)=0.01755, _p_=0.9862). In addition, there was no significant effect of drinking schedule on

BECs achieved during ethanol vapor exposure (ContA: 259.9±16.63 mg/dL, uIntA: 254±21.71

mg/dL, t(17)=0.2206, _p_=0.8280). As expected, a significant positive correlation was observed

between intoxication score and BECs achieved as a result of vapor exposure (r=0.6914,

_p_<0.0001). Altogether, these data corroborate prior work (Glover et al., 2019, 2021; Przybysz et

al., 2024; Ramirez et al., 2024) and demonstrate a similar degree of intoxication during chronic

intermittent ethanol vapor exposure between rats experiencing ContA or uIntA.

Schedule of access does not affect drinking dynamics prior to ethanol dependence

To determine whether uIntA can increase ethanol consumption, and other relevant parameters,

compared to ContA, we compared overall intake between groups prior to ethanol dependence.

As shown in **Fig. 3**, rats that underwent uIntA drinking exhibited similar levels of ethanol

consumption at baseline as rats that underwent ContA drinking. Indeed, analysis of intake across

all pre-vapor sessions as well as average intake during the final four baseline sessions found no

significant main effect of schedule on intake (**Fig. 3A**). Moreover, aBECs captured after the final

baseline drinking session were not significantly different between schedules (**Table 2**). In

agreement with this, uIntA and ContA groups also exhibited similar within-session eBEC

dynamics (**Fig 3B**) and bout probability (**Fig 3C**) at baseline. Importantly, differences in these

measures remained nonsignificant when analyzed by future vapor group assignment (**Fig 3D-F;**

Table 2). Furthermore, the proportion of rats whose average baseline intake was classified as

light (<0.5 g/kg), moderate (0.5-1.0 g/kg), or heavy (>1 g/kg) did not differ between schedules or

vapor exposure groups (**Fig 3G**-**H**). Altogether, these data show that uIntA engenders moderate

levels of voluntary ethanol consumption to a similar degree as ContA.

Dependence-induced escalation of ethanol consumption differs across schedules

Although we expected that all rats exposed to chronic intermittent ethanol vapor would exhibit

escalated ethanol intake, we hypothesized that uIntA would exacerbate escalation relative to

ContA counterparts. To assess this, we performed omnibus multifactorial RM ANOVAs utilizing

time (continuous or categorical [i.e. timepoint]), schedule (ContA vs. uIntA), and vapor (Air vs.

EtOH) as independent variables across all relevant dependent variables. As denoted in **Table 2**,

several analyses indicate trending three-way interactions and significant two way-interactions of

schedule and vapor, suggesting non-independent effects of both factors on each dependent

measure. As such, we performed RM two-way ANOVAs to determine the effect of vapor within

each schedule (ContA Air- vs. EtOH-exposed; uIntA Air- vs. EtOH-exposed). Separate analyses

Figure 3. Schedule of access does not affect ethanol consumption, eBEC dynamics, or drinking patterns at baseline. (**A**) Daily ethanol intake across all baseline drinking sessions (left) and average intake from the final four sessions (right) of baseline prior to vapor exposure. (**B**) Average within-session eBECs (left) and average peak eBEC (right) at baseline. (**C**) Average within-session bout probability at baseline (left). Ethanol availability time was normalized to 60 min (from 15 min) for the uIntA group to enable direct comparison with the ContA group. Area under the curve (AUC) of baseline within-session bout probability (right). Average ethanol intake (**D**), peak eBEC achieved (**E**), and AUC of bout probability (**F**) at baseline separated by schedule and vapor group assignment. The proportion of rats classified as light (< 0.5 g/kg), moderate (0.5 g/kg – 1 g/kg), or heavy (> 1 g/kg) drinkers at baseline grouped by schedule only (**G**) and by schedule and vapor group assignment (**H**). Error bars indicate ± SEM. Solid lines and closed datapoints indicate ContA. Dashed lines and open datapoints indicate uIntA. Circles and triangles indicate males and females, respectively. n=4-6/sex/group.

were performed to determine the effect of schedule within ethanol dependent rats (ContA EtOH-

exposed vs. uIntA EtOH-exposed).

Dependence-induced escalation is transient in ContA drinking rats

When drinking is examined across sessions, no significant main effect of vapor or vapor by

timepoint interaction was identified in rats that drank ethanol under a ContA schedule (**Fig. 4A**).

However, a significant vapor by timepoint interaction was detected when intake was assessed

during the final four sessions of each timepoint (**Fig. 4B**). Tukey's posthoc comparisons indicate

that EtOH-exposed ContA rats drank significantly more ethanol during vapor exposure compared

to baseline (p=0.0199) and withdrawal (p=0.0346). Additionally, EtOH-exposed rats drank more

during vapor exposure than Air-exposed counterparts (p=0.0251). This difference was also

apparent when data were assessed in terms of change in intake relative to baseline (**Fig. 4C**).

Šidák's posthoc comparisons found that EtOH-exposed ContA rats increased their ethanol intake

to a greater degree during vapor exposure than did Air-exposed ContA rats (p=0.0049).

Furthermore, EtOH-exposed rats exhibited a greater increase in intake during vapor exposure

than during withdrawal (p=0.0024). In corroboration with average intake increasing during vapor

exposure, we also observed a significant main effect of vapor group on eBECs achieved during

daily drinking sessions occurring throughout the 14d vapor exposure paradigm (**Fig. 4D**).

However, this effect did not persist into withdrawal (**Fig. 4E**). This is corroborated by a significant

vapor by timepoint interaction on average peak eBEC achieved during the final four sessions at

each timepoint (**Fig. 4F**). Tukey's posthoc comparisons indicate the EtOH-exposed ContA rats

achieved higher peak eBECs during vapor exposure compared to baseline (p=0.0099) and

withdrawal (p=0.0227). Moreover, EtOH-exposed ContA rats achieved a higher average peak

eBEC than Air-exposed counterparts during drinking sessions occurring over the course of vapor

exposure (p=0.0078). In agreement with eBECs, aBECs were not significantly different between

Air- and EtOH-exposed rats at 24 hr withdrawal ($t(17)$=2.026, p=0.0587; Air: 25.63±8.57 mg/dL;

Figure 4. Dependence promotes transient escalation of ethanol consumption in rats drinking under a ContA schedule. (**A**) Daily ethanol intake during vapor exposure and withdrawal timepoints relative to average intake during the final four baseline sessions. (**B**) Average intake across all timepoints. (**C**) Change in intake from baseline during vapor exposure and withdrawal. (**D**) Average within-session eBECs achieved in drinking sessions that occurred during vapor exposure. (**E**) Average within-session eBECs achieved in drinking sessions during withdrawal. (**F**) Average peak eBEC achieved across all timepoints. (**G**) Average within-session bout probability during vapor exposure. (**H**) Average within-session bout probability during withdrawal. (**I**) Area under the curve of bout probability across all timepoints. Proportion of Air- and EtOH-exposed ContA rats defined as escalators (≥ 20% increase from baseline) or non-escalators during vapor exposure (**J**) and withdrawal sessions (**K**). Error bars indicate ± SEM. Solid lines and closed datapoints indicate ContA. Circles and triangles indicate males and females, respectively. n=4-6/sex/group.

EtOH: 8.640±2.02 mg/dL). This transient increase in intake and intoxication is further corroborated

by changes in bout probability, such that a main effect of vapor group was detected during drinking

sessions occurring during vapor exposure (**Fig. 4G**), but not during withdrawal (**Fig. 4H**). Analysis

of bout probability area under the curve (AUC) found a significant vapor by timepoint interaction

with Tukey's posthoc comparisons revealing that EtOH-exposed ContA rats had significantly

greater AUC during the vapor timepoint than the withdrawal timepoint (**Fig. 4I**; p=0.0445). While

not significant, EtOH-exposed ContA rats exhibited a trend for greater AUC during the vapor

exposure timepoint compared to baseline (p=0.08). Additionally, EtOH-exposed ContA rats

exhibited significantly greater AUC than Air-exposed counterparts during the vapor exposure

timepoint (p=0.0095). Finally, the proportion of rats defined as escalators (exhibiting ≥20%

increase in intake from baseline) was significantly higher in EtOH- than Air-exposed rats during

drinking sessions that occurred in parallel with vapor exposure (**Fig. 4J**; p=0.0027) but not during

withdrawal (**Fig. 4K**; p=0.3133). Altogether, these data indicate that ethanol-dependent rats under

a ContA schedule exhibit a transient escalation of ethanol intake observed only during chronic

intermittent ethanol vapor exposure.

Dependence-induced escalation is sustained in uIntA drinking rats

In rats that underwent uIntA drinking, a significant main effect of vapor was detected in per session

intake (**Fig. 5A**), indicating that EtOH-exposed uIntA rats drank more during all post-baseline

sessions compared to Air-exposed counterparts. This is reinforced by a significant vapor by

timepoint interaction observed in average intake during the final four sessions of each timepoint

(**Fig. 5B**). Tukey's posthoc comparisons indicate that EtOH-exposed uIntA rats exhibited

significantly higher intake during the vapor (p=0.0168) and withdrawal (p=0.0142) timepoints

compared to baseline. Moreover, EtOH-exposed uIntA rats drank significantly more than Air-

exposed counterparts during both vapor (p<0.0001) and withdrawal (p=0.0015) timepoints. This

is further supported by a significant main effect of vapor on change in intake from baseline

Figure 5: Long-lasting dependence-induced escalation of ethanol consumption in rats drinking under an uIntA schedule. A) Daily ethanol intake during vapor exposure and withdrawal timepoints relative to average intake at baseline. (**B**) Average intake across all timepoints. (**C**) Change in intake from baseline during vapor exposure and withdrawal. (**D**) Average within-session eBECs achieved during vapor exposure drinking sessions. (**E**) Average within-session eBECs achieved during withdrawal. (**F**) Average peak eBEC achieved across all timepoints (**G**) Average within-session bout probability during vapor exposure. (**H**) Average within-session bout probability during withdrawal. (**I**) Area under the curve for bout probability across all timepoints. Proportion of Air- and EtOH-exposed uIntA rats classified as escalators (≥ 20% increase from baseline) or non-escalators during vapor exposure (**J**) and withdrawal (**K**) sessions. Error bars indicate ± SEM. Dashed lines and open datapoints indicate uIntA. Circles and triangles indicate males and females, respectively. n=4-5/sex/group.

observed during the vapor and withdrawal timepoints (**Fig 5C**). Maintenance of dependence-

induced escalation was associated with a robust increase in eBECs. This was supported by a

significant main effect of vapor and a significant vapor by timepoint interaction for within-session

eBECs achieved during vapor exposure (**Fig. 5D**) and withdrawal (**Fig. 5E**). A significant main

effect of vapor and vapor by timepoint interaction was observed in average peak eBEC during the

final four sessions of each timepoint (**Fig. 5F**). Tukey's posthoc comparisons indicate that peak

eBEC was significantly higher in EtOH-exposed uIntA rats during the vapor (*p*=0.0179) and

withdrawal (*p*=0.0060) timepoints compared to baseline. Furthermore, EtOH-exposed uIntA rats

had higher peak eBECs compared to Air-exposed counterparts during vapor (*p*=0.0034) and

withdrawal (*p*=0.0013) timepoints. Notably, aBECs measured at the end of the 24 hr withdrawal

drinking session were not different between Air- and EtOH-exposed rats (t(16)=0.9582, *p*=0.3522,

Air: 29.21±11.41 mg/dL, EtOH: 48.04±16.01 mg/dL). Nevertheless, a similar sustained elevation

in bout probability was also observed in uIntA rats such that there was a main effect of vapor

exposure on within-session bout probability for drinking sessions occurring during both vapor (**Fig.**

5G) and withdrawal (**Fig. 5H**) timepoints. Additionally, a main effect of vapor exposure was

observed for bout probability AUC during the final four sessions of each timepoint (**Fig. 5I**). While

not significant, a trend for a higher proportion of rats defined as escalators (≥20% increase in

intake from baseline) was apparent in EtOH- compared to Air-exposed rats during vapor exposure

(**Fig 5J**; *p*=0.0567). This trend persisted albeit to a somewhat diminished degree, during

withdrawal (**Fig 5K**; *p*=0.1534). Altogether, these data indicate that uIntA facilitates robust

dependence-induced escalation of ethanol consumption that emerges during vapor exposure and

is maintained at least four days into withdrawal.

Dependence-induced escalation of ethanol intake is greater in rats drinking on an uIntA schedule

Because we hypothesized *a priori*, that uIntA would facilitate greater dependence-induced

escalation of ethanol intake than ContA, we performed an additional set of analyses examining

the effect of schedule on dependent measures in only those rats that were exposed to ethanol

vapor. This analysis detected a main effect of schedule on intake across drinking sessions (**Fig.**

6A) indicating that uIntA rats drank significantly more than ContA rats in all post-baseline drinking

sessions. This is further corroborated by a significant main effect of schedule on intake averaged

across the final four sessions at each timepoint (**Fig. 6B**). While not significant, there was a

trending main effect of schedule on change in intake from baseline during vapor and withdrawal

timepoints (**Fig. 6C**). A significant schedule by time interaction was detected in within-session

eBEC dynamics observed during the final four vapor exposure drinking sessions (**Fig. 6D**).

However, Šidák's posthoc comparisons did not indicate any significant simple main effects. A

significant main effect of schedule and schedule by time interaction were identified in within-

session eBEC dynamics during withdrawal (**Fig. 6E**). Šidák's posthoc comparisons found that

uIntA rats achieved higher eBECs during minutes 22-35 of the drinking session compared to

ContA rats. The ability of uIntA to promote higher levels of intoxication was further supported by

a significant main effect of schedule on average peak eBECs across timepoints (**Fig. 6F**). In

agreement, EtOH-exposed uIntA rats exhibited significantly higher aBECs at 24 hr withdrawal

compared to EtOH-exposed ContA counterparts (t(17)=2.578, p=0.0195, ContA; 8.64±2.02

mg/dL, uIntA: 48.04±16.01 mg/dL). Similar results were observed with respect to bout probability

with a significant main effect of schedule found when within-session bout probability was

assessed during the final four vapor drinking sessions (**Fig. 6G**). A significant main effect of

schedule was also observed for within-session bout probability during withdrawal (**Fig. 6H**). This

was further supported by a significant main effect of schedule on bout probability AUC assessed

across all timepoints (**Fig. 6I**). Finally, the proportion of rats defined as escalators (≥20% increase

in intake from baseline) was not significantly different between ContA and uIntA rats in drinking

sessions that occurred during vapor exposure (**Fig 6J;** p>0.9999). However, a trending increase

in the proportion of rats defined as escalators was observed in the uIntA group compared to the

Figure 6: uIntA exacerbates dependence-induced escalation of ethanol consumption relative to ContA. A) Daily ethanol intake during vapor exposure and withdrawal timepoints relative to average intake at baseline. (**B**) Average intake across all timepoints. (**C**) Change in intake from baseline during vapor exposure and withdrawal. (**D**) Average within-session eBECs achieved during vapor exposure drinking sessions. (**E**) Average within-session eBECs achieved during withdrawal. (**F**) Average peak eBEC achieved across all timepoints (**G**) Average within-session bout probability during vapor exposure drinking sessions. (**H**) Average within-session bout probability during withdrawal. (**I**) Area under the curve for bout probability across all timepoints. Proportion of EtOH-exposed ContA and EtOH-exposed uIntA animals defined as escalators (≥ 20% increase from baseline) or non-escalators during vapor exposure (**J**) and withdrawal (**K**) sessions. Error bars indicate ± SEM. Solid lines and closed datapoints indicate ContA while dashed lines and open datapoints indicate uIntA. Circles and triangles indicate males and females, respectively. n=4-6/sex/group.

ContA group during withdrawal (**Fig 6K**; *p*=0.0698). Altogether, these data show that the uIntA

schedule elicits a more robust and sustained dependence-induced escalation of ethanol

consumption compared to the ContA schedule.

uIntA affords additional opportunities to assess motivation and drinking strategies

Motivation to consume ethanol is often extrapolated by measuring effort to perform an operant

response required to gain ethanol access. However, prior research has shown that an animal's

willingness to a perform an operant response is not necessarily linked to reinforcer consumption

(Blegen et al., 2018; Patwell et al., 2021; Pitock et al., 2025; Puaud et al., 2018). Separately, a

bevy of literature has demonstrated that motivation to consume liquid reinforcers can be

extrapolated from lick microstructure (Dwyer, 2012; Johnson, 2018; Naneix et al., 2020; Spector,

2000). This work has linked parameters related to the frequency and timing of drinking bouts (i.e.,

latency to 1st bout) with incentive to consume, whereas parameters related to bout duration (i.e.,

seconds; number of licks) and lick timing (i.e., interlick interval) with palatability of the reinforcer.

In combination with the discrete ethanol access periods inherent to uIntA, these measures permit

assessment of relative engagement during ethanol access periods that can be leveraged to

evaluate motivation. With this in mind, we analyzed how drinking microstructure was affected by

vapor exposure within uIntA rats.

As expected, the number of drinking bouts per DS presentation was significantly different between

Air- and EtOH-exposed uIntA rats as evidenced by a significant main effect of vapor group (**Fig.**

7A). The percent of DS presentations where rats engaged (i.e., performed ≥2 bouts) was used

as an indirect measure of bout frequency. This analysis revealed a significant vapor by timepoint

interaction (**Fig. 7B**), with Tukey's posthoc comparisons indicating that EtOH-exposed uIntA rats

exhibit higher percent DS engagement in drinking sessions during vapor exposure compared to

baseline (*p*=0.0498). Percent DS engagement was also greater in EtOH- than Air-exposed

Figure 7: Ethanol dependence increases motivation to consume ethanol in rats drinking under an uIntA schedule. (**A**) Average number of bouts per DS presentation across all timepoints. (**B**) Percent of DS presentations engaged (≥ 2 bouts within the DS) across all timepoints. (**C**) Average bout latency from DS onset across all timepoints. (**D**) Average number of bouts terminated by DS offset across all timepoints. (**E**) Average bout duration across all timepoints. (**F**) Average bout length across all timepoints. (**G**) Average interlick interval across all timepoints. Circles and triangles indicate males and females, respectively. n=4-5/sex/group.

counterparts during both vapor (*p*=0.0003) and withdrawal (*p*=0.0390) timepoints. Furthermore,

we observed a significant main effect of vapor on latency to first bout within each DS presentation

(**Fig. 7C**). Due to the unpredictable nature of DS duration, we next considered the number of

drinking bouts terminated by the end of a DS presentation, defined by performing the last lick of

a drinking bout within 0.5s of DS offset (**Fig. 7D**). This analysis revealed a significant vapor by

timepoint interaction with Tukey's post hoc comparisons showing that EtOH-exposed uIntA rats

exhibit more terminations during the vapor timepoint compared to baseline (*p*=0.0079). Moreover,

EtOH-exposed uIntA rats exhibit more terminations than Air-exposed counterparts during both

vapor (*p*=0.0004) and withdrawal (*p*=0.0454) timepoints. On the other hand, we observed a

significant vapor by timepoint interaction on bout duration (**Fig. 7E**) with Tukey's multiple

comparisons indicating that bout duration was shorter in Air-exposed rats during withdrawal

compared to baseline (*p*=0.0488). However, we did not observe an effect of vapor exposure or

timepoint in bout length (**Fig. 7F**). Finally, we observed a significant vapor by timepoint interaction

on interlick interval (**Fig. 7G**), with Tukey's multiple comparisons tests indicating that Air-exposed

rats exhibited a shorter interlick interval during the vapor timepoint than at baseline (*p*=0.0216).

Altogether, these data suggest that dependence-induced escalation observed in EtOH-exposed

animals is driven by increased incentive for ethanol, with the palatability of ethanol remaining

stable in EtOH-exposed rats throughout the testing period.

Due to the unpredictable nature of DS and ITI duration and timing within the uIntA schedule, we

next performed a series of analyses to determine whether DS order (i.e. earlier vs. later in a

session), amount of ethanol consumed during the prior DS, duration of the prior ITI period, or

duration of the current DS presentation affected drinking patterns. Using FLMM, we found that at

baseline (**Fig. 8A-D**), there was a modest effect of DS order on current DS bout probability such

that rats exhibited higher bout probability during early than late DS presentations (**Fig. 8A**).

Moreover, there was a robust effect of the amount of ethanol consumed in the prior DS

Figure 8: Factors affecting bout probability during DS presentations under the uIntA schedule of ethanol drinking. FLMM analysis of bout probability at baseline as a function of latency of DS onset (**A**), EtOH consumption in the prior DS period (**B**), prior ITI duration (**C**), and prior DS duration (**D**). Significance is delineated by a dotted line along the x axis representing significant joint confidence intervals associated with the beta coefficients β_{1-4} described in the *Baseline Model*. (**E-H**) Comparison of bout probability across vapor exposure groups during post-baseline drinking sessions (left) and visualization of beta coefficients corresponding to effects (right) as a function of latency of DS onset (**E**), EtOH consumption in the prior DS period (**F**), prior ITI duration (**G**), and prior DS duration (**H**). For E-H (left), significance is delineated by a dotted line along the x axis representing significant joint confidence intervals associated with $\beta_{2-5}^{(0-1)}$ coefficients described in the *Vapor and Withdrawal Model* with the blue dotted line corresponding to Air-exposed rats ($\beta_{2-5}^{(0)}$) and the orange dotted line corresponding to EtOH-exposed rats ($\beta_{2-5}^{(1)}$). For all aforementioned subfigures, error bars indicate ± SEM. For E-H (right), data depicts the difference within each group in dashed and solid lines shown on left. Coefficients are expressed as estimates ± pointwise 95% confidence intervals (dark shade) and joint 95% confidence intervals (light shade) accounted for multiple comparisons. Significance is delineated by a dotted line along the x axis representing joint confidence intervals associated with the beta coefficients $\beta_{6-9}^{(1)}$ described in the *Vapor and Withdrawal Model*. n=4-5/sex/group.

presentation period on current DS bout probability such that rats exhibited higher bout probability

in the current DS when they drank more in the prior DS compared to when they drank less (or not

at all) (**Fig. 8B**). We also found a modest effect of prior ITI duration on current DS bout probability

such that rats exhibited a higher bout probability in the current DS when the prior ITI was long

compared to when it was short (**Fig. 8C**). Notably, this effect was largely restricted to the last half

of the DS presentation period. Finally, we identified a modest effect of DS duration such that rats

have a higher bout probability during longer DS presentations than shorter DS presentations (**Fig.**

8D). This effect was largely restricted to the first half of the DS presentation period.

Subsequent analyses were designed to determine whether ethanol dependence alters these

drinking strategies by examining bout probability during the vapor and withdrawal timepoints

(pooled data) (**Fig. 8E-H**). This analysis found that, similar to our observations at baseline, bout

probability is higher during earlier than later DS presentations in both Air- and EtOH-exposed rats.

Interestingly, this effect is exacerbated in EtOH-exposed rats, such that the difference in bout

probability between earlier and later DS presentations is larger in this group than Air-exposed

controls (**Fig. 8E**). Similarly, both Air- and EtOH-exposed rats drink more ethanol in a given DS

presentation period when they drank higher amounts during the prior DS presentation period

compared to DS presentation periods when they drank less (or not all). Although EtOH-exposed

rats had a higher bout probability in both conditions, the degree to which bout probability is

affected by ethanol consumption in the prior DS was similar between Air- and EtOH-exposed

groups (**Fig. 8F**). We also saw no effect of prior ITI duration on post-baseline drinking during the

current DS presentation in either Air- or EtOH-exposed groups. In line with this, vapor exposure

had no significant effect on this measure (**Fig. 8G**). Finally, we found that during the vapor and

withdrawal timepoints EtOH-exposed animals exhibit higher bout probability during longer DS

presentations compared to shorter DS presentations, whereas Air-exposed animals no longer

exhibit this difference. In line with this, the effect of DS duration on bout probability is significantly

exacerbated in EtOH-exposed rats compared to Air-exposed rats (**Fig. 8H**). This effect was

largely restricted to the first half of the DS presentation time. Altogether, these data suggest that

ethanol dependence exacerbates front-loading of ethanol consumption and facilitates

capitalization of longer DS durations – factors that likely contribute to the emergence of escalated

ethanol intake.

uIntA promotes aversion-resistant drinking in ethanol-dependent rats

Finally, to determine whether uIntA promotes aversion-resistant drinking compared to ContA, we

next assessed intake of ethanol adulterated with quinine (30 mg/L). There was a significant vapor

by schedule interaction in intake observed during the quinine drinking session (**Fig. 9A**). Šidák's

multiple comparisons indicate that ethanol intake was higher in EtOH-exposed uIntA rats

compared to Air-exposed uIntA (p=0.0324) and EtOH-exposed ContA (p=0.0066) rats. When

intake was analyzed in terms of change from baseline, we observed a significant schedule by

vapor interaction (**Fig. 9B**). Šidák's multiple comparisons indicate that ethanol intake was

significantly greater (i.e., more positive change) in EtOH-exposed uIntA rats compared to Air-

exposed counterparts (p=0.0488) and EtOH-exposed ContA rats (p=0.0471). Surprisingly,

despite EtOH-exposed uIntA rats achieving relatively higher aBECs by the end of the quinine-

adulterated drinking session, this difference did not achieve statistical significance (**Fig. 9C**).

However, a multifactorial RM ANOVA of eBEC dynamics during the quinine drinking session

identified a significant three-way interaction between vapor, schedule, and time (**Table 2**). As

such, we performed separate two-way RM ANOVAs to assess the effect of vapor exposure on

eBECs during the quinine drinking session. Within the ContA schedule, there was no effect of

vapor exposure on eBECs (**Fig. 9D**). On the other hand, we observed a significant effect of vapor

within the uIntA rats (**Fig. 9E**). This is corroborated by a significant vapor by schedule interaction

in peak eBECs achieved during this session (**Fig. 9F**). Šidák's multiple comparisons indicate that

EtOH-exposed uIntA rats achieved a significantly higher peak eBEC than Air-exposed uIntA

Figure 9: uIntA promotes dependence-induced aversion-resistant drinking. (**A**) Intake of quinine-adulterated ethanol on the final day of testing. (**B**) Change in intake of quinine-adulterated ethanol from average baseline (BL) intake. (**C**) End-of-session aBEC following quinine-adulterated ethanol consumption. eBEC for ContA (**D**) and uIntA (**E**) rats across vapor groups throughout the 60-min quinine-adulterated drinking session. (**F**) Peak eBEC achieved during the quinine-adulterated drinking session. (**G**) Proportion of rats within each group classified as aversion-sensitive or -resistant (≤20% decrease from baseline). Error bars indicate ± SEM. Solid lines and closed datapoints indicate ContA and dashed lines and open datapoints indicate uIntA. Circles indicate males and triangles indicate females. n = 4-6/sex/group.

(*p*=0.0372) and EtOH-exposed ContA (*p*=0.0110) rats. Finally, we performed Fisher's exact tests

to compare the proportion of rats classified as aversion-resistant (≤20% decrease in intake from

baseline) between groups. Two outliers were identified using ROUT outlier detection (*n* = 1

Air/ContA, *n* = 1 Air/uIntA) and were excluded from this analysis (**Fig. 9G**). We found a greater

proportion of aversion-resistant rats in the EtOH-exposed uIntA group compared to Air-exposed

counterparts (*p*=0.0034). The proportion of rats defined as aversion-resistant was also

significantly greater in EtOH-exposed uIntA rats compared to EtOH-exposed ContA rats

(*p*=0.0198) (**Fig 9G**). Importantly, there were no significant differences in the proportion of

aversion-resistant vs -sensitive rats between ContA Air-exposed and EtOH-exposed groups

(*p*>0.9999) or between the ContA Air-exposed and uIntA Air-exposed groups (*p*>0.9999).

Altogether, these data suggest that uIntA promotes aversion-resistant drinking exclusively in

ethanol dependent rats, unlike the ContA schedule.

Discussion

Here, we present a novel uIntA schedule of voluntary ethanol intake that engenders similar levels

of drinking prior to ethanol dependence to a ContA procedure, despite significantly shorter total

duration of ethanol access (15 min vs. 60 min, respectively). uIntA exacerbates dependence-

induced escalation and aversion-resistant drinking compared to a ContA procedure, suggesting

it may serve as a more suitable model of AUD-relevant symptomatology. Analysis of lick

microstructure as well as parameters associated with the discrete ethanol access periods inherent

to the uIntA paradigm permits rigorous delineation of motivation to consume ethanol and variable

within-session drinking patterns without the need for an operant response requirement.

Importantly, all of this is achieved in the uIntA procedure with no greater experimental burden

than a ContA procedure. Altogether, this work highlights uIntA as a powerful tool, particularly

when used in combination with estimated BEC analyses, to elucidate psychological and

neurobiological factors contributing to loss of control over drinking within AUD.

While eBECs are used extensively in clinical studies of voluntary ethanol consumption (Hultgren

et al., 2025; Piasecki, 2019), their use is not widespread in preclinical work. To our knowledge,

the present study is the first to provide within-session estimates of BEC that can be used to

support claims related to drinking patterns and overall ethanol intake. Variability in drug

pharmacokinetics can dynamically modify intake, motivated responding, and SUD-related

symptomatology across drug classes (Allain et al., 2015; Kawa et al., 2019; Spear, 2020; Zimmer

et al., 2011). Thus, estimation of within-session BECs achieved by rodents during voluntary

drinking sessions provides a critical translational stepping stone that enables researchers to

evaluate the applicability of reported levels of intake to clinical manifestations of AUD, as was

recently emphasized by Grahame (2026). For the current analyses, we utilized the commonly

described Widmark formula paired with a zero-order kinetic model of ethanol elimination

(Widmark, 1981). We validated our eBEC pipeline using aBECs captured during voluntary ethanol

consumption on three separate occasions throughout the experiment, as well as pharmacokinetic

data previously established in Long-Evans and Sprague Dawley rats (Aull et al., 1956; Chung et

al., 2008; Crippens et al., 1999; Doherty & Gonzales, 2015; Kharbouche et al., 2010; Leasure &

Nixon, 2010; Little et al., 1996; Varlinskaya & Spear, 2004; B. Webb et al., 2002). While the fidelity

of this approach is supported by our ability to accurately predict aBECs within a range of -10 to

+20 mg/dL (ave: +3.7 mg/dL), sex and strain differences in ethanol metabolism have been

established in the literature (Denucci et al., 2010; Glover et al., 2021; Quintanilla et al., 2007).

Additionally, pharmacokinetic data that was used for the basis of our eBEC analyses was largely

examined in males. With this in mind, the field would benefit from studies that rigorously define

ethanol pharmacokinetics in order to determine sex- and strain-specific estimates of the volume

diffusion constant (Widmark R), as well as the effect of chronic ethanol exposure on ethanol

elimination rates.

Findings from the present study underscore the utility of eBECs in preclinical drinking studies.

Within-session time course data reveal the approximate time point at which subjects reach peak

intoxication across each phase of the study. These estimates provide further evidence for front-

loading and often capture maximal intoxication that is missed when blood samples are obtained

at the end of a drinking session. This is readily apparent in the discrepancy between peak eBECs

and end-of-session aBECs as a result of voluntary ethanol drinking at 24 hr withdrawal and the

quinine drinking session. Moreover, using eBECs, we also show that while non-dependent rats

maintained peak eBECs of ~50-60 mg/dL, ethanol-dependent rats were able to achieve eBECs

well above the criteria for binge drinking ((NIAAA, 2025), >80 mg/dL). In some cases, peak eBECs

far exceeded this criterion reaching values >200 mg/dL. Our data also show that ethanol-

dependent uIntA rats achieved significantly higher eBECs than ethanol-dependent ContA rats

during and after vapor exposure despite having a shorter duration of ethanol access. These

results confirm the clinical relevance of the drinking and intoxication levels captured using the

uIntA paradigm. Future work applying the same approach to calculate within-session eBECs will

provide important perspective on the translational relevance of the model(s) used and outcomes

observed (Grahame, 2026), which can provide valuable information regarding therapeutic

interventions for AUD.

Prior work has shown that within-session IntA can elicit higher ethanol intake compared to ContA

(Gage et al., 2023; Tomie et al., 2006). Additional work found that unpredictability of non-drug

reinforcer access further enhances reward seeking (M. J. F. Robinson et al., 2023). As such, it

was surprising that we did not observe greater ethanol intake in uIntA compared to ContA rats at

baseline in the present study. Of note, in Gage et al. (2023) rats were trained to lever press for

ethanol under a ContA schedule for four weeks in 24 hr drinking sessions after which they

transitioned to an IntA schedule where access to ethanol was progressively reduced from 40 to 2

min per hr within 24 hr drinking sessions. Although (Tomie et al., 2006) did not require an operant

response in their drinking paradigm, ethanol access in this study was limited to only 10 s at a time

during a 30 min drinking session, with ethanol concentration increasing over time. In contrast, rats

in the present study had no operant response requirement, drank the same concentration of

ethanol throughout testing, and experienced variable durations of ethanol access spanning 15-

120 s. As such, it is possible that simple methodological differences play a role in these discordant

results. Furthermore, while (Gage et al., 2023) found that IntA increased seeking for ethanol (i.e.,

lever pressing) in male rats, this was not associated with a concurrent increase in ethanol

consumption. Other work showing enhanced seeking for non-drug reinforcers using an IntA/uIntA

schedule compared to a ContA schedule did not directly measure reinforcer consumption

(Beasley et al., 2022; Muñoz-Escobar et al., 2019; M. J. F. Robinson et al., 2023). Given prior

work showing that seeking is not necessarily reflective of consumption (Blegen et al., 2018;

Patwell et al., 2021; Pitock et al., 2025; Puaud et al., 2018), it is possible that uIntA increases the

motivation to obtain access to ethanol (i.e. seeking) in the absence of heightened ethanol

consumption compared to ContA in non-dependent animals. We found that uIntA rats drink to a

similar degree to ContA rats prior to ethanol dependence despite significantly less time with

access to ethanol suggesting that uIntA rats, who have to adapt their drinking patterns to these

unpredictable ethanol access periods, may be more motivated to obtain ethanol prior to ethanol

dependence. Future work could incorporate an operant requirement to the uIntA schedule

developed in the present study to discriminate the effect of schedule on lever pressing versus

drinking in this paradigm.

Our findings show that uIntA exacerbates dependence-induced escalation of ethanol

consumption relative to ContA. Interestingly, while ContA rats exhibited escalated intake in

parallel with vapor exposure, the magnitude of escalation was lower than uIntA rats and transient,

returning to baseline levels once vapor exposure ended. In contrast, escalated intake was

sustained into acute withdrawal in uIntA rats. uIntA also promoted aversion-resistant drinking

during withdrawal over ContA. Prior work examining IntA/uIntA to non-drug reinforcers (Beasley

et al., 2022; Muñoz-Escobar et al., 2019; M. J. F. Robinson et al., 2023) has posited that enhanced

seeking resulting from intermittent reward access is due to processes related to incentive

salience, defined as the motivational property of 'wanting' a reinforcer, which is separable from

'liking' (Olney et al., 2018). Inherent to IntA and uIntA paradigms, rats are presented with

numerous opportunities to pair a previously neutral stimulus with reinforcer availability, likely

resulting in a robust association between DS presentation and reinforcer availability. The strength

of this association may imbue the DS with greater motivational salience in uIntA rats compared

to ContA. Importantly, compared to ContA, the unpredictable and intermittent nature of DS

presentation inherent to uIntA more closely reflects the variable cue dynamics experienced by

humans (i.e. friends, music, physical setting, etc.), which are paired with and modulate drinking

(Dvorak et al., 2014; Fischer et al., 2023; Fridberg et al., 2021; King et al., 2025; Pelloux et al.,

2019; Prignitz et al., 2024; Wray et al., 2014). Like in uIntA, these cues are often repeatedly paired

with ethanol availability, and may, over an extended alcohol history, be sufficient to drive

motivated seeking for ethanol (Cofresí et al., 2019). As such, repeated stimulus pairings, and

willingness to engage/consume during these pairings in the context of ethanol dependence, may

elicit incentive sensitization (T. E. Robinson & Berridge, 2025). In studies using potent reinforcers

like cocaine and opioids, the neurobiological processes underlying incentive sensitization may be

more easily engaged, thereby allowing IntA to drive higher seeking and escalation of consumption

in the absence of physical dependence (Allain & Samaha, 2019; Beasley et al., 2023; Ramborger

et al., 2026). In contrast, in the context of ethanol, a less rapidly potent reinforcer relative to other

addictive drugs, we found that the ability of uIntA to drive heightened intake is not apparent in

non-dependent rats. However, uIntA is sufficient to augment escalation of ethanol consumption

that emerges as dependence develops. Furthermore, uIntA promoted aversion-resistant drinking

exclusively in ethanol-dependent rats, whereas all other groups remained aversion-sensitive.

These data suggest that uIntA alone is not sufficient to drive incentive sensitization for ethanol-

associated cues but, rather, capitalizes upon dependence-induced neurobiological plasticity

(Cofresí et al., 2019), leading to an exacerbation of loss of control over drinking.

Prior literature has identified that lick microstructural analysis can extrapolate measures of

incentive value and reinforcer palatability (Dwyer, 2012; Johnson, 2018; Naneix et al., 2020;

Spector, 2000). In addition, the multiple discrete ethanol access periods associated with uIntA

affords researchers more opportunities to assess measures related to incentive within and across

sessions (i.e. bout frequency as a function of bouts per DS presentation and latency to first bout).

Using lick microstructural analyses, we found that EtOH-exposed uIntA rats had more bouts per

DS and decreased latency to first drinking bout with no change in bout duration, bout length, and

interlick interval. This suggests that dependence-induced escalation of ethanol consumption

observed in uIntA rats is due to a change in the incentive value of ethanol as a reinforcer as

opposed to a change in the palatability of ethanol. In addition, assessing the degree to which a

rat engages (or not) when presented with ethanol access has the potential to serve as a

translationally relevant outcome associated with an individual's perceived loss of control over

consumption when alcohol is freely available (Leeman et al., 2009; Patock-Peckham & Corbin,

2023; Remmerswaal et al., 2019; Waddell et al., 2025), such that rats experiencing a higher

motivation to consume exhibit more consumption across multiple DS presentations. This measure

may also provide an avenue to further assess the motivational potency of an ethanol-associated

cue to drive consumption (Sayette, 2016; Vafaie & Kober, 2022). On the other hand, terminated

drinking bouts further elaborates upon the intensity of drinking occurring within each DS

presentation similar to latency to first bout. With this in mind, rats exhibiting a higher number of

terminations are motivated to maximize their drinking time within DS presentations by continuing

to drink right up until the access period ends. In line with this, EtOH-exposed uIntA rats had

greater DS engagement and a higher number of terminated drinking bouts per session

concomitant with dependence-induced escalation.

Unpredictable ethanol access periods inherent to uIntA have the potential to promote drinking

strategies that seek to maximize ethanol intake within a limited amount of time (i.e. binge)

(Jeanblanc et al., 2019). This may be driven, at least in part, by the perception of scarcity of

ethanol access as a result of these unpredictable periods. Intuitively, adaptive processes in

mammals seek to maximize the reinforcing value of food and motivation for food-seeking in

uncertain conditions (Anselme & Güntürkün, 2019; Crandall & Temple, 2018; J. Webb et al.,

2025), suggesting that introduction of unpredictability for drug reinforcers may impinge upon these

adaptive processes to drive maladaptive intake. As such, we were particularly interested in

quantifying a maladaptive front-loading consumption phenotype, which is thought to be driven by

and enhance the rewarding effects of intoxication (Ardinger et al., 2022). However, criteria to

define front-loading and its analysis in preclinical assessments is often ambiguous and variable

(Ardinger et al., 2022), delineating a need in the field to better identify and isolate this phenotype.

Notably, analysis of DS onset with FLMM allowed us to continuously model the effect of time on

current DS bout probability sampled *throughout* the 60-min drinking session, as opposed to

conventional summary statistics, which have the potential to obscure effects by using averages

in combination with pre-defined and often arbitrary cutoffs (i.e. first 25-75% of session time).

Utilizing FLMM, we found that uIntA rats exhibited higher bout probability at earlier DS

presentations and when they drank larger quantities of ethanol in the preceding DS presentation.

Rats also exhibited higher bout probability during longer DS presentations than shorter DS

presentations. These parameters point to a significant concentration of drinking in earlier portions

of the session and capitalization of longer DS durations, highlighting a front-loading strategy that

seek to maximize the rewarding properties of ethanol in non-dependent animals. Importantly,

effects related to DS timing within the session and DS duration were significantly exacerbated in

ethanol-dependent animals at the time when dependence-induced escalation was observed.

Together, these results suggest that parameters associated with uIntA elicit behavioral strategies

that seek to maximize ethanol intake, including front-loading consumption, that are leveraged in

ethanol-dependent rats to exacerbate dependence-induced escalation. Further, this work

highlights a functionally relevant front-loading phenotype that is heightened by ethanol

dependence, providing an avenue to rigorously examine the relevance of this phenotype to clinical

manifestations of AUD.

In conclusion, our newly developed uIntA ethanol drinking paradigm more faithfully models the

often unpredictable nature of access to alcohol experienced by humans and significantly

exacerbates clinically relevant AUD symptomatology. uIntA also affords researchers the ability to

assess incentive salience, motivation, and drinking patterns without increasing experimental

burden compared to traditional within-session ContA procedures. In combination with estimated

measures of intoxication, this model represents a powerful tool that can be used to further our

understanding of psychological and neurobiological factors driving loss of control over drinking.

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Figure legends

Figure 1. Experimental design. (**A**) Rats that underwent daily continuous access (ContA)

sessions were allowed 60 min of uninterrupted ethanol access paired with house light illumination.

(**B**) Rats that underwent daily unpredictable intermittent access (uIntA) sessions experienced

variable periods of ethanol availability (amounting to 15 min) signaled by house light illumination.

separated by variable periods without ethanol access (amounting to 45 min). **(C)** Rats underwent

a total of seven weeks of voluntary drinking sessions. After a four-week baseline period, rats

underwent two weeks of chronic intermittent ethanol or air vapor exposure during which drinking

sessions continued Mon-Fri. Drinking sessions continued into withdrawal after completion of

vapor exposure. On the final day of withdrawal testing, ethanol was adulterated with 30 mg/L

quinine to assess aversion-resistant drinking. For each experimental timepoint, data was

averaged across the final four sessions (indicated by dotted squares).

Figure 2: Validation of estimated blood ethanol concentration (eBEC) analysis. (**A**) eBECs

were calculated using the Widmark equation and validated with end-of-session aBECs. (**B**)

Representative eBEC curve (blue line) plotted with number of licks occurring within each minute

of the session (black bars) to exemplify use of 'mgperlick' measurement in eBEC calculation.

Average residual [final eBEC – final aBEC] (**C**), individually defined estimated β ethanol

elimination rates (**D**), and mg of EtOH consumed per lick (**E**) for ContA and uIntA rats. (**F-H**)

Identical parameters as displayed in **C-E** separated by schedule and vapor group assignment. (**I**)

Correlation between average final eBEC and average final aBEC for drinking sessions where tail

blood was collected. (**J**) Correlation between average peak eBEC and average ethanol intake

across sessions within each experimental timepoint. (**K**) Correlation between total number of licks

and total intake for all sessions.

Figure 3. Schedule of access does not affect ethanol consumption, eBEC dynamics, or

drinking patterns at baseline. (**A**) Daily ethanol intake across all baseline drinking sessions (left)

and average intake from the final four sessions (right) of baseline prior to vapor exposure. (**B**)

Average within-session eBECs (left) and average peak eBEC (right) at baseline. (**C**) Average

within-session bout probability at baseline (left). Ethanol availability time was normalized to 60

min (from 15 min) for the uIntA group to enable direct comparison with the ContA group. Area

under the curve (AUC) of baseline within-session bout probability (right). Average ethanol intake

(**D**), peak eBEC achieved (**E**), and AUC of bout probability (**F**) at baseline separated by schedule

and vapor group assignment. The proportion of rats classified as light (< 0.5 g/kg), moderate (0.5

g/kg – 1 g/kg), or heavy (> 1 g/kg) drinkers at baseline grouped by schedule only (**G**) and by

schedule and vapor group assignment (**H**). Error bars indicate ± SEM. Solid lines and closed

datapoints indicate ContA. Dashed lines and open datapoints indicate uIntA. Circles and triangles

indicate males and females, respectively. n=4-6/sex/group.

Figure 4. Dependence promotes transient escalation of ethanol consumption in rats

drinking under a ContA schedule. (**A**) Daily ethanol intake during vapor exposure and

withdrawal timepoints relative to average intake during the final four baseline sessions. (**B**)

Average intake across all timepoints. (**C**) Change in intake from baseline during vapor exposure

and withdrawal. (**D**) Average within-session eBECs achieved in drinking sessions that occurred

during vapor exposure. (**E**) Average within-session eBECs achieved in drinking sessions during

withdrawal. (**F**) Average peak eBEC achieved across all timepoints. (**G**) Average within-session

bout probability during vapor exposure. (**H**) Average within-session bout probability during

withdrawal. (**I**) Area under the curve of bout probability across all timepoints. Proportion of Air-

and EtOH-exposed ContA rats defined as escalators (≥ 20% increase from baseline) or non-

escalators during vapor exposure (**J**) and withdrawal sessions (**K**). Error bars indicate ± SEM.

Solid lines and closed datapoints indicate ContA. Circles and triangles indicate males and

females, respectively. n=4-6/sex/group.

Figure 5: Long-lasting dependence-induced escalation of ethanol consumption in rats

drinking under an uIntA schedule. A) Daily ethanol intake during vapor exposure and

withdrawal timepoints relative to average intake at baseline. (**B**) Average intake across all

timepoints. (**C**) Change in intake from baseline during vapor exposure and withdrawal. (**D**)

Average within-session eBECs achieved during vapor exposure drinking sessions. (**E**) Average

within-session eBECs achieved during withdrawal. (**F**) Average peak eBEC achieved across all

timepoints (**G**) Average within-session bout probability during vapor exposure. (**H**) Average within-

session bout probability during withdrawal. (**I**) Area under the curve for bout probability across all

timepoints. Proportion of Air- and EtOH-exposed uIntA rats classified as escalators (≥ 20%

increase from baseline) or non-escalators during vapor exposure (**J**) and withdrawal (**K**) sessions.

Error bars indicate ± SEM. Dashed lines and open datapoints indicate uIntA. Circles and triangles

indicate males and females, respectively. n=4-5/sex/group.

Figure 6: uIntA exacerbates dependence-induced escalation of ethanol consumption

relative to ContA. A) Daily ethanol intake during vapor exposure and withdrawal timepoints

relative to average intake at baseline. (**B**) Average intake across all timepoints. (**C**) Change in

intake from baseline during vapor exposure and withdrawal. (**D**) Average within-session eBECs

achieved during vapor exposure drinking sessions. (**E**) Average within-session eBECs achieved

during withdrawal. (**F**) Average peak eBEC achieved across all timepoints (**G**) Average within-

session bout probability during vapor exposure drinking sessions. (**H**) Average within-session

bout probability during withdrawal. (**I**) Area under the curve for bout probability across all

timepoints. Proportion of EtOH-exposed ContA and EtOH-exposed uIntA animals defined as

escalators (≥ 20% increase from baseline) or non-escalators during vapor exposure (**J**) and

withdrawal (**K**) sessions. Error bars indicate ± SEM. Solid lines and closed datapoints indicate

ContA while dashed lines and open datapoints indicate uIntA. Circles and triangles indicate males

and females, respectively. n=4-6/sex/group.

Figure 7: Ethanol dependence increases motivation to consume ethanol in rats drinking

under an uIntA schedule. (**A**) Average number of bouts per DS presentation across all

timepoints. (**B**) Percent of DS presentations engaged (≥ 2 bouts within the DS) across all

timepoints. (**C**) Average bout latency from DS onset across all timepoints. (**D**) Average number of

bouts terminated by DS offset across all timepoints. (**E**) Average bout duration across all

timepoints. (**F**) Average bout length across all timepoints. (**G**) Average interlick interval across all

timepoints. Circles and triangles indicate males and females, respectively. n=4-5/sex/group.

Figure 8: Factors affecting bout probability during DS presentations under the uIntA

schedule of ethanol drinking. FLMM analysis of bout probability at baseline as a function of

latency of DS onset (**A**), EtOH consumption in the prior DS period (**B**), prior ITI duration (**C**), and

prior DS duration (**D**). Significance is delineated by a dotted line along the x axis representing

significant joint confidence intervals associated with the beta coefficients β_{1-4} described in the

Baseline Model. (**E-H**) Comparison of bout probability across vapor exposure groups during post-

baseline drinking sessions (left) and visualization of beta coefficients corresponding to effects

(right) as a function of latency of DS onset (**E**), EtOH consumption in the prior DS period (**F**), prior

ITI duration (**G**), and prior DS duration (**H**). For E-H (left), significance is delineated by a dotted

line along the x axis representing significant joint confidence intervals associated with $\beta_{2-5}^{(0-1)}$

coefficients described in the *Vapor and Withdrawal Model* with the blue dotted line corresponding

to Air-exposed rats ($\beta_{2-5}^{(0)}$) and the orange dotted line corresponding to EtOH-exposed rats ($\beta_{2-5}^{(1)}$).

For all aforementioned subfigures, error bars indicate ± SEM. For E-H (right), data depicts the

difference within each group in dashed and solid lines shown on left. Coefficients are expressed

as estimates ± pointwise 95% confidence intervals (dark shade) and joint 95% confidence

intervals (light shade) accounted for multiple comparisons. Significance is delineated by a dotted

line along the x axis representing joint confidence intervals associated with the beta coefficients

$\beta_{6-9}^{(1)}$ described in the *Vapor and Withdrawal Model*. n=4-5/sex/group.

Figure 9: uIntA promotes dependence-induced aversion-resistant drinking. (**A**) Intake of

quinine-adulterated ethanol on the final day of testing. (**B**) Change in intake of quinine-adulterated

ethanol from average baseline (BL) intake. (**C**) End-of-session aBEC following quinine-

adulterated ethanol consumption. eBEC for ContA (**D**) and uIntA (**E**) rats across vapor groups

throughout the 60-min quinine-adulterated drinking session. (**F**) Peak eBEC achieved during the

quinine-adulterated drinking session. (**G**) Proportion of rats within each group classified as

aversion-sensitive or -resistant (≤20% decrease from baseline). Error bars indicate ± SEM. Solid

lines and closed datapoints indicate ContA and dashed lines and open datapoints indicate uIntA.

Circles indicate males and triangles indicate females. n = 4-6/sex/group.

Table 1: Discriminative stimulus (or ethanol access) and intertrial intervals (no ethanol access)

periods within the uIntA schedule.

Table 2: Results of all conventional statistical analyses.

Table 3: Results of functional linear mixed modeling (FLMM) analyses.

Table 2: Results of all conventional statistical analyses

Figure	Analysis	Dependent Variable	Independent Variables	Effect	Test Stats	P-value	Summary
4-6 (Not Shown)	Mixed Effects Analysis	Per Session Intake (g/kg)	Session, Vapor, Schedule	Session	F (5.830, 190.2) = 6.914	<0.0001	****
				Schedule	F (1, 33) = 1.739	0.1964	ns
				Vapor	F (1, 33) = 16.77	0.0003	***
				Session X Schedule	F (5.830, 190.2) = 1.692	0.127	ns
				Session X Vapor	F (5.830, 190.2) = 2.490	0.0255	*
				Schedule X Vapor	F (1, 33) = 6.200	0.018	*
				Session X Schedule X Vapor	F (5.830, 190.2) = 0.4483	0.8408	ns
4-6 (Not Shown)	Multifactorial RM ANOVA	eBEC (mg/dL); Vapor Sessions	Time, Vapor, Schedule	Time	F (2.181, 71.97) = 41.02	<0.0001	****
				Schedule	F (1, 33) = 0.4048	0.529	ns
				Vapor	F (1, 33) = 18.10	0.0002	***
				Time x Schedule	F (2.181, 71.97) = 6.652	0.0017	**
				Time x Vapor	F (2.181, 71.97) = 16.74	<0.0001	****
				Schedule x Vapor	F (1, 33) = 0.1411	0.7096	ns
				Time x Schedule x Vapor	F (2.181, 71.97) = 2.553	0.0802	ns(trend)
4-6 (Not Shown)	Multifactorial RM ANOVA	eBEC (mg/dL); WD Sessions	Time, Vapor, Schedule	Time	F (1.662, 54.84) = 22.70	<0.0001	****
				Schedule	F (1, 33) = 3.741	0.0617	ns(trend)
				Vapor	F (1, 33) = 4.834	0.035	*
				Time x Schedule	F (1.662, 54.84) = 4.483	0.0212	*
				Time x Vapor	F (1.662, 54.84) = 4.166	0.027	*
				Schedule x Vapor	F (1, 33) = 4.574	0.0399	*
				Time x Schedule x Vapor	F (1.662, 54.84) = 3.347	0.051	ns (trend)
4-6 (Not Shown)	Multifactorial RM ANOVA	Bout Probability; Vapor Sessions	Time, Vapor, Schedule	Time	F (12.01, 396.3) = 11.81	<0.0001	****
				Schedule	F (1, 33) = 11.13	0.0021	**
				Vapor	F (1, 33) = 17.23	0.0002	***
				Time x Schedule	F (12.01, 396.3) = 1.486	0.1264	ns
				Time x Vapor	F (12.01, 396.3) = 1.631	0.0805	ns(trend)
				Schedule x Vapor	F (1, 33) = 1.024	0.3189	ns
				Time x Schedule x Vapor	F (12.01, 396.3) = 0.9072	0.5398	ns
4-6 (Not Shown)	Multifactorial RM ANOVA	Bout Probability; WD Sessions	Time, Vapor, Schedule	Time	F (10.49, 346.3) = 5.475	<0.0001	****
				Schedule	F (1, 33) = 10.40	0.0028	**
				Vapor	F (1, 33) = 6.042	0.0194	*
				Time x Schedule	F (10.49, 346.3) = 1.469	0.1451	ns
				Time x Vapor	F (10.49, 346.3) = 1.232	0.2666	ns
				Schedule x Vapor	F (1, 33) = 3.225	0.0817	ns(trend)
				Time x Schedule x Vapor	F (10.49, 346.3) = 0.9357	0.5031	ns
4-6 (Not Shown)	Multifactorial RM ANOVA	Average Intake (g/kg)	Timepoint, Vapor, Schedule	Timepoint	F (1.978, 65.26) = 7.073	0.0017	**
				Schedule	F (1, 33) = 3.090	0.088	ns(trend)
				Vapor	F (1, 33) = 9.949	0.0034	**
				Timepoint x Schedule	F (1.978, 65.26) = 1.758	0.1808	ns
				Timepoint x Vapor	F (1.978, 65.26) = 12.60	<0.0001	****
				Schedule x Vapor	F (1, 33) = 5.965	0.0201	*
				Timepoint x Schedule x Vapor	F (1.978, 65.26) = 1.097	0.3396	ns
4-6 (Not Shown)	Multifactorial RM ANOVA	Change in Raw Intake (g/kg)	Timepoint, Vapor, Schedule	Timepoint	F (1, 33) = 10.44	0.0028	**
				Schedule	F (1, 33) = 3.016	0.0918	ns(trend)
				Vapor	F (1, 33) = 21.34	<0.0001	****
				Timepoint x Schedule	F (1, 33) = 0.6254	0.4347	ns
				Timepoint x Vapor	F (1, 33) = 4.735	0.0368	*
				Schedule x Vapor	F (1, 33) = 1.403	0.2447	ns
				Timepoint x Schedule x Vapor	F (1, 33) = 0.8204	0.3716	ns
4-6 (Not Shown)	Multifactorial RM ANOVA	Average Peak eBEC (mg/dL)	Timepoint, Vapor, Schedule	Timepoint	F (1.975, 65.18) = 11.28	<0.0001	****
				Schedule	F (1, 33) = 2.337	0.1359	ns
				Vapor	F (1, 33) = 10.33	0.0029	**
				Timepoint x Schedule	F (1.975, 65.18) = 1.881	0.161	ns
				Timepoint x Vapor	F (1.975, 65.18) = 10.63	0.0001	***
				Schedule x Vapor	F (1, 33) = 3.035	0.0908	ns(trend)
				Timepoint x Schedule x Vapor	F (1.975, 65.18) = 1.414	0.2506	ns
4-6 (Not Shown)	Multifactorial RM ANOVA	AUC (Bout Probability)	Timepoint, Vapor, Schedule	Timepoint	F (1.581, 52.18) = 8.892	0.0011	**
				Schedule	F (1, 33) = 8.628	0.006	**
				Vapor	F (1, 33) = 9.441	0.0042	**
				Timepoint x Schedule	F (1.581, 52.18) = 4.896	0.0171	*
				Timepoint x Vapor	F (1.581, 52.18) = 6.624	0.0051	**
				Schedule x Vapor	F (1, 33) = 2.222	0.1456	ns
				Timepoint x Schedule x Vapor	F (1.581, 52.18) = 0.3303	0.6692	ns
9 (Not Shown)	Multifactorial RM ANOVA	eBEC (mg/dL); Quinine Sessions	Time, Vapor, Schedule	Time	F (3.007, 96.24) = 8.951	<0.0001	****
				Schedule	F (1, 32) = 1.267	0.2687	ns
				Vapor	F (1, 32) = 0.8283	0.3696	ns
				Time x Schedule	F (3.007, 96.24) = 5.120	0.0025	**
				Time x Vapor	F (3.007, 96.24) = 1.192	0.317	ns
				Schedule x Vapor	F (1, 32) = 6.229	0.0179	*
				Time x Schedule x Vapor	F (3.007, 96.24) = 3.192	0.027	*
2C	Unpaired t-test	Residual (mg/dL)	Schedule	Schedule	t=0.6047, df=35	0.5493	ns
2D	Unpaired t-test	Estimated β (mg/dL/hr)	Schedule	Schedule	t=1.246, df=35	0.2209	ns
2E	Unpaired t-test	mg EtOH/lick	Schedule	Schedule	t=0.1573, df=35	0.8759	ns
2F	Two-way ANOVA	Residual (mg/dL)	Schedule, Vapor	Schedule X Vapor	F (1, 33) = 1.161	0.2891	ns
				Vapor	F (1, 33) = 0.1462	0.7046	ns
				Schedule	F (1, 33) = 0.3800	0.5419	ns
2G	Two-way ANOVA	Estimated β (mg/dL/hr)	Schedule, Vapor	Schedule X Vapor	F (1, 33) = 3.786	0.0603	ns(trend)
				Vapor	F (1, 33) = 0.6020	0.4434	ns
				Schedule	F (1, 33) = 1.575	0.2182	ns

Figure	Analysis	Dependent Variable	Independent Variables	Effect	Test Stats	P-value	Summary
2H	Two-way ANOVA	mg EtOH/lick	Schedule, Vapor	Schedule X Vapor	F (1, 33) = 0.7527	0.3919	ns
				Vapor	F (1, 33) = 0.01684	0.8976	ns
				Schedule	F (1, 33) = 0.03264	0.8577	ns
2I	Spearman's Correlation	N/A	N/A	Average Final aBEC vs. Average Final eBEC	r = 0.9445 95% CI:0.8920 to 0.9718	<0.0001	****
2J	Spearman's Correlation	N/A	N/A	Average Peak eBEC vs. Average Intake (g/kg)	r = 0.9433 95% CI:0.9175 to 0.9612	<0.0001	****
2K	Spearman's Correlation	N/A	N/A	Licks vs. Intake (g/kg)	r = 0.7976 95% CI:0.7594 to 0.8303	<0.0001	****
3A [*left*]	Mixed Effects Analysis	Intake (g/kg)	Session, Schedule	Session	F (8.446, 294.3) = 8.646	<0.0001	****
				Schedule	F (1, 35) = 0.03212	0.8588	ns
				Session X Schedule	F (8.446, 294.3) = 0.6513	0.7426	ns
3A [*right*]	Unpaired t-test	Average Intake (g/kg)	Schedule	Schedule	t=0.1676, df=35	0.8679	ns
3B [*left*]	2-way RM ANOVA	eBEC (mg/dL)	Time, Schedule	Time X Schedule	F (2.164, 75.73) = 0.3830	0.6994	ns
				Time	F (2.164, 75.73) = 19.01	<0.0001	****
				Schedule	F (1, 35) = 0.4153	0.5235	ns
				Subject	F (35, 2065) = 374.0	<0.0001	****
3B [*right*]	Unpaired t-test	Peak eBEC (mg/dL)	Schedule	Schedule	t=0.2302, df=35	0.8193	ns
3C [*left*]	2-way RM ANOVA	Bout Probability	Time, Schedule	Time X Schedule	F (13.38, 468.2) = 1.174	0.2938	ns
				Time	F (13.38, 468.2) = 7.205	<0.0001	****
				Schedule	F (1, 35) = 0.3475	0.5593	ns
				Subject	F (35, 2625) = 16.95	<0.0001	****
3C [*right*]	Unpaired t-test	AUC (Bout Probability)	Schedule	Schedule	t=0.5642, df=35	0.5762	ns
3D	2-way ANOVA	Avg Intake (g/kg)	Vapor, Schedule	Vapor X Schedule	F (1, 33) = 0.9195	0.3446	ns
				Vapor	F (1, 33) = 0.5620	0.4588	ns
				Schedule	F (1, 33) = 0.01473	0.9041	ns
3E	2-way ANOVA	Peak eBEC (mg/dL)	Vapor, Schedule	Vapor X Schedule	F (1, 33) = 0.1015	0.7521	ns
				Vapor	F (1, 33) = 0.8857	0.3535	ns
				Schedule	F (1, 33) = 0.06753	0.7966	ns
3F	2-way ANOVA	AUC (Bout Probability)	Vapor, Schedule	Vapor X Schedule	F (1, 33) = 0.7144	0.4041	ns
				Vapor	F (1, 33) = 0.5881	0.4486	ns
				Schedule	F (1, 33) = 0.3090	0.5821	ns
3G	Fisher's Exact Test	N/A	Vapor	Proportion of Drinking Phenotypes at Baseline	N/A	0.8446	ns
3H	Fisher's Exact Test	N/A	Vapor	Proportion of Drinking Phenotypes at Baseline within ContA schedule	N/A	>0.9999	ns
3H	Fisher's Exact Test	N/A	Vapor	Proportion of Drinking Phenotypes at Baseline within uIntA schedule	N/A	0.7121	ns
3 (*Not Shown*)	2-way ANOVA	aBEC (mg/dL)	Vapor, Schedule	Vapor X Schedule	F (1, 33) = 1.831	0.1852	ns
				Vapor	F (1, 33) = 1.487	0.2314	ns
				Schedule	F (1, 33) = 0.03124	0.8608	ns
4A	Mixed Effects Analysis	Intake (g/kg)	Session, Vapor	Session	F (5.139, 86.57) = 3.645	0.0045	**
				Vapor	F (1, 17) = 1.036	0.3231	ns
				Session X Vapor	F (5.139, 86.57) = 1.799	0.1195	ns
4B	2-way RM ANOVA	Average Intake (g/kg)	Timepoint, Vapor	Timepoint x Vapor	F (1.772, 30.12) = 5.660	0.0103	*
				Timepoint	F (1.772, 30.12) = 4.552	0.0222	*
				Vapor	F (1, 17) = 0.2359	0.6334	ns
				Subject	F (17, 34) = 2.610	0.0084	**
4C	2-way RM ANOVA	Change in Average Intake (g/kg)	Timepoint, Vapor	Timepoint x Vapor	F (1, 17) = 5.355	0.0334	*
				Timepoint	F (1, 17) = 9.121	0.0077	**
				Vapor	F (1, 17) = 5.964	0.0258	*
				Subject	F (17, 17) = 3.013	0.0143	*
4D	2-way RM ANOVA	eBEC (mg/dL); Vapor Sessions	Time, Vapor	Time x Vapor	F (2.405, 40.88) = 5.549	0.0048	**
				Time	F (2.405, 40.88) = 14.35	<0.0001	****
				Vapor	F (1, 17) = 9.434	0.0069	**
				Subject	F (17, 1003) = 355.8	<0.0001	****
4E	2-way RM ANOVA	eBEC (mg/dL); WD Sessions	Time, Vapor	Time x Vapor	F (1.319, 22.42) = 0.4959	0.5391	ns
				Time	F (1.319, 22.42) = 4.188	0.0429	*
				Vapor	F (1, 17) = 0.001607	0.9685	ns
				Subject	F (17, 1003) = 315.3	<0.0001	****
4F	2-way RM ANOVA	Peak eBEC (mg/dL)	Timepoint, Vapor	Timepoint x Vapor	F (1.811, 30.78) = 5.217	0.0133	*
				Timepoint	F (1.811, 30.78) = 6.184	0.0068	**
				Vapor	F (1, 17) = 0.9873	0.3343	ns
				Subject	F (17, 34) = 2.057	0.0361	*
4G	2-way RM ANOVA	Bout Probability; Vapor Sessions	Time, Vapor	Time x Vapor	F (8.118, 138.0) = 1.558	0.1418	ns
				Time	F (8.118, 138.0) = 12.62	<0.0001	****
				Vapor	F (1, 17) = 9.071	0.0079	**
				Subject	F (17, 1275) = 9.828	<0.0001	****
4H	2-way RM ANOVA	Bout Probability; Withdrawal Sessions	Time, Vapor	Time x Vapor	F (4.036, 68.61) = 1.287	0.2834	ns
				Time	F (4.036, 68.61) = 6.110	0.0003	***
				Vapor	F (1, 17) = 0.3537	0.5599	ns
				Subject	F (17, 1275) = 10.17	<0.0001	****
4I	2-way RM ANOVA	AUC (Bout Probability)	Timepoint, Vapor	Timepoint x Vapor	F (1.955, 33.24) = 5.867	0.0069	**
				Timepoint	F (1.955, 33.24) = 4.530	0.0188	*
				Vapor	F (1, 17) = 1.800	0.1973	ns
				Subject	F (17, 34) = 4.609	<0.0001	****
4J	Fisher's Exact Test	N/A	Vapor	Proportion of Escalators at Vapor Sessions	N/A	0.0055	**
4K	Fisher's Exact Test	N/A	Vapor	Proportion of Escalators at Withdrawal Sessions	N/A	0.5820	ns

Figure	Analysis	Dependent Variable	Independent Variables	Effect	Test Stats	P-value	Summary
5A	Mixed Effects Analysis	Intake (g/kg)	Session, Vapor	Session	F (4.600, 72.53) = 5.038	0.0007	***
				Vapor	F (1, 16) = 30.01	<0.0001	****
				Session X Vapor	F (4.600, 72.53) = 1.115	0.3589	ns
5B	2-way RM ANOVA	Average Intake (g/kg)	Timepoint, Vapor	Timepoint x Vapor	F (1.924, 30.78) = 7.860	0.0019	**
				Timepoint	F (1.924, 30.78) = 4.277	0.0242	*
				Vapor	F (1, 16) = 17.13	0.0008	***
				Subject	F (16, 32) = 1.944	0.0536	ns(trend)
5C	2-way RM ANOVA	Change in Average Intake (g/kg)	Timepoint, Vapor	Timepoint x Vapor	F (1, 16) = 0.7181	0.4093	ns
				Timepoint	F (1, 16) = 2.650	0.1231	ns
				Vapor	F (1, 16) = 16.69	0.0009	***
				Subject	F (16, 16) = 2.426	0.0429	*
5D	2-way RM ANOVA	eBEC (mg/dL); Vapor Sessions	Time, Vapor	Time x Vapor	F (1.993, 31.89) = 11.71	0.0002	***
				Time	F (1.993, 31.89) = 28.57	<0.0001	****
				Vapor	F (1, 16) = 8.764	0.0092	**
				Subject	F (16, 944) = 303.4	<0.0001	****
5E	2-way RM ANOVA	eBEC (mg/dL); WD Sessions	Time, Vapor	Time x Vapor	F (2.034, 32.55) = 6.438	0.0042	**
				Time	F (2.034, 32.55) = 21.30	<0.0001	****
				Vapor	F (1, 16) = 10.82	0.0046	**
				Subject	F (16, 944) = 204.2	<0.0001	****
5F	2-way RM ANOVA	Peak eBEC (mg/dL)	Timepoint, Vapor	Timepoint x Vapor	F (1.667, 26.67) = 6.626	0.0068	**
				Timepoint	F (1.667, 26.67) = 6.850	0.0059	**
				Vapor	F (1, 16) = 13.81	0.0019	**
				Subject	F (16, 32) = 1.352	0.2271	ns
5G	2-way RM ANOVA	Bout Probability; Vapor Sessions	Time, Vapor	Time x Vapor	F (8.261, 132.2) = 1.097	0.3696	ns
				Time	F (8.261, 132.2) = 3.617	0.0007	***
				Vapor	F (1, 16) = 8.837	0.0090	**
				Subject	F (16, 1200) = 13.03	<0.0001	****
5H	2-way RM ANOVA	Bout Probability; Vapor Sessions	Time, Vapor	Time x Vapor	F (8.523, 136.4) = 0.9447	0.4858	ns
				Time	F (8.523, 136.4) = 1.903	0.0599	ns(trend)
				Vapor	F (1, 16) = 6.362	0.0226	*
				Subject	F (16, 1200) = 13.20	<0.0001	****
5I	2-way RM ANOVA	AUC (Bout Probability)	Timepoint, Vapor	Timepoint x Vapor	F (1.346, 21.53) = 2.476	0.1226	ns
				Timepoint	F (1.346, 21.53) = 7.540	0.0073	**
				Vapor	F (1, 16) = 7.781	0.0131	*
				Subject	F (16, 32) = 3.284	0.0020	**
5J	Fisher's Exact Test	N/A	Vapor	Proportion of Escalators at Vapor Sessions	N/A	0.0567	ns(trend)
5K	Fisher's Exact Test	N/A	Vapor	Proportion of Escalators at Withdrawal Sessions	N/A	0.1534	ns
6A	Mixed Effects Analysis	Intake (g/kg)	Session, Schedule	Session	F (4.809, 80.65) = 5.679	0.0002	***
				Schedule	F (1, 17) = 9.694	0.0063	**
				Session X Schedule	F (4.809, 80.65) = 1.212	0.3112	ns
6B	2-way RM ANOVA	Average Intake (g/kg)	Timepoint, Schedule	Timepoint x Schedule	F (1.927, 32.76) = 2.000	0.1529	ns
				Timepoint	F (1.927, 32.76) = 12.62	0.0001	***
				Schedule	F (1, 17) = 13.87	0.0017	**
				Subject	F (17, 34) = 1.040	0.4441	ns
6C	2-way RM ANOVA	Change in Average Intake (g/kg)	Timepoint, Schedule	Timepoint x Schedule	F (1, 17) = 0.9248	0.3497	ns
				Timepoint	F (1, 17) = 9.394	0.0070	**
				Schedule	F (1, 17) = 3.545	0.0770	ns(trend)
				Subject	F (17, 17) = 2.089	0.0694	ns(trend)
6D	2-way RM ANOVA	eBEC (mg/dL); Vapor Sessions	Time, Schedule	Time x Schedule	F (1.990, 33.83) = 5.720	0.0073	**
				Time	F (1.990, 33.83) = 36.33	<0.0001	****
				Schedule	F (1, 17) = 0.3442	0.5651	ns
				Subject	F (17, 1003) = 333.8	<0.0001	****
6E	2-way RM ANOVA	eBEC (mg/dL); WD Sessions	Time, Schedule	Time x Schedule	F (1.428, 24.27) = 5.067	0.0230	*
				Time	F (1.428, 24.27) = 14.87	0.0002	***
				Schedule	F (1, 17) = 8.771	0.0087	**
				Subject	F (17, 1003) = 162.7	<0.0001	****
6F	2-way RM ANOVA	Peak eBEC (mg/dL)	Timepoint, Schedule	Timepoint x Schedule	F (1.884, 32.03) = 2.233	0.1262	ns
				Timepoint	F (1.884, 32.03) = 14.53	<0.0001	****
				Schedule	F (1, 17) = 8.919	0.0083	**
				Subject	F (17, 34) = 0.7102	0.7712	ns
6G	2-way RM ANOVA	Bout Probability; Vapor Sessions	Time, Schedule	Time x Schedule	F (8.370, 142.3) = 1.261	0.2663	ns
				Time	F (8.370, 142.3) = 8.432	<0.0001	****
				Schedule	F (1, 17) = 6.065	0.0248	*
				Subject	F (17, 1275) = 15.88	<0.0001	****
6H	2-way RM ANOVA	Bout Probability; Vapor Sessions	Time, Schedule	Time x Schedule	F (7.307, 124.2) = 1.074	0.3845	ns
				Time	F (7.307, 124.2) = 3.825	0.0007	***
				Schedule	F (1, 17) = 10.95	0.0041	**
				Subject	F (17, 1275) = 10.92	<0.0001	****
6I	2-way RM ANOVA	AUC (Bout Probability)	Timepoint, Schedule	Timepoint x Schedule	F (1.520, 25.84) = 2.736	0.0957	ns
				Timepoint	F (1.520, 25.84) = 12.21	0.0005	***
				Schedule	F (1, 17) = 7.468	0.0142	*
				Subject	F (17, 34) = 3.984	0.0003	***
6J	Fisher's Exact Test	N/A	Schedule	Proportion of Escalators at Vapor Sessions	N/A	>0.9999	ns
6K	Fisher's Exact Test	N/A	Schedule	Proportion of Escalators at Withdrawal Sessions	N/A	0.0698	ns(trend)
7A	2-way RM ANOVA	Bouts per DS	Timepoint, Vapor	Timepoint x Vapor	F (1.985, 31.76) = 2.799	0.0763	ns(trend)
				Timepoint	F (1.985, 31.76) = 2.889	0.0707	ns(trend)
				Vapor	F (1, 16) = 7.894	0.0126	*
				Subject	F (16, 32) = 3.992	0.0004	***

Figure	Analysis	Dependent Variable	Independent Variables	Effect	Test Stats	P-value	Summary
7B	2-way RM ANOVA	% DS Engaged	Timepoint, Vapor	Timepoint x Vapor	F (1.892, 30.28) = 4.413	0.0224	*
				Timepoint	F (1.892, 30.28) = 1.440	0.2525	ns
				Vapor	F (1, 16) = 10.41	0.0053	**
				Subject	F (16, 32) = 3.093	0.0032	**
7C	2-way RM ANOVA	Bout Latency per DS (sec)	Timepoint, Vapor	Timepoint x Vapor	F (1.828, 29.24) = 1.064	0.3526	ns
				Timepoint	F (1.828, 29.24) = 2.417	0.1109	ns
				Vapor	F (1, 16) = 4.583	0.0480	*
				Subject	F (16, 32) = 2.153	0.0317	*
7D	2-way RM ANOVA	Average # of Terminations per Session	Timepoint, Vapor	Timepoint x Vapor	F (1.800, 28.80) = 5.440	0.0119	*
				Timepoint	F (1.800, 28.80) = 3.552	0.0461	*
				Vapor	F (1, 16) = 8.859	0.0089	**
				Subject	F (16, 32) = 3.536	0.0011	**
7E	2-way RM ANOVA	Bout Duration (sec)	Timepoint, Vapor	Timepoint x Vapor	F (1.964, 31.43) = 3.578	0.0405	*
				Timepoint	F (1.964, 31.43) = 1.800	0.1824	ns
				Vapor	F (1, 16) = 1.031	0.3251	ns
				Subject	F (16, 32) = 9.526	<0.0001	****
7F	2-way RM ANOVA	Bout Length (licks)	Timepoint, Vapor	Timepoint x Vapor	F (1.945, 31.12) = 2.611	0.0908	ns(trend)
				Timepoint	F (1.945, 31.12) = 1.948	0.1605	ns
				Vapor	F (1, 16) = 1.088	0.3124	ns
				Subject	F (16, 32) = 9.053	<0.0001	****
7G	2-way RM ANOVA	Interlick Interval (sec)	Timepoint, Vapor	Timepoint x Vapor	F (1.731, 27.70) = 4.439	0.0256	*
				Timepoint	F (1.731, 27.70) = 6.973	0.0049	**
				Vapor	F (1, 16) = 1.339	0.2641	ns
				Subject	F (16, 32) = 8.485	<0.0001	****
9A	2-way ANOVA	Intake (g/kg)	Vapor, Schedule	Vapor X Schedule	F (1, 33) = 10.63	0.0026	**
				Vapor	F (1, 33) = 0.1330	0.7177	ns
				Schedule	F (1, 33) = 1.353	0.2531	ns
9B	2-way ANOVA	Change in Intake from BL (g/kg)	Vapor, Schedule	Vapor X Schedule	F (1, 33) = 5.193	0.0293	*
				Vapor	F (1, 33) = 1.191	0.2830	ns
				Schedule	F (1, 33) = 1.058	0.3112	ns
9C	2-way ANOVA	aBEC (mg/dL)	Vapor, Schedule	Vapor X Schedule	F (1, 33) = 1.932	0.1738	ns
				Vapor	F (1, 33) = 1.521	0.2262	ns
				Schedule	F (1, 33) = 1.403	0.2446	ns
9D	2-way RM ANOVA	eBEC (mg/dL); ContA only	Time, Vapor	Time x Vapor	F (3.375, 54.00) = 0.9506	0.4309	ns
				Time	F (3.375, 54.00) = 3.161	0.0271	*
				Vapor	F (1, 16) = 1.318	0.2678	ns
				Subject	F (16, 944) = 425.1	<0.0001	****
9E	2-way RM ANOVA	eBEC (mg/dL); uIntA only	Time, Vapor	Time x Vapor	F (2.521, 40.34) = 2.648	0.0711	ns
				Time	F (2.521, 40.34) = 8.459	0.0004	***
				Vapor	F (1, 16) = 5.546	0.0316	*
				Subject	F (16, 944) = 167.8	<0.0001	****
9F	2-way ANOVA	Peak eBEC (mg/dL)	Vapor, Schedule	Vapor X Schedule	F (1, 32) = 6.485	0.0159	*
				Vapor	F (1, 32) = 0.8906	0.3524	ns
				Schedule	F (1, 32) = 2.376	0.1330	ns
9G	Fisher's Exact Test	N/A	Vapor	Proportion Aversion-Resistant in ContA rats	N/A	>0.9999	ns
9G	Fisher's Exact Test	N/A	Vapor	Proportion Aversion-Resistant in uIntA rats	N/A	0.0034	**
9G	Fisher's Exact Test	N/A	Schedule	Proportion Aversion-Resistant in Air-Exposed rats	N/A	>0.9999	ns
9G	Fisher's Exact Test	N/A	Schedule	Proportion Aversion-Resistant in EtOH-exposed rats	N/A	0.0198	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
Baseline	8A	N/A	DSLatency	1	1	-0.00604	-0.0157621	0.003678	-0.022716	0.0106315	ns
Baseline	8A	N/A	DSLatency	1	2	-0.03009	-0.0453623	-0.0148259	-0.056285	-0.0039033	*
Baseline	8A	N/A	DSLatency	1	3	-0.05177	-0.0695639	-0.0339855	-0.08229	-0.0212594	*
Baseline	8A	N/A	DSLatency	1	4	-0.06846	-0.0882207	-0.0486895	-0.102361	-0.0345496	*
Baseline	8A	N/A	DSLatency	1	5	-0.07896	-0.1005413	-0.057381	-0.115979	-0.0419429	*
Baseline	8A	N/A	DSLatency	1	6	-0.08474	-0.1077353	-0.0617363	-0.124189	-0.0452829	*
Baseline	8A	N/A	DSLatency	1	7	-0.0883	-0.1123083	-0.0642819	-0.129487	-0.0471033	*
Baseline	8A	N/A	DSLatency	1	8	-0.09047	-0.1147596	-0.066176	-0.132138	-0.0487981	*
Baseline	8A	N/A	DSLatency	1	9	-0.09013	-0.1149258	-0.0653267	-0.132667	-0.0475856	*
Baseline	8A	N/A	DSLatency	1	10	-0.0869	-0.1120063	-0.0617868	-0.129969	-0.0438237	*
Baseline	8A	N/A	DSLatency	1	11	-0.08283	-0.1080482	-0.0576174	-0.126087	-0.0395788	*
Baseline	8A	N/A	DSLatency	1	12	-0.08036	-0.1052554	-0.0554649	-0.123065	-0.0376553	*
Baseline	8A	N/A	DSLatency	1	13	-0.07941	-0.1042952	-0.0545176	-0.1221	-0.0367126	*
Baseline	8A	N/A	DSLatency	1	14	-0.07792	-0.1029007	-0.0529452	-0.120769	-0.0350766	*
Baseline	8A	N/A	DSLatency	1	15	-0.07489	-0.1001093	-0.049664	-0.118153	-0.0316202	*
Baseline	8A	N/A	DSLatency	1	16	-0.0715	-0.0966564	-0.0463507	-0.11465	-0.0283568	*
Baseline	8A	N/A	DSLatency	1	17	-0.06974	-0.094976	-0.044512	-0.113027	-0.0264614	*
Baseline	8A	N/A	DSLatency	1	18	-0.07113	-0.0966018	-0.0456555	-0.114825	-0.0274325	*
Baseline	8A	N/A	DSLatency	1	19	-0.0765	-0.1024962	-0.0505098	-0.121091	-0.0319147	*
Baseline	8A	N/A	DSLatency	1	20	-0.08456	-0.110906	-0.0582195	-0.129751	-0.039374	*
Baseline	8A	N/A	DSLatency	1	21	-0.09022	-0.1167953	-0.0636383	-0.135809	-0.0446245	*
Baseline	8A	N/A	DSLatency	1	22	-0.08778	-0.1140661	-0.061492	-0.132871	-0.0426868	*
Baseline	8A	N/A	DSLatency	1	23	-0.07847	-0.1044022	-0.0525361	-0.122954	-0.0339841	*
Baseline	8A	N/A	DSLatency	1	24	-0.07247	-0.0981251	-0.0468207	-0.116476	-0.0284696	*
Baseline	8A	N/A	DSLatency	1	25	-0.07927	-0.1053054	-0.0532366	-0.12393	-0.0346121	*
Baseline	8A	N/A	DSLatency	1	26	-0.09572	-0.1225718	-0.068876	-0.141778	-0.0496695	*
Baseline	8A	N/A	DSLatency	1	27	-0.10759	-0.1353999	-0.0797734	-0.155297	-0.0598764	*
Baseline	8A	N/A	DSLatency	1	28	-0.10474	-0.1328657	-0.0766077	-0.152989	-0.0564847	*
Baseline	8A	N/A	DSLatency	1	29	-0.09241	-0.1204236	-0.0643891	-0.140467	-0.0443461	ns
Baseline	8A	N/A	DSLatency	1	30	-0.08496	-0.112676	-0.0572503	-0.132501	-0.037425	*
Baseline	8A	N/A	DSLatency	1	31	-0.09012	-0.1181257	-0.0621069	-0.138163	-0.0420695	*
Baseline	8A	N/A	DSLatency	1	32	-0.10187	-0.1304436	-0.073297	-0.150884	-0.0528562	*
Baseline	8A	N/A	DSLatency	1	33	-0.10834	-0.137201	-0.0794881	-0.157844	-0.0588448	*
Baseline	8A	N/A	DSLatency	1	34	-0.1037	-0.1320692	-0.0753264	-0.152366	-0.0550301	*
Baseline	8A	N/A	DSLatency	1	35	-0.0919	-0.119951	-0.063851	-0.140017	-0.0437846	*
Baseline	8A	N/A	DSLatency	1	36	-0.08138	-0.1094523	-0.0533104	-0.129534	-0.0332289	*
Baseline	8A	N/A	DSLatency	1	37	-0.07788	-0.1062771	-0.0494883	-0.12659	-0.0291755	*
Baseline	8A	N/A	DSLatency	1	38	-0.08155	-0.1102231	-0.0528842	-0.130733	-0.0323746	*
Baseline	8A	N/A	DSLatency	1	39	-0.08873	-0.1178728	-0.0595854	-0.138722	-0.0387365	*
Baseline	8A	N/A	DSLatency	1	40	-0.09537	-0.1248309	-0.065902	-0.145909	-0.0448237	*
Baseline	8A	N/A	DSLatency	1	41	-0.09909	-0.1288315	-0.0693568	-0.150105	-0.0480833	*
Baseline	8A	N/A	DSLatency	1	42	-0.09924	-0.1288904	-0.0695921	-0.150101	-0.0483817	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
Baseline	8A	N/A	DSLatency	1	43	-0.09651	-0.1260862	-0.0669375	-0.147243	-0.0457805	*
Baseline	8A	N/A	DSLatency	1	44	-0.09332	-0.1226509	-0.0639805	-0.143637	-0.0429946	*
Baseline	8A	N/A	DSLatency	1	45	-0.09325	-0.1225328	-0.063967	-0.143481	-0.0430186	*
Baseline	8A	N/A	DSLatency	1	46	-0.09848	-0.1276757	-0.0692758	-0.148565	-0.0483867	*
Baseline	8A	N/A	DSLatency	1	47	-0.10733	-0.1366823	-0.0779698	-0.157683	-0.0569689	*
Baseline	8A	N/A	DSLatency	1	48	-0.11551	-0.1448167	-0.0862014	-0.165783	-0.0652353	*
Baseline	8A	N/A	DSLatency	1	49	-0.11989	-0.1492738	-0.0904983	-0.170297	-0.0694748	*
Baseline	8A	N/A	DSLatency	1	50	-0.12023	-0.1496592	-0.0908068	-0.17071	-0.0697558	*
Baseline	8A	N/A	DSLatency	1	51	-0.11753	-0.1471581	-0.0879076	-0.168351	-0.0667142	*
Baseline	8A	N/A	DSLatency	1	52	-0.11241	-0.1419504	-0.0828634	-0.163085	-0.0617285	*
Baseline	8A	N/A	DSLatency	1	53	-0.10618	-0.1357545	-0.0766022	-0.156913	-0.055444	*
Baseline	8A	N/A	DSLatency	1	54	-0.10182	-0.1313405	-0.0723085	-0.152456	-0.0511933	*
Baseline	8A	N/A	DSLatency	1	55	-0.10173	-0.1313212	-0.072143	-0.152489	-0.0509755	*
Baseline	8A	N/A	DSLatency	1	56	-0.10466	-0.1339409	-0.0753692	-0.154891	-0.0544187	*
Baseline	8A	N/A	DSLatency	1	57	-0.1067	-0.1355673	-0.0778248	-0.156221	-0.0571709	*
Baseline	8A	N/A	DSLatency	1	58	-0.10612	-0.1344581	-0.077772	-0.154734	-0.0574959	*
Baseline	8A	N/A	DSLatency	1	59	-0.10623	-0.1345554	-0.0779089	-0.154817	-0.057647	*
Baseline	8A	N/A	DSLatency	1	60	-0.1123	-0.1408352	-0.0837642	-0.161249	-0.0633505	*
Baseline	8A	N/A	DSLatency	1	61	-0.12497	-0.1539472	-0.0960009	-0.174674	-0.075274	*
Baseline	8A	N/A	DSLatency	1	62	-0.13727	-0.1664272	-0.1081143	-0.187285	-0.0872564	*
Baseline	8A	N/A	DSLatency	1	63	-0.13939	-0.1688168	-0.1099637	-0.189868	-0.0889125	*
Baseline	8A	N/A	DSLatency	1	64	-0.1283	-0.1577788	-0.098831	-0.178864	-0.0777459	*
Baseline	8A	N/A	DSLatency	1	65	-0.11264	-0.1423334	-0.0829419	-0.163577	-0.061698	*
Baseline	8A	N/A	DSLatency	1	66	-0.10573	-0.1355322	-0.0759324	-0.156851	-0.054614	*
Baseline	8A	N/A	DSLatency	1	67	-0.11197	-0.1420341	-0.081904	-0.163542	-0.0603961	*
Baseline	8A	N/A	DSLatency	1	68	-0.12132	-0.1513685	-0.0912664	-0.172866	-0.0697685	*
Baseline	8A	N/A	DSLatency	1	69	-0.12032	-0.1503976	-0.0902358	-0.171917	-0.0687165	*
Baseline	8A	N/A	DSLatency	1	70	-0.10842	-0.1383301	-0.0785014	-0.15973	-0.0571013	*
Baseline	8A	N/A	DSLatency	1	71	-0.10027	-0.1301643	-0.0703833	-0.151547	-0.0490001	*
Baseline	8A	N/A	DSLatency	1	72	-0.11019	-0.1398449	-0.0805344	-0.16106	-0.0593196	*
Baseline	8A	N/A	DSLatency	1	73	-0.13627	-0.1660541	-0.1064866	-0.187361	-0.0851798	*
Baseline	8A	N/A	DSLatency	1	74	-0.16204	-0.1921222	-0.1319644	-0.21364	-0.1104466	*
Baseline	8A	N/A	DSLatency	1	75	-0.1723	-0.2029502	-0.1416537	-0.224875	-0.1197285	*
Baseline	8A	N/A	DSLatency	1	76	-0.16505	-0.1957831	-0.1343231	-0.217767	-0.1123394	*
Baseline	8A	N/A	DSLatency	1	77	-0.14914	-0.1798101	-0.1184669	-0.201752	-0.096525	*
Baseline	8A	N/A	DSLatency	1	78	-0.13402	-0.1642764	-0.1037641	-0.185921	-0.0821194	*
Baseline	8A	N/A	DSLatency	1	79	-0.12334	-0.1534795	-0.0931911	-0.175044	-0.0716265	*
Baseline	8A	N/A	DSLatency	1	80	-0.11588	-0.1459068	-0.0858631	-0.167384	-0.064386	*
Baseline	8A	N/A	DSLatency	1	81	-0.11012	-0.1404578	-0.0797876	-0.162159	-0.0580865	*
Baseline	8A	N/A	DSLatency	1	82	-0.10741	-0.1380474	-0.0767799	-0.159962	-0.054865	*
Baseline	8A	N/A	DSLatency	1	83	-0.11143	-0.1426204	-0.0802414	-0.164933	-0.057929	*
Baseline	8A	N/A	DSLatency	1	84	-0.12363	-0.1550448	-0.0922199	-0.177517	-0.0697481	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
Baseline	8A	N/A	DSLatency	1	85	-0.13886	-0.1707286	-0.106995	-0.193526	-0.084198	*
Baseline	8A	N/A	DSLatency	1	86	-0.14714	-0.179015	-0.1152739	-0.201815	-0.0924743	*
Baseline	8A	N/A	DSLatency	1	87	-0.14217	-0.1739921	-0.1103524	-0.196755	-0.087589	*
Baseline	8A	N/A	DSLatency	1	88	-0.12821	-0.1595611	-0.0968553	-0.18199	-0.074426	*
Baseline	8A	N/A	DSLatency	1	89	-0.1171	-0.1484104	-0.0857985	-0.170806	-0.0634027	*
Baseline	8A	N/A	DSLatency	1	90	-0.11773	-0.1488909	-0.0865766	-0.17118	-0.0642874	*
Baseline	8A	N/A	DSLatency	1	91	-0.12844	-0.1596423	-0.0972338	-0.181965	-0.0749108	*
Baseline	8A	N/A	DSLatency	1	92	-0.13912	-0.1698728	-0.1083677	-0.191873	-0.0863679	*
Baseline	8A	N/A	DSLatency	1	93	-0.13975	-0.170519	-0.108987	-0.192529	-0.0869775	*
Baseline	8A	N/A	DSLatency	1	94	-0.12806	-0.1585171	-0.0975993	-0.180307	-0.0758097	*
Baseline	8A	N/A	DSLatency	1	95	-0.11172	-0.1423168	-0.0811273	-0.164204	-0.0592404	*
Baseline	8A	N/A	DSLatency	1	96	-0.10352	-0.1337412	-0.07329	-0.155364	-0.0516672	*
Baseline	8A	N/A	DSLatency	1	97	-0.11082	-0.1415284	-0.080105	-0.163499	-0.0581344	*
Baseline	8A	N/A	DSLatency	1	98	-0.12698	-0.1573769	-0.0965917	-0.179119	-0.0748493	*
Baseline	8A	N/A	DSLatency	1	99	-0.13467	-0.1662157	-0.1031305	-0.188781	-0.0805655	*
Baseline	8A	N/A	DSLatency	1	100	-0.12134	-0.1509962	-0.0916768	-0.172214	-0.0704588	*
Baseline	8A	N/A	DSLatency	1	101	-0.09147	-0.1327477	-0.0501871	-0.162279	-0.020656	*
Baseline	8B	N/A	PriorEtOH	2	1	-0.00193	-0.0069872	0.00311738	-0.010206	0.0063361	ns
Baseline	8B	N/A	PriorEtOH	2	2	-0.00089	-0.0074099	0.00563027	-0.011564	0.0097842	ns
Baseline	8B	N/A	PriorEtOH	2	3	0.002594	-0.0045465	0.00973508	-0.009096	0.0142844	ns
Baseline	8B	N/A	PriorEtOH	2	4	0.00979	0.00228958	0.01729118	-0.002489	0.0220699	ns
Baseline	8B	N/A	PriorEtOH	2	5	0.019631	0.01181437	0.02744722	0.0068346	0.032427	*
Baseline	8B	N/A	PriorEtOH	2	6	0.029463	0.0213047	0.03762035	0.0161074	0.0428176	*
Baseline	8B	N/A	PriorEtOH	2	7	0.037155	0.02854981	0.04576067	0.0230674	0.0512431	*
Baseline	8B	N/A	PriorEtOH	2	8	0.042466	0.03336194	0.05157088	0.0275616	0.0573712	*
Baseline	8B	N/A	PriorEtOH	2	9	0.046236	0.03649839	0.05597311	0.0302948	0.0621767	*
Baseline	8B	N/A	PriorEtOH	2	10	0.048433	0.03823498	0.05863048	0.0317381	0.0651274	*
Baseline	8B	N/A	PriorEtOH	2	11	0.047844	0.03766866	0.05801934	0.0311861	0.0645019	*
Baseline	8B	N/A	PriorEtOH	2	12	0.044292	0.03454677	0.05403684	0.0283383	0.0602453	*
Baseline	8B	N/A	PriorEtOH	2	13	0.040358	0.03101753	0.04969927	0.0250666	0.0556502	*
Baseline	8B	N/A	PriorEtOH	2	14	0.039472	0.03025431	0.04868897	0.024382	0.0545612	*
Baseline	8B	N/A	PriorEtOH	2	15	0.042193	0.03286527	0.05152118	0.0269225	0.0574639	*
Baseline	8B	N/A	PriorEtOH	2	16	0.045653	0.03619516	0.05511071	0.0301697	0.0611362	*
Baseline	8B	N/A	PriorEtOH	2	17	0.047025	0.03745687	0.05659269	0.0313613	0.0626883	*
Baseline	8B	N/A	PriorEtOH	2	18	0.046391	0.03667353	0.05610854	0.0304826	0.0622995	*
Baseline	8B	N/A	PriorEtOH	2	19	0.045661	0.03574781	0.05557398	0.0294323	0.0618895	*
Baseline	8B	N/A	PriorEtOH	2	20	0.046014	0.03593683	0.05609195	0.0295165	0.0625122	*
Baseline	8B	N/A	PriorEtOH	2	21	0.047492	0.03737426	0.05760983	0.0309283	0.0640558	*
Baseline	8B	N/A	PriorEtOH	2	22	0.050046	0.04011082	0.0599815	0.0337811	0.0663112	*
Baseline	8B	N/A	PriorEtOH	2	23	0.053511	0.04385022	0.06317157	0.0376955	0.0693263	*
Baseline	8B	N/A	PriorEtOH	2	24	0.056917	0.04738739	0.06644712	0.041316	0.0725185	*
Baseline	8B	N/A	PriorEtOH	2	25	0.059042	0.04930518	0.06877923	0.0431018	0.0749826	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
Baseline	8B	N/A	PriorEtOH	2	26	0.059493	0.04927316	0.0697137	0.0427619	0.0762249	*
Baseline	8B	N/A	PriorEtOH	2	27	0.058525	0.04781062	0.06923856	0.0409849	0.0760643	*
Baseline	8B	N/A	PriorEtOH	2	28	0.056409	0.04546707	0.06735123	0.038496	0.0743223	*
Baseline	8B	N/A	PriorEtOH	2	29	0.054032	0.04307125	0.06499339	0.0360881	0.0719766	*
Baseline	8B	N/A	PriorEtOH	2	30	0.053303	0.04225511	0.06435108	0.0352166	0.0713896	*
Baseline	8B	N/A	PriorEtOH	2	31	0.055303	0.04384668	0.06675899	0.0365481	0.0740576	*
Baseline	8B	N/A	PriorEtOH	2	32	0.058293	0.04625474	0.07033154	0.0385852	0.0780011	*
Baseline	8B	N/A	PriorEtOH	2	33	0.059346	0.04703336	0.0716579	0.0391893	0.0795019	*
Baseline	8B	N/A	PriorEtOH	2	34	0.058149	0.04609203	0.07020673	0.0384104	0.0778883	*
Baseline	8B	N/A	PriorEtOH	2	35	0.057541	0.04592134	0.06916042	0.0385187	0.0765631	*
Baseline	8B	N/A	PriorEtOH	2	36	0.059744	0.04838277	0.07110487	0.0411448	0.0783429	*
Baseline	8B	N/A	PriorEtOH	2	37	0.063576	0.05225641	0.07489659	0.0450445	0.0821085	*
Baseline	8B	N/A	PriorEtOH	2	38	0.066148	0.05475636	0.07753956	0.0474989	0.084797	*
Baseline	8B	N/A	PriorEtOH	2	39	0.06606	0.0545806	0.07754025	0.0472669	0.0848539	*
Baseline	8B	N/A	PriorEtOH	2	40	0.064046	0.05257436	0.07551733	0.045266	0.0828257	*
Baseline	8B	N/A	PriorEtOH	2	41	0.061534	0.0501859	0.07288276	0.0429559	0.0801127	*
Baseline	8B	N/A	PriorEtOH	2	42	0.059677	0.04857177	0.07078241	0.0414967	0.0778575	*
Baseline	8B	N/A	PriorEtOH	2	43	0.058988	0.04819545	0.06978039	0.0413197	0.0766562	*
Baseline	8B	N/A	PriorEtOH	2	44	0.058774	0.04825817	0.06929079	0.0415584	0.0759906	*
Baseline	8B	N/A	PriorEtOH	2	45	0.057305	0.04690674	0.06770394	0.0402819	0.0743288	*
Baseline	8B	N/A	PriorEtOH	2	46	0.053555	0.04315007	0.06396039	0.0365211	0.0705894	*
Baseline	8B	N/A	PriorEtOH	2	47	0.048762	0.03828461	0.05923883	0.0316098	0.0659137	*
Baseline	8B	N/A	PriorEtOH	2	48	0.045731	0.03522113	0.05623991	0.0285257	0.0629353	*
Baseline	8B	N/A	PriorEtOH	2	49	0.046729	0.03625705	0.05720113	0.0295854	0.0638728	*
Baseline	8B	N/A	PriorEtOH	2	50	0.052198	0.04181412	0.06258282	0.0351984	0.0691986	*
Baseline	8B	N/A	PriorEtOH	2	51	0.060774	0.05042188	0.07112574	0.0438268	0.0777208	*
Baseline	8B	N/A	PriorEtOH	2	52	0.069851	0.05944546	0.08025666	0.0528162	0.086886	*
Baseline	8B	N/A	PriorEtOH	2	53	0.076607	0.06602744	0.08718677	0.0592872	0.093927	*
Baseline	8B	N/A	PriorEtOH	2	54	0.079378	0.06856466	0.09019123	0.0616756	0.0970803	*
Baseline	8B	N/A	PriorEtOH	2	55	0.078277	0.067312	0.08924275	0.0603261	0.0962287	*
Baseline	8B	N/A	PriorEtOH	2	56	0.074523	0.06369437	0.08535137	0.0567956	0.0922501	*
Baseline	8B	N/A	PriorEtOH	2	57	0.069621	0.05915892	0.08008382	0.0524934	0.0867493	*
Baseline	8B	N/A	PriorEtOH	2	58	0.065153	0.05502661	0.07528009	0.048575	0.0817317	*
Baseline	8B	N/A	PriorEtOH	2	59	0.062215	0.05217433	0.07225597	0.0457774	0.0786529	*
Baseline	8B	N/A	PriorEtOH	2	60	0.060352	0.05017308	0.07053183	0.0436879	0.077017	*
Baseline	8B	N/A	PriorEtOH	2	61	0.057841	0.04743026	0.06825153	0.0407978	0.074884	*
Baseline	8B	N/A	PriorEtOH	2	62	0.053848	0.04331099	0.06438461	0.0365981	0.0710975	*
Baseline	8B	N/A	PriorEtOH	2	63	0.049698	0.03916024	0.06023508	0.032447	0.0669484	*
Baseline	8B	N/A	PriorEtOH	2	64	0.047238	0.03674798	0.05772793	0.0300649	0.064411	*
Baseline	8B	N/A	PriorEtOH	2	65	0.046694	0.03618036	0.0572085	0.029482	0.0639069	*
Baseline	8B	N/A	PriorEtOH	2	66	0.047129	0.03650499	0.0577523	0.0297368	0.0645205	*
Baseline	8B	N/A	PriorEtOH	2	67	0.048289	0.03744429	0.05913465	0.0305349	0.066044	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
Baseline	8B	N/A	PriorEtOH	2	68	0.050644	0.03953263	0.06175481	0.0324539	0.0688336	*
Baseline	8B	N/A	PriorEtOH	2	69	0.053872	0.0425385	0.06520648	0.0353177	0.0724272	*
Baseline	8B	N/A	PriorEtOH	2	70	0.056693	0.04529828	0.06808823	0.0380387	0.0753478	*
Baseline	8B	N/A	PriorEtOH	2	71	0.058233	0.04696402	0.06950206	0.0397846	0.0766814	*
Baseline	8B	N/A	PriorEtOH	2	72	0.058545	0.04752581	0.06956476	0.0405054	0.0765851	*
Baseline	8B	N/A	PriorEtOH	2	73	0.057822	0.04694856	0.06869535	0.0400212	0.0756227	*
Baseline	8B	N/A	PriorEtOH	2	74	0.05619	0.04525702	0.06712335	0.0382916	0.0740888	*
Baseline	8B	N/A	PriorEtOH	2	75	0.054293	0.04318207	0.06540458	0.0361032	0.0724834	*
Baseline	8B	N/A	PriorEtOH	2	76	0.052901	0.0417042	0.06409758	0.0345709	0.0712309	*
Baseline	8B	N/A	PriorEtOH	2	77	0.051771	0.04064585	0.06289669	0.033558	0.0699846	*
Baseline	8B	N/A	PriorEtOH	2	78	0.050036	0.03913754	0.06093532	0.032194	0.0678789	*
Baseline	8B	N/A	PriorEtOH	2	79	0.047965	0.03728052	0.05864912	0.0304737	0.065456	*
Baseline	8B	N/A	PriorEtOH	2	80	0.04712	0.03650294	0.0577369	0.029739	0.0645009	*
Baseline	8B	N/A	PriorEtOH	2	81	0.048219	0.0374192	0.05901906	0.0305387	0.0658996	*
Baseline	8B	N/A	PriorEtOH	2	82	0.049896	0.03875406	0.06103877	0.0316554	0.0681374	*
Baseline	8B	N/A	PriorEtOH	2	83	0.050346	0.03884986	0.06184219	0.0315258	0.0691663	*
Baseline	8B	N/A	PriorEtOH	2	84	0.049465	0.03776122	0.06116856	0.0303049	0.0686248	*
Baseline	8B	N/A	PriorEtOH	2	85	0.048747	0.03695285	0.06054124	0.0294389	0.0680552	*
Baseline	8B	N/A	PriorEtOH	2	86	0.049755	0.03797133	0.06153826	0.0304642	0.0690454	*
Baseline	8B	N/A	PriorEtOH	2	87	0.053258	0.04150867	0.0650074	0.0340233	0.0724928	*
Baseline	8B	N/A	PriorEtOH	2	88	0.059013	0.04730746	0.0707191	0.0398498	0.0781768	*
Baseline	8B	N/A	PriorEtOH	2	89	0.065454	0.05373129	0.07717634	0.046263	0.0846446	*
Baseline	8B	N/A	PriorEtOH	2	90	0.070173	0.05843107	0.08191424	0.0509506	0.0893947	*
Baseline	8B	N/A	PriorEtOH	2	91	0.071772	0.06008821	0.08345611	0.0526445	0.0908998	*
Baseline	8B	N/A	PriorEtOH	2	92	0.071076	0.05958798	0.08256303	0.0522694	0.0898816	*
Baseline	8B	N/A	PriorEtOH	2	93	0.069738	0.05845822	0.08101846	0.0512718	0.0882049	*
Baseline	8B	N/A	PriorEtOH	2	94	0.067911	0.05687652	0.07894582	0.0498465	0.0859759	*
Baseline	8B	N/A	PriorEtOH	2	95	0.064215	0.05338302	0.07504604	0.0464824	0.0819467	*
Baseline	8B	N/A	PriorEtOH	2	96	0.058059	0.0473781	0.06873901	0.0405737	0.0755434	*
Baseline	8B	N/A	PriorEtOH	2	97	0.051071	0.04032744	0.06181386	0.0334831	0.0686582	*
Baseline	8B	N/A	PriorEtOH	2	98	0.045807	0.03495557	0.05665839	0.0280423	0.0635717	*
Baseline	8B	N/A	PriorEtOH	2	99	0.043552	0.03270151	0.05440247	0.0257888	0.0613152	*
Baseline	8B	N/A	PriorEtOH	2	100	0.043721	0.03309848	0.05434433	0.0263307	0.0611121	*
Baseline	8B	N/A	PriorEtOH	2	101	0.044965	0.03096479	0.05896601	0.0220451	0.0678857	*
Baseline	8B	N/A	PriorITI	3	1	-0.00036	-0.0091561	0.0084404	-0.015494	0.0147786	ns
Baseline	8C	N/A	PriorITI	3	2	0.005481	-0.0087633	0.01972552	-0.019025	0.0299872	ns
Baseline	8C	N/A	PriorITI	3	3	0.0127	-0.0042922	0.02969285	-0.016534	0.0419342	ns
Baseline	8C	N/A	PriorITI	3	4	0.01948	0.00020483	0.03875525	-0.013681	0.0526411	ns
Baseline	8C	N/A	PriorITI	3	5	0.022306	0.00089979	0.04371151	-0.014521	0.0591322	ns
Baseline	8C	N/A	PriorITI	3	6	0.02168	-0.0012717	0.04463255	-0.017806	0.0611672	ns
Baseline	8C	N/A	PriorITI	3	7	0.023471	-0.000417	0.04735835	-0.017626	0.064567	ns
Baseline	8C	N/A	PriorITI	3	8	0.03142	0.00757349	0.05526612	-0.009605	0.0724449	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
Baseline	8C	N/A	PriorITI	3	9	0.039858	0.01594436	0.0637718	-0.001283	0.0809992	ns
Baseline	8C	N/A	PriorITI	3	10	0.038752	0.01497012	0.06253307	-0.002162	0.0796652	ns
Baseline	8C	N/A	PriorITI	3	11	0.0273	0.00332136	0.05127887	-0.013953	0.0685531	ns
Baseline	8C	N/A	PriorITI	3	12	0.017896	-0.0061856	0.04197775	-0.023534	0.0593261	ns
Baseline	8C	N/A	PriorITI	3	13	0.022716	-0.0018149	0.04724612	-0.019487	0.0649178	ns
Baseline	8C	N/A	PriorITI	3	14	0.038959	0.01427181	0.06364679	-0.003513	0.0814316	ns
Baseline	8C	N/A	PriorITI	3	15	0.052098	0.02729791	0.07689837	0.0094319	0.0947644	*
Baseline	8C	N/A	PriorITI	3	16	0.053116	0.02857479	0.07765732	0.0108953	0.0953368	*
Baseline	8C	N/A	PriorITI	3	17	0.047641	0.02300098	0.07228039	0.0052506	0.0900308	*
Baseline	8C	N/A	PriorITI	3	18	0.046374	0.0214922	0.07125524	0.0035676	0.0891798	*
Baseline	8C	N/A	PriorITI	3	19	0.050544	0.02515073	0.07593697	0.0068576	0.0942301	*
Baseline	8C	N/A	PriorITI	3	20	0.051055	0.02542674	0.07668384	0.006964	0.0951466	*
Baseline	8C	N/A	PriorITI	3	21	0.041334	0.01547306	0.06719404	-0.003157	0.0858239	ns
Baseline	8C	N/A	PriorITI	3	22	0.026797	0.0011418	0.05245234	-0.01734	0.0709343	ns
Baseline	8C	N/A	PriorITI	3	23	0.018935	-0.0065716	0.04444151	-0.024946	0.0628164	ns
Baseline	8C	N/A	PriorITI	3	24	0.021694	-0.0035918	0.04697953	-0.021808	0.0651953	ns
Baseline	8C	N/A	PriorITI	3	25	0.027504	0.00189343	0.05311393	-0.016556	0.0715635	ns
Baseline	8C	N/A	PriorITI	3	26	0.027418	0.00124437	0.05359206	-0.017611	0.0724476	ns
Baseline	8C	N/A	PriorITI	3	27	0.021123	-0.0058057	0.04805077	-0.025205	0.0674498	ns
Baseline	8C	N/A	PriorITI	3	28	0.013999	-0.0131626	0.04115974	-0.032729	0.0607266	ns
Baseline	8C	N/A	PriorITI	3	29	0.008391	-0.0187815	0.0355627	-0.038356	0.0551374	ns
Baseline	8C	N/A	PriorITI	3	30	0.004087	-0.0227315	0.03090576	-0.042052	0.0502258	ns
Baseline	8C	N/A	PriorITI	3	31	0.00549	-0.0213158	0.03229557	-0.040627	0.0516063	ns
Baseline	8C	N/A	PriorITI	3	32	0.018981	-0.0077912	0.04575416	-0.027078	0.0650411	ns
Baseline	8C	N/A	PriorITI	3	33	0.04009	0.01327252	0.06690807	-0.006047	0.0862275	ns
Baseline	8C	N/A	PriorITI	3	34	0.051898	0.02532433	0.07847134	0.0061809	0.0976148	*
Baseline	8C	N/A	PriorITI	3	35	0.043759	0.01701953	0.07049783	-0.002243	0.0897606	ns
Baseline	8C	N/A	PriorITI	3	36	0.026719	-0.0002356	0.05367398	-0.019654	0.0730921	ns
Baseline	8C	N/A	PriorITI	3	37	0.021552	-0.005778	0.04888248	-0.025467	0.0685711	ns
Baseline	8C	N/A	PriorITI	3	38	0.033135	0.0055726	0.06069658	-0.014283	0.0805522	ns
Baseline	8C	N/A	PriorITI	3	39	0.045318	0.01720183	0.07343465	-0.003053	0.0936896	ns
Baseline	8C	N/A	PriorITI	3	40	0.042131	0.01360291	0.07065857	-0.006948	0.0912099	ns
Baseline	8C	N/A	PriorITI	3	41	0.026328	-0.0026417	0.0552986	-0.023512	0.0761686	ns
Baseline	8C	N/A	PriorITI	3	42	0.013887	-0.0151269	0.04290008	-0.036028	0.0638013	ns
Baseline	8C	N/A	PriorITI	3	43	0.016064	-0.0131435	0.04527218	-0.034185	0.0663134	ns
Baseline	8C	N/A	PriorITI	3	44	0.031028	0.00189298	0.06016228	-0.019096	0.0811508	ns
Baseline	8C	N/A	PriorITI	3	45	0.04905	0.0198919	0.07820711	-0.001113	0.0992122	ns
Baseline	8C	N/A	PriorITI	3	46	0.06129	0.03228379	0.09029551	0.011388	0.1111913	*
Baseline	8C	N/A	PriorITI	3	47	0.065094	0.0359585	0.09422966	0.0149693	0.1152189	*
Baseline	8C	N/A	PriorITI	3	48	0.064015	0.03500353	0.09302578	0.014104	0.1139253	*
Baseline	8C	N/A	PriorITI	3	49	0.062383	0.03322927	0.09153751	0.0122267	0.1125401	*
Baseline	8C	N/A	PriorITI	3	50	0.059415	0.03012313	0.08870727	0.0090212	0.1098092	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
Baseline	8C	N/A	PriorITI	3	51	0.051187	0.02157441	0.0807995	0.0002416	0.1021323	*
Baseline	8C	N/A	PriorITI	3	52	0.039228	0.00976181	0.06869503	-0.011466	0.0899227	ns
Baseline	8C	N/A	PriorITI	3	53	0.03274	0.00335904	0.06212013	-0.017807	0.0832858	ns
Baseline	8C	N/A	PriorITI	3	54	0.038512	0.00944121	0.06758323	-0.011501	0.0885259	ns
Baseline	8C	N/A	PriorITI	3	55	0.051188	0.02218762	0.0801887	0.0012957	0.1010806	*
Baseline	8C	N/A	PriorITI	3	56	0.057905	0.02918979	0.0866193	0.0085038	0.1073053	*
Baseline	8C	N/A	PriorITI	3	57	0.051954	0.02338471	0.08052302	0.0028036	0.1011042	*
Baseline	8C	N/A	PriorITI	3	58	0.038435	0.01023275	0.06663699	-0.010084	0.0869537	ns
Baseline	8C	N/A	PriorITI	3	59	0.027026	-0.0012204	0.05527199	-0.021569	0.0756205	ns
Baseline	8C	N/A	PriorITI	3	60	0.023315	-0.0050247	0.05165385	-0.02544	0.0720694	ns
Baseline	8C	N/A	PriorITI	3	61	0.028036	-0.0006293	0.05670161	-0.02128	0.0773521	ns
Baseline	8C	N/A	PriorITI	3	62	0.040163	0.01137285	0.06895273	-0.009367	0.0896929	ns
Baseline	8C	N/A	PriorITI	3	63	0.056429	0.0272323	0.08562631	0.0061989	0.1066598	*
Baseline	8C	N/A	PriorITI	3	64	0.069473	0.0401756	0.09877092	0.0190696	0.1198769	*
Baseline	8C	N/A	PriorITI	3	65	0.072169	0.04260605	0.10173265	0.0213087	0.12303	*
Baseline	8C	N/A	PriorITI	3	66	0.066508	0.03689938	0.09611698	0.0155693	0.1174471	*
Baseline	8C	N/A	PriorITI	3	67	0.064321	0.03450913	0.09413354	0.0130325	0.1156102	*
Baseline	8C	N/A	PriorITI	3	68	0.074049	0.04449124	0.10360667	0.0231979	0.1249	*
Baseline	8C	N/A	PriorITI	3	69	0.088298	0.05890555	0.1176909	0.0377311	0.1388653	*
Baseline	8C	N/A	PriorITI	3	70	0.091274	0.06218425	0.12036355	0.0412281	0.1413197	*
Baseline	8C	N/A	PriorITI	3	71	0.079824	0.05061623	0.10903217	0.0295749	0.1300735	*
Baseline	8C	N/A	PriorITI	3	72	0.069411	0.04026315	0.09855791	0.0192655	0.1195556	*
Baseline	8C	N/A	PriorITI	3	73	0.074201	0.04473337	0.10366809	0.0235052	0.1248963	*
Baseline	8C	N/A	PriorITI	3	74	0.088087	0.05833273	0.1178414	0.0368978	0.1392763	*
Baseline	8C	N/A	PriorITI	3	75	0.093802	0.06348708	0.12411615	0.0416486	0.1459547	*
Baseline	8C	N/A	PriorITI	3	76	0.086356	0.05605812	0.11665296	0.0342319	0.1384791	*
Baseline	8C	N/A	PriorITI	3	77	0.076921	0.04664753	0.10719529	0.0248383	0.1290045	*
Baseline	8C	N/A	PriorITI	3	78	0.075	0.04507002	0.10492936	0.0235088	0.1264906	*
Baseline	8C	N/A	PriorITI	3	79	0.078141	0.04811547	0.10816581	0.0264854	0.1297959	*
Baseline	8C	N/A	PriorITI	3	80	0.080701	0.05076526	0.11063685	0.0291996	0.1322025	*
Baseline	8C	N/A	PriorITI	3	81	0.081404	0.0512145	0.11159442	0.0294657	0.1333432	*
Baseline	8C	N/A	PriorITI	3	82	0.078429	0.04819906	0.10865898	0.0264215	0.1304366	*
Baseline	8C	N/A	PriorITI	3	83	0.068033	0.03738209	0.09868482	0.0153009	0.120766	*
Baseline	8C	N/A	PriorITI	3	84	0.054107	0.02333809	0.08487672	0.001172	0.1070429	*
Baseline	8C	N/A	PriorITI	3	85	0.048687	0.01733653	0.08003694	-0.005248	0.1026215	ns
Baseline	8C	N/A	PriorITI	3	86	0.054691	0.02332248	0.08606028	0.0007244	0.1086584	*
Baseline	8C	N/A	PriorITI	3	87	0.057492	0.02614603	0.08883776	0.0035646	0.1114192	*
Baseline	8C	N/A	PriorITI	3	88	0.04415	0.01341005	0.0748904	-0.008735	0.0970355	ns
Baseline	8C	N/A	PriorITI	3	89	0.023448	-0.0072424	0.05413865	-0.029352	0.076248	ns
Baseline	8C	N/A	PriorITI	3	90	0.014508	-0.0159492	0.04496579	-0.037891	0.0669073	ns
Baseline	8C	N/A	PriorITI	3	91	0.021001	-0.0095911	0.05159271	-0.031629	0.0736311	ns
Baseline	8C	N/A	PriorITI	3	92	0.030262	0.00012216	0.06040102	-0.02159	0.0821134	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
Baseline	8C	N/A	PriorITI	3	93	0.034727	0.00439827	0.0650552	-0.01745	0.0869038	ns
Baseline	8C	N/A	PriorITI	3	94	0.039016	0.00891106	0.06912057	-0.012776	0.090808	ns
Baseline	8C	N/A	PriorITI	3	95	0.04525	0.01476745	0.07573246	-0.007192	0.097692	ns
Baseline	8C	N/A	PriorITI	3	96	0.046457	0.01636694	0.07654765	-0.00531	0.0982247	ns
Baseline	8C	N/A	PriorITI	3	97	0.039354	0.00866172	0.07004628	-0.013449	0.0921569	ns
Baseline	8C	N/A	PriorITI	3	98	0.031774	0.00164977	0.06189922	-0.020052	0.083601	ns
Baseline	8C	N/A	PriorITI	3	99	0.031397	-0.000122	0.06291567	-0.022828	0.0856217	ns
Baseline	8C	N/A	PriorITI	3	100	0.036203	0.00666182	0.06574421	-0.01462	0.0870256	ns
Baseline	8C	N/A	PriorITI	3	101	0.041269	-0.0001961	0.08273442	-0.030068	0.1126059	ns
Baseline	8D	N/A	DSduration	4	1	0.034185	0.02591594	0.04245311	0.020065	0.048304	*
Baseline	8D	N/A	DSduration	4	2	0.089329	0.07632552	0.10233262	0.0671241	0.111534	*
Baseline	8D	N/A	DSduration	4	3	0.108563	0.09278782	0.12433885	0.081625	0.1355017	*
Baseline	8D	N/A	DSduration	4	4	0.087933	0.0701203	0.10574538	0.057516	0.1183496	*
Baseline	8D	N/A	DSduration	4	5	0.056784	0.03700853	0.07655877	0.0230156	0.0905517	*
Baseline	8D	N/A	DSduration	4	6	0.04061	0.01940276	0.06181667	0.0043966	0.0768228	*
Baseline	8D	N/A	DSduration	4	7	0.038172	0.01610935	0.06023392	0.000498	0.0758453	*
Baseline	8D	N/A	DSduration	4	8	0.035944	0.01389132	0.05799752	-0.001714	0.0736024	ns
Baseline	8D	N/A	DSduration	4	9	0.02932	0.0072166	0.05142384	-0.008424	0.0670645	ns
Baseline	8D	N/A	DSduration	4	10	0.024182	0.00217403	0.04619043	-0.013399	0.0617635	ns
Baseline	8D	N/A	DSduration	4	11	0.026849	0.00468137	0.04901716	-0.011005	0.0647033	ns
Baseline	8D	N/A	DSduration	4	12	0.037525	0.01525297	0.05979681	-0.000507	0.0755565	ns
Baseline	8D	N/A	DSduration	4	13	0.049584	0.02692773	0.07223996	0.0108962	0.0882715	*
Baseline	8D	N/A	DSduration	4	14	0.054594	0.03177732	0.07741068	0.0156321	0.0935559	*
Baseline	8D	N/A	DSduration	4	15	0.051798	0.02889326	0.07470304	0.0126856	0.0909107	*
Baseline	8D	N/A	DSduration	4	16	0.050489	0.02780017	0.07317847	0.0117452	0.0892334	*
Baseline	8D	N/A	DSduration	4	17	0.058069	0.03530592	0.08083263	0.0191985	0.0969401	*
Baseline	8D	N/A	DSduration	4	18	0.06958	0.04657846	0.09258137	0.0303025	0.1088573	*
Baseline	8D	N/A	DSduration	4	19	0.075659	0.05219975	0.0991179	0.0356	0.1157177	*
Baseline	8D	N/A	DSduration	4	20	0.075802	0.05210412	0.09949923	0.0353356	0.1162677	*
Baseline	8D	N/A	DSduration	4	21	0.074484	0.05059048	0.09837781	0.0336832	0.1152851	*
Baseline	8D	N/A	DSduration	4	22	0.069429	0.04571094	0.09314722	0.0289279	0.1099303	*
Baseline	8D	N/A	DSduration	4	23	0.056761	0.03320421	0.08031809	0.0165352	0.0969871	*
Baseline	8D	N/A	DSduration	4	24	0.044908	0.02153948	0.06827584	0.005004	0.0848113	*
Baseline	8D	N/A	DSduration	4	25	0.047676	0.02402053	0.07133117	0.0072819	0.0880698	*
Baseline	8D	N/A	DSduration	4	26	0.062251	0.03805282	0.08644974	0.0209299	0.1035727	*
Baseline	8D	N/A	DSduration	4	27	0.069879	0.04499414	0.09476479	0.0273852	0.1123738	*
Baseline	8D	N/A	DSduration	4	28	0.063054	0.03793301	0.08817469	0.0201574	0.1059503	*
Baseline	8D	N/A	DSduration	4	29	0.056688	0.03157737	0.08179923	0.0138088	0.0995679	*
Baseline	8D	N/A	DSduration	4	30	0.064061	0.03925703	0.08886477	0.0217057	0.1064161	*
Baseline	8D	N/A	DSduration	4	31	0.075487	0.0507069	0.10026774	0.0331721	0.1178025	*
Baseline	8D	N/A	DSduration	4	32	0.073031	0.04825283	0.09780944	0.0307196	0.1153427	*
Baseline	8D	N/A	DSduration	4	33	0.056659	0.03185224	0.08146601	0.0142988	0.0990195	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
Baseline	8D	N/A	DSduration	4	34	0.042114	0.01751898	0.0667097	0.0001152	0.0841135	*
Baseline	8D	N/A	DSduration	4	35	0.038186	0.0134684	0.06290402	-0.004022	0.0803945	ns
Baseline	8D	N/A	DSduration	4	36	0.039336	0.01440928	0.06426248	-0.003229	0.0819007	ns
Baseline	8D	N/A	DSduration	4	37	0.039127	0.01386922	0.06438403	-0.004003	0.0822563	ns
Baseline	8D	N/A	DSduration	4	38	0.039114	0.01362099	0.06460649	-0.004418	0.0826453	ns
Baseline	8D	N/A	DSduration	4	39	0.042803	0.01681644	0.06878984	-0.001572	0.0871782	ns
Baseline	8D	N/A	DSduration	4	40	0.049341	0.02295767	0.07572365	0.0042889	0.0943924	*
Baseline	8D	N/A	DSduration	4	41	0.055857	0.02908732	0.08262669	0.010145	0.1015691	*
Baseline	8D	N/A	DSduration	4	42	0.060632	0.03380435	0.08746018	0.0148208	0.1064438	*
Baseline	8D	N/A	DSduration	4	43	0.061932	0.03495179	0.0889132	0.0158601	0.1080049	*
Baseline	8D	N/A	DSduration	4	44	0.057578	0.03065147	0.08450443	0.0115982	0.1035577	*
Baseline	8D	N/A	DSduration	4	45	0.047577	0.02065013	0.07450421	0.0015964	0.0935579	*
Baseline	8D	N/A	DSduration	4	46	0.035598	0.00878982	0.06240536	-0.01018	0.0813747	ns
Baseline	8D	N/A	DSduration	4	47	0.027352	0.0004464	0.05425755	-0.018592	0.0732961	ns
Baseline	8D	N/A	DSduration	4	48	0.027474	0.0006608	0.05428734	-0.018312	0.0732606	ns
Baseline	8D	N/A	DSduration	4	49	0.035708	0.00878141	0.0626352	-0.010272	0.0816888	ns
Baseline	8D	N/A	DSduration	4	50	0.045487	0.01841648	0.07255783	-0.000739	0.0917132	ns
Baseline	8D	N/A	DSduration	4	51	0.049691	0.02234785	0.07703326	0.003	0.0963811	*
Baseline	8D	N/A	DSduration	4	52	0.048957	0.0217253	0.07618819	0.0024562	0.0954573	*
Baseline	8D	N/A	DSduration	4	53	0.049934	0.02279978	0.07706881	0.0035993	0.0962693	*
Baseline	8D	N/A	DSduration	4	54	0.054103	0.02723005	0.08097686	0.0082143	0.0999926	*
Baseline	8D	N/A	DSduration	4	55	0.054822	0.02803163	0.08161207	0.0090747	0.100569	*
Baseline	8D	N/A	DSduration	4	56	0.04861	0.02206622	0.07515358	0.0032838	0.093936	*
Baseline	8D	N/A	DSduration	4	57	0.041909	0.01552829	0.06828971	-0.003139	0.0869568	ns
Baseline	8D	N/A	DSduration	4	58	0.040942	0.01488423	0.06700075	-0.003555	0.0854397	ns
Baseline	8D	N/A	DSduration	4	59	0.041887	0.01580941	0.06796508	-0.002643	0.0864179	ns
Baseline	8D	N/A	DSduration	4	60	0.038749	0.01256427	0.06493323	-0.005964	0.0834615	ns
Baseline	8D	N/A	DSduration	4	61	0.034697	0.00822676	0.06116693	-0.010504	0.0798973	Sig.
Baseline	8D	N/A	DSduration	4	62	0.035943	0.00933251	0.06255337	-0.009497	0.081383	ns
Baseline	8D	N/A	DSduration	4	63	0.039194	0.01223299	0.06615483	-0.006845	0.0852325	ns
Baseline	8D	N/A	DSduration	4	64	0.036521	0.00944476	0.06359724	-0.009715	0.0827565	ns
Baseline	8D	N/A	DSduration	4	65	0.030133	0.00283274	0.05743405	-0.016485	0.0767521	ns
Baseline	8D	N/A	DSduration	4	66	0.030263	0.00289694	0.05762919	-0.016467	0.0769936	ns
Baseline	8D	N/A	DSduration	4	67	0.038657	0.01112607	0.06618878	-0.008355	0.0856701	ns
Baseline	8D	N/A	DSduration	4	68	0.046292	0.01896804	0.0736156	-0.000366	0.09295	ns
Baseline	8D	N/A	DSduration	4	69	0.04909	0.02193659	0.07624349	0.0027227	0.0954574	*
Baseline	8D	N/A	DSduration	4	70	0.05348	0.02658177	0.08037887	0.0075482	0.0994124	*
Baseline	8D	N/A	DSduration	4	71	0.062024	0.03504603	0.08900184	0.0159563	0.1080915	*
Baseline	8D	N/A	DSduration	4	72	0.065504	0.038561	0.09244646	0.0194962	0.1115113	*
Baseline	8D	N/A	DSduration	4	73	0.057054	0.0298413	0.08426643	0.0105855	0.1035222	*
Baseline	8D	N/A	DSduration	4	74	0.04488	0.0173767	0.07238403	-0.002085	0.0918458	ns
Baseline	8D	N/A	DSduration	4	75	0.041369	0.01337394	0.06936391	-0.006435	0.0891733	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
Baseline	8D	N/A	DSduration	4	76	0.045611	0.01760242	0.0736198	-0.002217	0.0934389	ns
Baseline	8D	N/A	DSduration	4	77	0.046537	0.01857689	0.07449725	-0.001208	0.094282	ns
Baseline	8D	N/A	DSduration	4	78	0.039792	0.01212538	0.06745925	-0.007452	0.0870365	ns
Baseline	8D	N/A	DSduration	4	79	0.031675	0.00395516	0.05939573	-0.01566	0.0790107	ns
Baseline	8D	N/A	DSduration	4	80	0.027348	-0.0003164	0.05501161	-0.019892	0.0745868	ns
Baseline	8D	N/A	DSduration	4	81	0.024461	-0.0034113	0.05233425	-0.023134	0.0720572	ns
Baseline	8D	N/A	DSduration	4	82	0.020372	-0.0075739	0.04831879	-0.027349	0.0680938	ns
Baseline	8D	N/A	DSduration	4	83	0.018212	-0.0100967	0.04652023	-0.030128	0.0665514	ns
Baseline	8D	N/A	DSduration	4	84	0.021622	-0.0068352	0.05007908	-0.026972	0.0702155	ns
Baseline	8D	N/A	DSduration	4	85	0.027636	-0.0013205	0.05659196	-0.02181	0.0770815	ns
Baseline	8D	N/A	DSduration	4	86	0.029187	0.0001808	0.0581929	-0.020344	0.0787177	ns
Baseline	8D	N/A	DSduration	4	87	0.023442	-0.0055084	0.05239206	-0.025994	0.0728774	ns
Baseline	8D	N/A	DSduration	4	88	0.014621	-0.0138091	0.04305066	-0.033926	0.0631678	ns
Baseline	8D	N/A	DSduration	4	89	0.008591	-0.0197557	0.03693675	-0.039814	0.0569947	ns
Baseline	8D	N/A	DSduration	4	90	0.006773	-0.0213945	0.03494084	-0.041326	0.0548724	ns
Baseline	8D	N/A	DSduration	4	91	0.006309	-0.0219385	0.03455671	-0.041927	0.0545449	ns
Baseline	8D	N/A	DSduration	4	92	0.004845	-0.0230304	0.03272117	-0.042755	0.0524462	ns
Baseline	8D	N/A	DSduration	4	93	0.003027	-0.024971	0.03102501	-0.044783	0.0508366	ns
Baseline	8D	N/A	DSduration	4	94	0.002206	-0.0256346	0.03004685	-0.045335	0.0497471	ns
Baseline	8D	N/A	DSduration	4	95	0.00247	-0.025655	0.03059514	-0.045556	0.0504966	ns
Baseline	8D	N/A	DSduration	4	96	0.004676	-0.0231613	0.03251293	-0.042859	0.0522106	ns
Baseline	8D	N/A	DSduration	4	97	0.011454	-0.0168454	0.03975412	-0.03687	0.0597792	ns
Baseline	8D	N/A	DSduration	4	98	0.02221	-0.0057486	0.0501681	-0.025532	0.0699516	ns
Baseline	8D	N/A	DSduration	4	99	0.028949	-0.0001717	0.05807029	-0.020778	0.0786765	ns
Baseline	8D	N/A	DSduration	4	100	0.022845	-0.0045048	0.05019444	-0.023858	0.0695472	ns
Baseline	8D	N/A	DSduration	4	101	0.005365	-0.0334063	0.04413634	-0.060841	0.0715711	ns
VaporWD	8E [left]	Air	DSLatency	2	1	0.003515	-0.0053144	0.0123443	-0.011691	0.0187206	ns
VaporWD	8E [left]	Air	DSLatency	2	2	-0.0121	-0.0278805	0.00367046	-0.039273	0.0150631	ns
VaporWD	8E [left]	Air	DSLatency	2	3	-0.03189	-0.0501045	-0.0136761	-0.063258	-0.0005222	*
VaporWD	8E [left]	Air	DSLatency	2	4	-0.05793	-0.0799869	-0.035876	-0.095915	-0.0199482	*
VaporWD	8E [left]	Air	DSLatency	2	5	-0.0862	-0.1109954	-0.0613983	-0.128904	-0.0434895	*
VaporWD	8E [left]	Air	DSLatency	2	6	-0.10825	-0.1356182	-0.0808816	-0.155383	-0.0611169	*
VaporWD	8E [left]	Air	DSLatency	2	7	-0.11991	-0.1490196	-0.0908075	-0.170039	-0.0697879	*
VaporWD	8E [left]	Air	DSLatency	2	8	-0.12598	-0.1557276	-0.0962292	-0.177212	-0.0747451	*
VaporWD	8E [left]	Air	DSLatency	2	9	-0.13312	-0.1633394	-0.1028968	-0.185164	-0.0810718	*
VaporWD	8E [left]	Air	DSLatency	2	10	-0.14066	-0.1707431	-0.1105731	-0.19247	-0.0888465	*
VaporWD	8E [left]	Air	DSLatency	2	11	-0.14316	-0.1735551	-0.1127563	-0.195509	-0.0908027	*
VaporWD	8E [left]	Air	DSLatency	2	12	-0.14027	-0.1706301	-0.1099144	-0.192554	-0.0879908	*
VaporWD	8E [left]	Air	DSLatency	2	13	-0.13741	-0.1681042	-0.10671	-0.190273	-0.0845414	*
VaporWD	8E [left]	Air	DSLatency	2	14	-0.13619	-0.166872	-0.1055045	-0.189031	-0.0833455	*
VaporWD	8E [left]	Air	DSLatency	2	15	-0.1319	-0.1627939	-0.1010154	-0.185101	-0.078708	*
VaporWD	8E [left]	Air	DSLatency	2	16	-0.12375	-0.1543222	-0.0931685	-0.176404	-0.0710868	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8E [left]	Air	DSLatency	2	17	-0.12045	-0.1510506	-0.0898536	-0.173148	-0.0677561	*
VaporWD	8E [left]	Air	DSLatency	2	18	-0.1289	-0.1594682	-0.0983252	-0.181546	-0.0762473	*
VaporWD	8E [left]	Air	DSLatency	2	19	-0.14129	-0.1724122	-0.110174	-0.194886	-0.0877006	*
VaporWD	8E [left]	Air	DSLatency	2	20	-0.1425	-0.1739191	-0.111089	-0.196606	-0.0884019	*
VaporWD	8E [left]	Air	DSLatency	2	21	-0.12967	-0.161514	-0.0978164	-0.184514	-0.0748161	*
VaporWD	8E [left]	Air	DSLatency	2	22	-0.11618	-0.1480319	-0.0843309	-0.171033	-0.0613294	*
VaporWD	8E [left]	Air	DSLatency	2	23	-0.11355	-0.145705	-0.0813955	-0.168926	-0.0581743	*
VaporWD	8E [left]	Air	DSLatency	2	24	-0.1165	-0.1486812	-0.084327	-0.171919	-0.0610897	*
VaporWD	8E [left]	Air	DSLatency	2	25	-0.11214	-0.1446579	-0.0796162	-0.168144	-0.0561305	*
VaporWD	8E [left]	Air	DSLatency	2	26	-0.09951	-0.1320758	-0.0669491	-0.155592	-0.0434327	*
VaporWD	8E [left]	Air	DSLatency	2	27	-0.09228	-0.1251112	-0.0594418	-0.148823	-0.0357295	*
VaporWD	8E [left]	Air	DSLatency	2	28	-0.10118	-0.133917	-0.0684427	-0.157559	-0.0448008	*
VaporWD	8E [left]	Air	DSLatency	2	29	-0.12019	-0.1531528	-0.0872197	-0.17696	-0.0634121	*
VaporWD	8E [left]	Air	DSLatency	2	30	-0.1335	-0.1663887	-0.1006034	-0.190143	-0.0768493	*
VaporWD	8E [left]	Air	DSLatency	2	31	-0.1332	-0.1662783	-0.100117	-0.190168	-0.0762271	*
VaporWD	8E [left]	Air	DSLatency	2	32	-0.12563	-0.158499	-0.0927686	-0.182233	-0.0690342	*
VaporWD	8E [left]	Air	DSLatency	2	33	-0.12103	-0.1540178	-0.0880384	-0.177842	-0.0642142	*
VaporWD	8E [left]	Air	DSLatency	2	34	-0.12156	-0.1545138	-0.0885968	-0.178316	-0.064795	*
VaporWD	8E [left]	Air	DSLatency	2	35	-0.12226	-0.1555959	-0.0889331	-0.179667	-0.0648621	*
VaporWD	8E [left]	Air	DSLatency	2	36	-0.12074	-0.1541509	-0.0873335	-0.178278	-0.0632067	*
VaporWD	8E [left]	Air	DSLatency	2	37	-0.12055	-0.1542793	-0.0868254	-0.178636	-0.0624688	*
VaporWD	8E [left]	Air	DSLatency	2	38	-0.1241	-0.1576769	-0.0905317	-0.181922	-0.0662865	*
VaporWD	8E [left]	Air	DSLatency	2	39	-0.12689	-0.1604836	-0.0932988	-0.184743	-0.0690392	*
VaporWD	8E [left]	Air	DSLatency	2	40	-0.12309	-0.1563968	-0.0897905	-0.180447	-0.0657398	*
VaporWD	8E [left]	Air	DSLatency	2	41	-0.11477	-0.1482192	-0.0813283	-0.172373	-0.0571749	*
VaporWD	8E [left]	Air	DSLatency	2	42	-0.11027	-0.1436977	-0.0768324	-0.167842	-0.0526883	*
VaporWD	8E [left]	Air	DSLatency	2	43	-0.1132	-0.1470452	-0.0793646	-0.171484	-0.0549261	*
VaporWD	8E [left]	Air	DSLatency	2	44	-0.11825	-0.1521639	-0.0843331	-0.176657	-0.0598403	*
VaporWD	8E [left]	Air	DSLatency	2	45	-0.11958	-0.1537218	-0.0854307	-0.178381	-0.0607717	*
VaporWD	8E [left]	Air	DSLatency	2	46	-0.11885	-0.1527037	-0.0849866	-0.177155	-0.0605349	*
VaporWD	8E [left]	Air	DSLatency	2	47	-0.12095	-0.154732	-0.0871587	-0.179132	-0.0627589	*
VaporWD	8E [left]	Air	DSLatency	2	48	-0.1256	-0.1591228	-0.0920834	-0.18333	-0.0678764	*
VaporWD	8E [left]	Air	DSLatency	2	49	-0.12842	-0.1622118	-0.0946276	-0.186616	-0.0702239	*
VaporWD	8E [left]	Air	DSLatency	2	50	-0.12841	-0.1623334	-0.0944896	-0.186831	-0.0699921	*
VaporWD	8E [left]	Air	DSLatency	2	51	-0.12914	-0.1635444	-0.0947412	-0.188388	-0.0698973	*
VaporWD	8E [left]	Air	DSLatency	2	52	-0.13282	-0.1672586	-0.0983731	-0.192132	-0.0734996	*
VaporWD	8E [left]	Air	DSLatency	2	53	-0.13815	-0.1728193	-0.103483	-0.197856	-0.0784467	*
VaporWD	8E [left]	Air	DSLatency	2	54	-0.14401	-0.1784757	-0.1095437	-0.203366	-0.0846533	*
VaporWD	8E [left]	Air	DSLatency	2	55	-0.14987	-0.1843843	-0.1153588	-0.209308	-0.0904347	*
VaporWD	8E [left]	Air	DSLatency	2	56	-0.15239	-0.1865227	-0.1182608	-0.211171	-0.0936123	*
VaporWD	8E [left]	Air	DSLatency	2	57	-0.14768	-0.1817513	-0.1136179	-0.206353	-0.0890159	*
VaporWD	8E [left]	Air	DSLatency	2	58	-0.13878	-0.1725371	-0.1050242	-0.196915	-0.0806463	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8E [left]	Air	DSLatency	2	59	-0.13416	-0.1679809	-0.1003407	-0.192405	-0.0759168	*
VaporWD	8E [left]	Air	DSLatency	2	60	-0.13541	-0.1690501	-0.1017735	-0.193343	-0.0774808	*
VaporWD	8E [left]	Air	DSLatency	2	61	-0.13315	-0.1671533	-0.0991527	-0.191707	-0.0745986	*
VaporWD	8E [left]	Air	DSLatency	2	62	-0.12097	-0.1551101	-0.08682	-0.179769	-0.0621613	*
VaporWD	8E [left]	Air	DSLatency	2	63	-0.10724	-0.1418002	-0.0726711	-0.166762	-0.0477096	*
VaporWD	8E [left]	Air	DSLatency	2	64	-0.10497	-0.1395008	-0.0704478	-0.164435	-0.0455137	*
VaporWD	8E [left]	Air	DSLatency	2	65	-0.11402	-0.148762	-0.0792781	-0.173852	-0.0541884	*
VaporWD	8E [left]	Air	DSLatency	2	66	-0.12303	-0.1575482	-0.0885079	-0.182478	-0.0635784	*
VaporWD	8E [left]	Air	DSLatency	2	67	-0.12698	-0.1616466	-0.0923226	-0.186679	-0.0672906	*
VaporWD	8E [left]	Air	DSLatency	2	68	-0.13169	-0.1661999	-0.0971874	-0.191119	-0.0722679	*
VaporWD	8E [left]	Air	DSLatency	2	69	-0.14019	-0.17491	-0.1054775	-0.199981	-0.0804064	*
VaporWD	8E [left]	Air	DSLatency	2	70	-0.14649	-0.1809518	-0.112023	-0.205841	-0.0871337	*
VaporWD	8E [left]	Air	DSLatency	2	71	-0.1472	-0.1817448	-0.112652	-0.206693	-0.0877036	*
VaporWD	8E [left]	Air	DSLatency	2	72	-0.14901	-0.1833581	-0.1146625	-0.208163	-0.0898574	*
VaporWD	8E [left]	Air	DSLatency	2	73	-0.15732	-0.191946	-0.1226922	-0.216953	-0.0976855	*
VaporWD	8E [left]	Air	DSLatency	2	74	-0.16574	-0.2002461	-0.1312303	-0.225167	-0.1063096	*
VaporWD	8E [left]	Air	DSLatency	2	75	-0.16555	-0.2002992	-0.1307962	-0.225396	-0.1056997	*
VaporWD	8E [left]	Air	DSLatency	2	76	-0.15933	-0.1939417	-0.1247236	-0.218935	-0.09973	*
VaporWD	8E [left]	Air	DSLatency	2	77	-0.15574	-0.1907466	-0.1207315	-0.216028	-0.0954501	*
VaporWD	8E [left]	Air	DSLatency	2	78	-0.15539	-0.1904406	-0.1203328	-0.215756	-0.0950179	*
VaporWD	8E [left]	Air	DSLatency	2	79	-0.1525	-0.1879975	-0.117007	-0.213631	-0.0913734	*
VaporWD	8E [left]	Air	DSLatency	2	80	-0.14767	-0.1830286	-0.112311	-0.208564	-0.0867758	*
VaporWD	8E [left]	Air	DSLatency	2	81	-0.14752	-0.1831079	-0.1119229	-0.208812	-0.0862189	*
VaporWD	8E [left]	Air	DSLatency	2	82	-0.15202	-0.1874033	-0.1166338	-0.212957	-0.0910799	*
VaporWD	8E [left]	Air	DSLatency	2	83	-0.15328	-0.1890338	-0.1175224	-0.214856	-0.0917006	*
VaporWD	8E [left]	Air	DSLatency	2	84	-0.14861	-0.1841881	-0.1130371	-0.20988	-0.0873455	*
VaporWD	8E [left]	Air	DSLatency	2	85	-0.14465	-0.1803709	-0.1089366	-0.206165	-0.0831426	*
VaporWD	8E [left]	Air	DSLatency	2	86	-0.1458	-0.1809985	-0.110601	-0.206418	-0.0851814	*
VaporWD	8E [left]	Air	DSLatency	2	87	-0.14864	-0.1839811	-0.1132976	-0.209504	-0.0877748	*
VaporWD	8E [left]	Air	DSLatency	2	88	-0.15116	-0.1863931	-0.1159307	-0.211836	-0.0904878	*
VaporWD	8E [left]	Air	DSLatency	2	89	-0.15656	-0.1924632	-0.1206514	-0.218393	-0.0947211	*
VaporWD	8E [left]	Air	DSLatency	2	90	-0.16259	-0.1983215	-0.1268671	-0.224123	-0.1010659	*
VaporWD	8E [left]	Air	DSLatency	2	91	-0.15899	-0.1948718	-0.1231099	-0.220784	-0.0971977	*
VaporWD	8E [left]	Air	DSLatency	2	92	-0.1442	-0.1794455	-0.1089508	-0.2049	-0.0834961	*
VaporWD	8E [left]	Air	DSLatency	2	93	-0.13417	-0.1697877	-0.098548	-0.195511	-0.0728244	*
VaporWD	8E [left]	Air	DSLatency	2	94	-0.14227	-0.1775874	-0.1069528	-0.203093	-0.0814476	*
VaporWD	8E [left]	Air	DSLatency	2	95	-0.15853	-0.194562	-0.1224882	-0.220587	-0.0964633	*
VaporWD	8E [left]	Air	DSLatency	2	96	-0.16297	-0.1985153	-0.1274191	-0.224187	-0.1017473	*
VaporWD	8E [left]	Air	DSLatency	2	97	-0.1541	-0.1905308	-0.1176725	-0.216839	-0.0913644	*
VaporWD	8E [left]	Air	DSLatency	2	98	-0.14794	-0.183234	-0.1126394	-0.208725	-0.0871486	*
VaporWD	8E [left]	Air	DSLatency	2	99	-0.15119	-0.1880068	-0.1143748	-0.214594	-0.0877873	*
VaporWD	8E [left]	Air	DSLatency	2	100	-0.15347	-0.188115	-0.1188316	-0.213132	-0.0938144	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8E [left]	Air	DSLatency	2	101	-0.14805	-0.1965503	-0.0995403	-0.231579	-0.0645114	*
VaporWD	8E [left]	EtOH	DSLatency	2	1	-0.00393	-0.0121543	0.0042919	-0.01794	0.0100773	ns
VaporWD	8E [left]	EtOH	DSLatency	2	2	-0.02416	-0.0367744	-0.0115381	-0.045652	-0.0026605	*
VaporWD	8E [left]	EtOH	DSLatency	2	3	-0.04037	-0.0564589	-0.0242846	-0.067777	-0.0129664	*
VaporWD	8E [left]	EtOH	DSLatency	2	4	-0.0529	-0.0718136	-0.0339797	-0.085123	-0.0206706	*
VaporWD	8E [left]	EtOH	DSLatency	2	5	-0.06751	-0.0889148	-0.0460959	-0.103978	-0.0310331	*
VaporWD	8E [left]	EtOH	DSLatency	2	6	-0.08891	-0.1124923	-0.0653264	-0.129084	-0.0487345	*
VaporWD	8E [left]	EtOH	DSLatency	2	7	-0.11319	-0.1382928	-0.0880923	-0.155952	-0.0704328	*
VaporWD	8E [left]	EtOH	DSLatency	2	8	-0.13016	-0.1559079	-0.1044199	-0.17402	-0.0863075	*
VaporWD	8E [left]	EtOH	DSLatency	2	9	-0.13447	-0.1605152	-0.1084224	-0.17884	-0.0900972	*
VaporWD	8E [left]	EtOH	DSLatency	2	10	-0.13109	-0.1571136	-0.1050607	-0.175425	-0.0867496	*
VaporWD	8E [left]	EtOH	DSLatency	2	11	-0.12823	-0.1544073	-0.1020483	-0.172826	-0.0836296	*
VaporWD	8E [left]	EtOH	DSLatency	2	12	-0.129	-0.1552576	-0.1027378	-0.173733	-0.0842625	*
VaporWD	8E [left]	EtOH	DSLatency	2	13	-0.13314	-0.1595926	-0.1066973	-0.1782	-0.0880899	*
VaporWD	8E [left]	EtOH	DSLatency	2	14	-0.14228	-0.1687899	-0.1157634	-0.187444	-0.0971098	*
VaporWD	8E [left]	EtOH	DSLatency	2	15	-0.15747	-0.1840502	-0.1308993	-0.202748	-0.112202	*
VaporWD	8E [left]	EtOH	DSLatency	2	16	-0.17431	-0.2007234	-0.1478939	-0.219308	-0.1293096	*
VaporWD	8E [left]	EtOH	DSLatency	2	17	-0.1867	-0.2130539	-0.1603507	-0.231594	-0.1418108	*
VaporWD	8E [left]	EtOH	DSLatency	2	18	-0.19508	-0.2214945	-0.1686691	-0.240077	-0.1500863	*
VaporWD	8E [left]	EtOH	DSLatency	2	19	-0.20463	-0.231416	-0.1778537	-0.250258	-0.1590117	*
VaporWD	8E [left]	EtOH	DSLatency	2	20	-0.21535	-0.2424751	-0.1882171	-0.261562	-0.1691302	*
VaporWD	8E [left]	EtOH	DSLatency	2	21	-0.22021	-0.2476372	-0.1927749	-0.266937	-0.1734755	*
VaporWD	8E [left]	EtOH	DSLatency	2	22	-0.21553	-0.2430628	-0.1880008	-0.262432	-0.1686311	*
VaporWD	8E [left]	EtOH	DSLatency	2	23	-0.20794	-0.2356206	-0.1802519	-0.255098	-0.1607744	*
VaporWD	8E [left]	EtOH	DSLatency	2	24	-0.20766	-0.2354507	-0.179879	-0.255	-0.16033	*
VaporWD	8E [left]	EtOH	DSLatency	2	25	-0.21788	-0.2458831	-0.189878	-0.265584	-0.1701766	*
VaporWD	8E [left]	EtOH	DSLatency	2	26	-0.23295	-0.2610873	-0.2048055	-0.280886	-0.1850068	*
VaporWD	8E [left]	EtOH	DSLatency	2	27	-0.24502	-0.2733035	-0.2167352	-0.293203	-0.1968356	*
VaporWD	8E [left]	EtOH	DSLatency	2	28	-0.25063	-0.2789182	-0.2223375	-0.298822	-0.2024335	*
VaporWD	8E [left]	EtOH	DSLatency	2	29	-0.25287	-0.2812599	-0.2244851	-0.301232	-0.204513	*
VaporWD	8E [left]	EtOH	DSLatency	2	30	-0.25822	-0.2866389	-0.2298059	-0.306632	-0.2098133	*
VaporWD	8E [left]	EtOH	DSLatency	2	31	-0.26878	-0.2972566	-0.2402982	-0.317293	-0.2202615	*
VaporWD	8E [left]	EtOH	DSLatency	2	32	-0.27735	-0.3057383	-0.2489576	-0.325713	-0.2289833	*
VaporWD	8E [left]	EtOH	DSLatency	2	33	-0.27397	-0.3023756	-0.2455656	-0.32236	-0.225581	*
VaporWD	8E [left]	EtOH	DSLatency	2	34	-0.25858	-0.2870451	-0.2301101	-0.307074	-0.2100816	*
VaporWD	8E [left]	EtOH	DSLatency	2	35	-0.24294	-0.2716432	-0.2142431	-0.291835	-0.1940509	*
VaporWD	8E [left]	EtOH	DSLatency	2	36	-0.23762	-0.2664911	-0.2087576	-0.2868	-0.1884482	*
VaporWD	8E [left]	EtOH	DSLatency	2	37	-0.2411	-0.2701413	-0.2120593	-0.290573	-0.1916273	*
VaporWD	8E [left]	EtOH	DSLatency	2	38	-0.24525	-0.2742441	-0.2162477	-0.294646	-0.1958458	*
VaporWD	8E [left]	EtOH	DSLatency	2	39	-0.24741	-0.276329	-0.218482	-0.296678	-0.1981327	*
VaporWD	8E [left]	EtOH	DSLatency	2	40	-0.25158	-0.2803494	-0.2228016	-0.300594	-0.2025575	*
VaporWD	8E [left]	EtOH	DSLatency	2	41	-0.25984	-0.2886384	-0.2310323	-0.308903	-0.2107676	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8E [left]	EtOH	DSLatency	2	42	-0.26887	-0.2977554	-0.2399847	-0.318078	-0.2196623	*
VaporWD	8E [left]	EtOH	DSLatency	2	43	-0.27542	-0.3045591	-0.2462885	-0.325057	-0.2257901	*
VaporWD	8E [left]	EtOH	DSLatency	2	44	-0.27999	-0.3092847	-0.2506994	-0.329894	-0.2300903	*
VaporWD	8E [left]	EtOH	DSLatency	2	45	-0.28305	-0.3124507	-0.2536571	-0.333133	-0.2329747	*
VaporWD	8E [left]	EtOH	DSLatency	2	46	-0.28145	-0.3106967	-0.2522074	-0.331272	-0.2316321	*
VaporWD	8E [left]	EtOH	DSLatency	2	47	-0.27202	-0.3011141	-0.2429353	-0.32158	-0.2224693	*
VaporWD	8E [left]	EtOH	DSLatency	2	48	-0.25783	-0.2867855	-0.2288687	-0.307159	-0.2084948	*
VaporWD	8E [left]	EtOH	DSLatency	2	49	-0.24775	-0.2768448	-0.2186457	-0.297318	-0.1981725	*
VaporWD	8E [left]	EtOH	DSLatency	2	50	-0.24834	-0.2776437	-0.2190298	-0.298263	-0.1984107	*
VaporWD	8E [left]	EtOH	DSLatency	2	51	-0.25637	-0.285983	-0.2267575	-0.306817	-0.2059233	*
VaporWD	8E [left]	EtOH	DSLatency	2	52	-0.26107	-0.2908176	-0.2313228	-0.311747	-0.2103938	*
VaporWD	8E [left]	EtOH	DSLatency	2	53	-0.25534	-0.2851901	-0.2254837	-0.306194	-0.2044803	*
VaporWD	8E [left]	EtOH	DSLatency	2	54	-0.24411	-0.2739	-0.2143242	-0.294858	-0.1933666	*
VaporWD	8E [left]	EtOH	DSLatency	2	55	-0.23931	-0.269027	-0.2095866	-0.289937	-0.1886767	*
VaporWD	8E [left]	EtOH	DSLatency	2	56	-0.24644	-0.2759267	-0.2169616	-0.296669	-0.1962189	*
VaporWD	8E [left]	EtOH	DSLatency	2	57	-0.25943	-0.2887501	-0.2301082	-0.309379	-0.2094793	*
VaporWD	8E [left]	EtOH	DSLatency	2	58	-0.26929	-0.2984342	-0.2401413	-0.31894	-0.2196351	*
VaporWD	8E [left]	EtOH	DSLatency	2	59	-0.27378	-0.3028755	-0.2446758	-0.323349	-0.2242024	*
VaporWD	8E [left]	EtOH	DSLatency	2	60	-0.27545	-0.3045045	-0.2463981	-0.324945	-0.2259575	*
VaporWD	8E [left]	EtOH	DSLatency	2	61	-0.27456	-0.3038166	-0.2452963	-0.324403	-0.2247101	*
VaporWD	8E [left]	EtOH	DSLatency	2	62	-0.26958	-0.2990699	-0.2400928	-0.319817	-0.2193459	*
VaporWD	8E [left]	EtOH	DSLatency	2	63	-0.26319	-0.2929484	-0.2334385	-0.313883	-0.2125041	*
VaporWD	8E [left]	EtOH	DSLatency	2	64	-0.2612	-0.2910317	-0.231365	-0.312021	-0.2103755	*
VaporWD	8E [left]	EtOH	DSLatency	2	65	-0.26452	-0.2944236	-0.23461	-0.315465	-0.2135688	*
VaporWD	8E [left]	EtOH	DSLatency	2	66	-0.26711	-0.2969358	-0.2372879	-0.317919	-0.216305	*
VaporWD	8E [left]	EtOH	DSLatency	2	67	-0.26392	-0.2937632	-0.2340841	-0.314757	-0.2130903	*
VaporWD	8E [left]	EtOH	DSLatency	2	68	-0.25722	-0.2870355	-0.2274029	-0.308013	-0.2064254	*
VaporWD	8E [left]	EtOH	DSLatency	2	69	-0.25293	-0.2828052	-0.2230477	-0.303827	-0.2020262	*
VaporWD	8E [left]	EtOH	DSLatency	2	70	-0.25365	-0.2834243	-0.2238826	-0.30437	-0.2029371	*
VaporWD	8E [left]	EtOH	DSLatency	2	71	-0.25755	-0.287273	-0.2278186	-0.308188	-0.2069038	*
VaporWD	8E [left]	EtOH	DSLatency	2	72	-0.26146	-0.2911311	-0.2317899	-0.312006	-0.2109149	*
VaporWD	8E [left]	EtOH	DSLatency	2	73	-0.26292	-0.2927101	-0.2331295	-0.313669	-0.2121703	*
VaporWD	8E [left]	EtOH	DSLatency	2	74	-0.26138	-0.291185	-0.2315691	-0.312157	-0.2105975	*
VaporWD	8E [left]	EtOH	DSLatency	2	75	-0.26059	-0.2904807	-0.2306937	-0.311513	-0.2096618	*
VaporWD	8E [left]	EtOH	DSLatency	2	76	-0.26793	-0.2978354	-0.2380231	-0.318876	-0.2169824	*
VaporWD	8E [left]	EtOH	DSLatency	2	77	-0.28743	-0.3175545	-0.257298	-0.338751	-0.2361011	*
VaporWD	8E [left]	EtOH	DSLatency	2	78	-0.31311	-0.3434157	-0.2828119	-0.364735	-0.2614928	*
VaporWD	8E [left]	EtOH	DSLatency	2	79	-0.33221	-0.3627527	-0.3016753	-0.384238	-0.2801895	*
VaporWD	8E [left]	EtOH	DSLatency	2	80	-0.33629	-0.3668464	-0.3057392	-0.388343	-0.284243	*
VaporWD	8E [left]	EtOH	DSLatency	2	81	-0.32823	-0.3588528	-0.2976022	-0.380399	-0.2760556	*
VaporWD	8E [left]	EtOH	DSLatency	2	82	-0.31759	-0.3481981	-0.2869803	-0.369733	-0.2654452	*
VaporWD	8E [left]	EtOH	DSLatency	2	83	-0.31036	-0.341137	-0.2795906	-0.362788	-0.2579399	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8E [left]	EtOH	DSLatency	2	84	-0.3045	-0.3352523	-0.2737491	-0.356888	-0.2521136	*
VaporWD	8E [left]	EtOH	DSLatency	2	85	-0.29535	-0.3260584	-0.264638	-0.347665	-0.2430316	*
VaporWD	8E [left]	EtOH	DSLatency	2	86	-0.2837	-0.3141369	-0.253256	-0.335554	-0.2318394	*
VaporWD	8E [left]	EtOH	DSLatency	2	87	-0.27622	-0.3066354	-0.2458127	-0.328032	-0.2244166	*
VaporWD	8E [left]	EtOH	DSLatency	2	88	-0.27737	-0.3078523	-0.2468816	-0.329301	-0.2254333	*
VaporWD	8E [left]	EtOH	DSLatency	2	89	-0.28304	-0.3138935	-0.2521797	-0.335603	-0.2304702	*
VaporWD	8E [left]	EtOH	DSLatency	2	90	-0.28527	-0.3161653	-0.2543751	-0.337902	-0.2326386	*
VaporWD	8E [left]	EtOH	DSLatency	2	91	-0.28247	-0.3133139	-0.2516305	-0.335013	-0.2299316	*
VaporWD	8E [left]	EtOH	DSLatency	2	92	-0.28126	-0.3117854	-0.2507258	-0.333265	-0.2292463	*
VaporWD	8E [left]	EtOH	DSLatency	2	93	-0.2866	-0.3171953	-0.2560069	-0.33872	-0.2344822	*
VaporWD	8E [left]	EtOH	DSLatency	2	94	-0.29348	-0.3240817	-0.2628839	-0.34561	-0.2413558	*
VaporWD	8E [left]	EtOH	DSLatency	2	95	-0.29174	-0.3226529	-0.2608198	-0.344404	-0.2390683	*
VaporWD	8E [left]	EtOH	DSLatency	2	96	-0.27802	-0.3088906	-0.247146	-0.330611	-0.2254255	*
VaporWD	8E [left]	EtOH	DSLatency	2	97	-0.25938	-0.2905741	-0.2281874	-0.31252	-0.2062411	*
VaporWD	8E [left]	EtOH	DSLatency	2	98	-0.24474	-0.2758984	-0.2135775	-0.297822	-0.1916543	*
VaporWD	8E [left]	EtOH	DSLatency	2	99	-0.23601	-0.2677014	-0.20431	-0.290001	-0.1820102	*
VaporWD	8E [left]	EtOH	DSLatency	2	100	-0.22919	-0.2596551	-0.1987181	-0.281091	-0.1772817	*
VaporWD	8E [left]	EtOH	DSLatency	2	101	-0.22144	-0.2659613	-0.1769167	-0.297285	-0.1455927	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	1	-0.00757	-0.019401	0.00427041	-0.027861	0.0127303	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	2	-0.01226	-0.0316685	0.00714709	-0.045541	0.0210193	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	3	-0.00828	-0.0322914	0.01572274	-0.049451	0.0328824	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	4	0.005746	-0.022639	0.03413201	-0.042928	0.0544213	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	5	0.019201	-0.0129617	0.05136345	-0.035951	0.0743525	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	6	0.018995	-0.0164546	0.05444486	-0.041793	0.0797835	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	7	0.005888	-0.0318453	0.04362173	-0.058816	0.0705928	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	8	-0.00464	-0.0432939	0.03400558	-0.07092	0.0616315	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	9	-0.00132	-0.0404745	0.03784347	-0.068464	0.0658334	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	10	0.00954	-0.0295426	0.04862181	-0.057478	0.0765569	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	11	0.014796	-0.0245739	0.05416684	-0.052715	0.0823079	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	12	0.011645	-0.0277951	0.0510849	-0.055986	0.0792757	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	13	0.005018	-0.0347527	0.04478938	-0.06318	0.0732168	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	14	-0.00604	-0.045879	0.03380318	-0.074356	0.0622807	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	15	-0.02646	-0.0664496	0.01352118	-0.09503	0.0421018	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	16	-0.0509	-0.0905867	-0.0112039	-0.118957	0.0171666	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	17	-0.06497	-0.1045901	-0.0253458	-0.132911	0.0029753	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	18	-0.06482	-0.104492	-0.0251406	-0.132851	0.0032186	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	19	-0.06413	-0.1044069	-0.0238571	-0.133194	0.0049304	ns
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	20	-0.07522	-0.1159852	-0.0344627	-0.14512	-0.0053275	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	21	-0.09156	-0.1328058	-0.0503184	-0.162286	-0.0208383	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	22	-0.09784	-0.1391964	-0.056488	-0.168755	-0.026929	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	23	-0.0926	-0.1342364	-0.0509648	-0.163997	-0.0212045	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	24	-0.09138	-0.1331392	-0.049622	-0.162987	-0.0197739	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	25	-0.10713	-0.1492446	-0.0650155	-0.179347	-0.034913	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	26	-0.1337	-0.1759786	-0.0914262	-0.206197	-0.0612082	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	27	-0.1516	-0.1941229	-0.109074	-0.224518	-0.0786785	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	28	-0.14855	-0.1910455	-0.1060556	-0.22142	-0.0756812	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	29	-0.13293	-0.1756125	-0.0902468	-0.206121	-0.059738	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	30	-0.12538	-0.1680697	-0.0826889	-0.198584	-0.0521748	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	31	-0.13597	-0.1787929	-0.0931397	-0.209404	-0.0625283	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	32	-0.1521	-0.1947553	-0.1094504	-0.225242	-0.0789634	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	33	-0.15348	-0.1961907	-0.1107686	-0.22672	-0.0802398	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	34	-0.13708	-0.1798533	-0.0943127	-0.210425	-0.0637415	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	35	-0.11987	-0.1630219	-0.0767093	-0.193869	-0.0458622	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	36	-0.11586	-0.1592295	-0.0724972	-0.190227	-0.0415	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	37	-0.12032	-0.1639861	-0.0766458	-0.195201	-0.0454314	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	38	-0.12184	-0.1654062	-0.0782689	-0.196548	-0.047127	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	39	-0.12135	-0.1648423	-0.0778621	-0.195928	-0.0467763	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	40	-0.12863	-0.171855	-0.0854104	-0.202749	-0.0545161	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	41	-0.14444	-0.1877435	-0.1011342	-0.218697	-0.070181	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	42	-0.15788	-0.2012795	-0.1144899	-0.232297	-0.0834723	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	43	-0.1621	-0.2059198	-0.1182837	-0.23724	-0.0869636	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	44	-0.16221	-0.2062311	-0.1181876	-0.237697	-0.0867218	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	45	-0.16398	-0.2081968	-0.1197652	-0.239801	-0.0881607	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	46	-0.16291	-0.206854	-0.1189686	-0.238263	-0.0875594	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	47	-0.15132	-0.195061	-0.107584	-0.226324	-0.0763207	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	48	-0.13217	-0.1756635	-0.088671	-0.206754	-0.0575809	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	49	-0.11851	-0.1622596	-0.0747677	-0.193528	-0.0434991	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	50	-0.11891	-0.1629338	-0.0748857	-0.194401	-0.0434183	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	51	-0.1274	-0.1719365	-0.0828679	-0.203769	-0.0510357	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	52	-0.1297	-0.1744014	-0.0850019	-0.206352	-0.0530515	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	53	-0.11799	-0.1628864	-0.0731019	-0.194974	-0.041014	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	54	-0.09906	-0.1438099	-0.0543179	-0.175793	-0.0223345	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	55	-0.08812	-0.1328076	-0.0434354	-0.164748	-0.0114949	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	56	-0.09444	-0.138727	-0.0501467	-0.170385	-0.0184892	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	57	-0.11293	-0.1570164	-0.0688393	-0.18853	-0.0373258	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	58	-0.13024	-0.1740284	-0.0864492	-0.205328	-0.0551493	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	59	-0.13834	-0.1821044	-0.094585	-0.213383	-0.0633066	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	60	-0.1404	-0.1840394	-0.096752	-0.215235	-0.0655564	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	61	-0.14353	-0.1875307	-0.0995304	-0.218981	-0.06808	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	62	-0.14937	-0.1936756	-0.1050625	-0.225345	-0.0733932	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	63	-0.15386	-0.1986108	-0.1091167	-0.230595	-0.0771325	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	64	-0.15411	-0.1989275	-0.1092862	-0.230964	-0.0772494	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	65	-0.15117	-0.1961468	-0.1061923	-0.228295	-0.0740436	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	66	-0.14611	-0.1909131	-0.1012996	-0.22294	-0.0692728	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	67	-0.13729	-0.1821561	-0.0924165	-0.214228	-0.0603446	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	68	-0.12436	-0.1691494	-0.0795731	-0.201163	-0.0475596	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	69	-0.11239	-0.1573237	-0.0674634	-0.189439	-0.0353483	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	70	-0.10784	-0.1525588	-0.0631126	-0.184526	-0.0311455	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	71	-0.11023	-0.154935	-0.0655311	-0.186887	-0.0335792	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	72	-0.11162	-0.1561885	-0.0670472	-0.188047	-0.0351892	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	73	-0.10602	-0.1508165	-0.0612152	-0.182839	-0.0291927	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	74	-0.09722	-0.1419957	-0.0524379	-0.174003	-0.0204309	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	75	-0.09516	-0.1401204	-0.0502063	-0.172255	-0.018072	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	76	-0.10651	-0.151425	-0.061587	-0.183532	-0.0294799	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	77	-0.13017	-0.1754707	-0.0848642	-0.207852	-0.0524825	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	78	-0.15888	-0.2043941	-0.1133655	-0.236927	-0.0808329	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	79	-0.18175	-0.2276876	-0.1358191	-0.26052	-0.1029864	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	80	-0.18886	-0.2347687	-0.1429606	-0.26758	-0.1101495	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	81	-0.17951	-0.2255743	-0.1334522	-0.258498	-0.1005289	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	82	-0.16508	-0.2110404	-0.1191115	-0.243895	-0.0862572	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	83	-0.15771	-0.203989	-0.1114377	-0.237066	-0.078361	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	84	-0.15642	-0.2026135	-0.1102321	-0.23563	-0.0772161	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	85	-0.15066	-0.1968546	-0.1044653	-0.229874	-0.0714463	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	86	-0.1376	-0.1833092	-0.0918883	-0.215982	-0.0592155	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	87	-0.12682	-0.1725465	-0.0810931	-0.205231	-0.0484087	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	88	-0.12513	-0.1709013	-0.0793545	-0.203619	-0.0466367	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	89	-0.12668	-0.1731111	-0.0802487	-0.206299	-0.0470607	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	90	-0.12487	-0.171287	-0.0784595	-0.204462	-0.045284	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	91	-0.12513	-0.1715351	-0.0787205	-0.204706	-0.0455497	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	92	-0.13533	-0.1811654	-0.0895019	-0.213925	-0.0567424	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	93	-0.14911	-0.195151	-0.1030777	-0.228057	-0.0701718	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	94	-0.15093	-0.1968585	-0.1049988	-0.229688	-0.0721692	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	95	-0.13656	-0.1830975	-0.0900237	-0.216361	-0.0567602	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	96	-0.11738	-0.1636824	-0.0710701	-0.196781	-0.0379716	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	97	-0.10364	-0.1505864	-0.056684	-0.184146	-0.0231243	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	98	-0.09422	-0.1405772	-0.0478544	-0.173715	-0.0147164	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	99	-0.08508	-0.1328669	-0.0372924	-0.167024	-0.0031352	*
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	100	-0.07742	-0.1226274	-0.0322211	-0.154938	8.91E-05	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8E [right]	Air + EtOH	Vapor X DSlatency	6	101	-0.07276	-0.1380838	-0.0074266	-0.184779	0.0392688	ns
VaporWD	8F [left]	Air	PriorEtOH	3	1	0.002861	-0.0007466	0.00646846	-0.003289	0.0090105	ns
VaporWD	8F [left]	Air	PriorEtOH	3	2	0.005886	0.00065046	0.01112089	-0.003039	0.01481	ns
VaporWD	8F [left]	Air	PriorEtOH	3	3	0.007966	0.00182165	0.01410949	-0.002508	0.0184389	ns
VaporWD	8F [left]	Air	PriorEtOH	3	4	0.009326	0.00214822	0.016503	-0.002909	0.0215607	ns
VaporWD	8F [left]	Air	PriorEtOH	3	5	0.011554	0.00342221	0.01968521	-0.002308	0.0254152	ns
VaporWD	8F [left]	Air	PriorEtOH	3	6	0.015576	0.00667765	0.02447513	0.000407	0.0307458	*
VaporWD	8F [left]	Air	PriorEtOH	3	7	0.019499	0.01005864	0.02893863	0.0034066	0.0355907	*
VaporWD	8F [left]	Air	PriorEtOH	3	8	0.019906	0.01018369	0.02962748	0.003333	0.0364782	*
VaporWD	8F [left]	Air	PriorEtOH	3	9	0.016041	0.00609564	0.02598574	-0.000912	0.0329937	ns
VaporWD	8F [left]	Air	PriorEtOH	3	10	0.011395	0.00132199	0.02146886	-0.005776	0.0285673	ns
VaporWD	8F [left]	Air	PriorEtOH	3	11	0.009962	-0.0002682	0.02019218	-0.007477	0.027401	ns
VaporWD	8F [left]	Air	PriorEtOH	3	12	0.011904	0.0015725	0.02223506	-0.005708	0.0295152	ns
VaporWD	8F [left]	Air	PriorEtOH	3	13	0.01424	0.00375896	0.02472069	-0.003627	0.0321062	ns
VaporWD	8F [left]	Air	PriorEtOH	3	14	0.014828	0.00424448	0.02541129	-0.003213	0.032869	ns
VaporWD	8F [left]	Air	PriorEtOH	3	15	0.01396	0.0033607	0.02455928	-0.004108	0.0320282	ns
VaporWD	8F [left]	Air	PriorEtOH	3	16	0.012727	0.00227273	0.02318129	-0.005094	0.030548	ns
VaporWD	8F [left]	Air	PriorEtOH	3	17	0.011962	0.00165377	0.02226941	-0.00561	0.029533	ns
VaporWD	8F [left]	Air	PriorEtOH	3	18	0.012877	0.00263486	0.02312007	-0.004583	0.0303377	ns
VaporWD	8F [left]	Air	PriorEtOH	3	19	0.016743	0.00641265	0.0270737	-0.000867	0.0343533	ns
VaporWD	8F [left]	Air	PriorEtOH	3	20	0.023065	0.01262821	0.0335027	0.0052735	0.0408575	*
VaporWD	8F [left]	Air	PriorEtOH	3	21	0.029203	0.01864181	0.0397646	0.0111996	0.0472068	*
VaporWD	8F [left]	Air	PriorEtOH	3	22	0.032506	0.02182223	0.04318913	0.014294	0.0507174	*
VaporWD	8F [left]	Air	PriorEtOH	3	23	0.0324	0.02152929	0.04327074	0.0138691	0.050931	*
VaporWD	8F [left]	Air	PriorEtOH	3	24	0.030426	0.01943568	0.04141611	0.0116913	0.0491605	*
VaporWD	8F [left]	Air	PriorEtOH	3	25	0.028927	0.01790642	0.03994815	0.0101404	0.0477142	*
VaporWD	8F [left]	Air	PriorEtOH	3	26	0.029423	0.01846444	0.04038139	0.0107424	0.0481034	*
VaporWD	8F [left]	Air	PriorEtOH	3	27	0.031261	0.0203409	0.04218119	0.0126459	0.0498762	*
VaporWD	8F [left]	Air	PriorEtOH	3	28	0.032144	0.02125506	0.04303249	0.0135822	0.0507054	*
VaporWD	8F [left]	Air	PriorEtOH	3	29	0.030993	0.02007818	0.04190861	0.0123866	0.0496002	*
VaporWD	8F [left]	Air	PriorEtOH	3	30	0.029676	0.01874094	0.04061119	0.0110353	0.0483168	*
VaporWD	8F [left]	Air	PriorEtOH	3	31	0.030391	0.01941026	0.0413715	0.0116726	0.0491092	*
VaporWD	8F [left]	Air	PriorEtOH	3	32	0.032164	0.02118709	0.04314066	0.0134521	0.0508756	*
VaporWD	8F [left]	Air	PriorEtOH	3	33	0.032372	0.02136644	0.04337855	0.0136109	0.0511341	*
VaporWD	8F [left]	Air	PriorEtOH	3	34	0.031485	0.02044023	0.0425306	0.0126571	0.0503138	*
VaporWD	8F [left]	Air	PriorEtOH	3	35	0.033082	0.02196666	0.0441983	0.0141337	0.0520312	*
VaporWD	8F [left]	Air	PriorEtOH	3	36	0.038197	0.02704207	0.0493515	0.0191817	0.0572118	*
VaporWD	8F [left]	Air	PriorEtOH	3	37	0.042759	0.0315561	0.05396265	0.0236615	0.0618572	*
VaporWD	8F [left]	Air	PriorEtOH	3	38	0.042752	0.03157862	0.05392525	0.0237052	0.0617987	*
VaporWD	8F [left]	Air	PriorEtOH	3	39	0.039488	0.02836656	0.05060967	0.0205296	0.0584466	*
VaporWD	8F [left]	Air	PriorEtOH	3	40	0.037188	0.02612002	0.0482564	0.0183207	0.0560558	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8F [left]	Air	PriorEtOH	3	41	0.037134	0.02600788	0.04825944	0.0181679	0.0560994	*
VaporWD	8F [left]	Air	PriorEtOH	3	42	0.037234	0.02598187	0.04848579	0.018053	0.0564146	*
VaporWD	8F [left]	Air	PriorEtOH	3	43	0.036211	0.02476032	0.04766141	0.0166915	0.0557302	*
VaporWD	8F [left]	Air	PriorEtOH	3	44	0.034813	0.02324964	0.04637566	0.0151016	0.0545237	*
VaporWD	8F [left]	Air	PriorEtOH	3	45	0.033106	0.021553	0.0446584	0.0134122	0.0527992	*
VaporWD	8F [left]	Air	PriorEtOH	3	46	0.029982	0.01859511	0.04136907	0.0105711	0.0493931	*
VaporWD	8F [left]	Air	PriorEtOH	3	47	0.026162	0.01495735	0.03736671	0.0070618	0.0452623	*
VaporWD	8F [left]	Air	PriorEtOH	3	48	0.024786	0.01371953	0.03585197	0.0059216	0.0436499	*
VaporWD	8F [left]	Air	PriorEtOH	3	49	0.027478	0.01638558	0.03856956	0.0085694	0.0463857	*
VaporWD	8F [left]	Air	PriorEtOH	3	50	0.031843	0.02062004	0.043066	0.0127116	0.0509744	*
VaporWD	8F [left]	Air	PriorEtOH	3	51	0.034471	0.02303663	0.04590455	0.0149795	0.0539617	*
VaporWD	8F [left]	Air	PriorEtOH	3	52	0.034853	0.02329859	0.04640748	0.0151566	0.0545495	*
VaporWD	8F [left]	Air	PriorEtOH	3	53	0.03467	0.02309304	0.04624666	0.0149353	0.0544044	*
VaporWD	8F [left]	Air	PriorEtOH	3	54	0.034505	0.02302017	0.04598992	0.0149272	0.0540829	*
VaporWD	8F [left]	Air	PriorEtOH	3	55	0.03342	0.02202553	0.04481447	0.0139962	0.0528437	*
VaporWD	8F [left]	Air	PriorEtOH	3	56	0.031386	0.02011265	0.04266034	0.0121684	0.0506046	*
VaporWD	8F [left]	Air	PriorEtOH	3	57	0.030182	0.0189906	0.04137323	0.0111045	0.0492594	*
VaporWD	8F [left]	Air	PriorEtOH	3	58	0.0314	0.02029126	0.04250937	0.0124631	0.0503375	*
VaporWD	8F [left]	Air	PriorEtOH	3	59	0.034656	0.02356376	0.04574789	0.0157476	0.0535641	*
VaporWD	8F [left]	Air	PriorEtOH	3	60	0.03817	0.02705976	0.04927974	0.0192309	0.0571086	*
VaporWD	8F [left]	Air	PriorEtOH	3	61	0.040442	0.02920365	0.05168067	0.0212843	0.0596001	*
VaporWD	8F [left]	Air	PriorEtOH	3	62	0.04103	0.02964823	0.05241204	0.0216278	0.0604325	*
VaporWD	8F [left]	Air	PriorEtOH	3	63	0.040241	0.02871051	0.05177111	0.0205855	0.0598961	*
VaporWD	8F [left]	Air	PriorEtOH	3	64	0.038546	0.0269496	0.05014183	0.0187782	0.0583132	*
VaporWD	8F [left]	Air	PriorEtOH	3	65	0.036236	0.02460848	0.04786374	0.0164149	0.0560573	*
VaporWD	8F [left]	Air	PriorEtOH	3	66	0.033472	0.02190216	0.04504084	0.0137497	0.0531934	*
VaporWD	8F [left]	Air	PriorEtOH	3	67	0.03055	0.01904064	0.04205951	0.0109303	0.0501698	*
VaporWD	8F [left]	Air	PriorEtOH	3	68	0.027944	0.0165122	0.03937517	0.0084568	0.0474305	*
VaporWD	8F [left]	Air	PriorEtOH	3	69	0.025986	0.0145796	0.03739279	0.0065418	0.0454306	*
VaporWD	8F [left]	Air	PriorEtOH	3	70	0.024683	0.0133279	0.03603756	0.0053265	0.0440389	*
VaporWD	8F [left]	Air	PriorEtOH	3	71	0.023847	0.01250831	0.03518552	0.0045184	0.0431754	*
VaporWD	8F [left]	Air	PriorEtOH	3	72	0.0232	0.0118885	0.0345121	0.0039175	0.0424831	*
VaporWD	8F [left]	Air	PriorEtOH	3	73	0.022423	0.01108204	0.0337632	0.0030907	0.0417545	*
VaporWD	8F [left]	Air	PriorEtOH	3	74	0.021621	0.0102754	0.03296605	0.0022807	0.0409607	*
VaporWD	8F [left]	Air	PriorEtOH	3	75	0.021854	0.01046916	0.03323979	0.0024463	0.0412626	*
VaporWD	8F [left]	Air	PriorEtOH	3	76	0.024523	0.01311641	0.03593028	0.0050783	0.0439683	*
VaporWD	8F [left]	Air	PriorEtOH	3	77	0.029705	0.01818539	0.04122434	0.010068	0.0493417	*
VaporWD	8F [left]	Air	PriorEtOH	3	78	0.035434	0.02378175	0.04708717	0.0155705	0.0552984	*
VaporWD	8F [left]	Air	PriorEtOH	3	79	0.039148	0.02732553	0.05097042	0.0189947	0.0593013	*
VaporWD	8F [left]	Air	PriorEtOH	3	80	0.039811	0.0279297	0.05169219	0.0195574	0.0600645	*
VaporWD	8F [left]	Air	PriorEtOH	3	81	0.038551	0.02667743	0.05042471	0.0183105	0.0587917	*
VaporWD	8F [left]	Air	PriorEtOH	3	82	0.037577	0.02579189	0.0493612	0.0174876	0.0576654	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8F [left]	Air	PriorEtOH	3	83	0.038599	0.02681971	0.05037845	0.0185192	0.058679	*
VaporWD	8F [left]	Air	PriorEtOH	3	84	0.041621	0.02987032	0.05337248	0.0215898	0.061653	*
VaporWD	8F [left]	Air	PriorEtOH	3	85	0.044722	0.03300957	0.05643422	0.0247563	0.0646875	*
VaporWD	8F [left]	Air	PriorEtOH	3	86	0.045581	0.03398972	0.0571717	0.025822	0.0653395	*
VaporWD	8F [left]	Air	PriorEtOH	3	87	0.04394	0.03232947	0.05555066	0.0241479	0.0637322	*
VaporWD	8F [left]	Air	PriorEtOH	3	88	0.042156	0.0304135	0.05389895	0.0221388	0.0621736	*
VaporWD	8F [left]	Air	PriorEtOH	3	89	0.042531	0.03053126	0.05453072	0.0220755	0.0629865	*
VaporWD	8F [left]	Air	PriorEtOH	3	90	0.044473	0.03235801	0.05658821	0.0238209	0.0651253	*
VaporWD	8F [left]	Air	PriorEtOH	3	91	0.045312	0.03320619	0.05741754	0.0246757	0.065948	*
VaporWD	8F [left]	Air	PriorEtOH	3	92	0.043707	0.03176139	0.05565349	0.0233434	0.0640714	*
VaporWD	8F [left]	Air	PriorEtOH	3	93	0.040995	0.02908793	0.05290278	0.0206972	0.0612935	*
VaporWD	8F [left]	Air	PriorEtOH	3	94	0.039031	0.02718036	0.05088198	0.0188295	0.0592328	*
VaporWD	8F [left]	Air	PriorEtOH	3	95	0.03816	0.02627464	0.05004544	0.0178994	0.0584207	*
VaporWD	8F [left]	Air	PriorEtOH	3	96	0.038006	0.02620085	0.04981061	0.0178824	0.0581291	*
VaporWD	8F [left]	Air	PriorEtOH	3	97	0.038838	0.02696749	0.0507084	0.0186028	0.0590731	*
VaporWD	8F [left]	Air	PriorEtOH	3	98	0.040683	0.02887408	0.05249102	0.0205531	0.060812	*
VaporWD	8F [left]	Air	PriorEtOH	3	99	0.041862	0.02992957	0.05379453	0.0215212	0.0622029	*
VaporWD	8F [left]	Air	PriorEtOH	3	100	0.040265	0.02883316	0.05169663	0.0207776	0.0597522	*
VaporWD	8F [left]	Air	PriorEtOH	3	101	0.0361	0.01979337	0.05240579	0.008303	0.0638962	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	1	0.000712	-0.0012813	0.00270448	-0.002701	0.0041242	ns
VaporWD	8F [left]	EtOH	PriorEtOH	3	2	0.00586	0.00266343	0.00905742	0.000386	0.0113349	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	3	0.011139	0.0071148	0.01516297	0.0042481	0.0180297	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	4	0.016452	0.01170691	0.02119627	0.0083269	0.0245763	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	5	0.021265	0.01588976	0.02664078	0.0120603	0.0304702	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	6	0.025006	0.01907975	0.0309324	0.0148579	0.0351542	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	7	0.027876	0.02156684	0.03418544	0.0170722	0.0386801	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	8	0.030842	0.02437763	0.0373068	0.0197724	0.0419121	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	9	0.03435	0.02780843	0.0408922	0.0231481	0.0455525	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	10	0.037368	0.03084035	0.0438951	0.0261904	0.0485451	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	11	0.038355	0.03178687	0.04492302	0.0271079	0.049602	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	12	0.03712	0.03053846	0.04370088	0.0258501	0.0483892	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	13	0.035109	0.02847885	0.04173939	0.0237556	0.0464627	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	14	0.033923	0.02728149	0.04056354	0.0225506	0.0452945	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	15	0.034234	0.02757206	0.04089548	0.0228264	0.0456412	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	16	0.036133	0.02951313	0.04275204	0.0247976	0.0474676	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	17	0.039434	0.03282394	0.04604469	0.0281148	0.0507538	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	18	0.043139	0.03651348	0.04976358	0.0317939	0.0544831	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	19	0.04554	0.03881631	0.05226352	0.0340265	0.0570533	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	20	0.045832	0.03902324	0.05264048	0.0341729	0.0574908	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	21	0.045173	0.03828602	0.0520601	0.0333798	0.0569663	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	22	0.04539	0.03848438	0.05229523	0.0335651	0.0572145	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	23	0.046937	0.03999311	0.05388101	0.0350464	0.0588277	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8F [left]	EtOH	PriorEtOH	3	24	0.048717	0.04175342	0.05568059	0.0367927	0.0606413	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	25	0.049339	0.04231649	0.05636229	0.0373135	0.0613653	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	26	0.047815	0.04075704	0.05487227	0.0357293	0.0599	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	27	0.043818	0.03671818	0.05091802	0.0316603	0.0559759	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	28	0.038606	0.03150711	0.0457047	0.0264501	0.0507618	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	29	0.03514	0.02801252	0.04226734	0.0229351	0.0473448	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	30	0.035572	0.02844092	0.04270312	0.0233609	0.0477832	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	31	0.038572	0.03142238	0.04572252	0.0263288	0.0508161	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	32	0.040799	0.03367633	0.04792205	0.0286021	0.0529962	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	33	0.0412	0.03407049	0.04832858	0.0289919	0.0534072	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	34	0.04197	0.03482926	0.04911115	0.0297422	0.0541982	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	35	0.044649	0.03744536	0.05185236	0.0323137	0.056984	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	36	0.047376	0.04013304	0.05461801	0.0349736	0.0597774	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	37	0.047554	0.04026317	0.05484475	0.0350693	0.0600386	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	38	0.045668	0.03839104	0.05294495	0.0332071	0.0581289	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	39	0.044521	0.03725878	0.05178308	0.0320854	0.0569565	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	40	0.045567	0.0383469	0.05278788	0.0332032	0.0579316	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	41	0.047873	0.04064334	0.05510304	0.0354929	0.0602535	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	42	0.050164	0.04291973	0.0574078	0.0377592	0.0625683	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	43	0.051971	0.0446635	0.05927865	0.0394577	0.0644844	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	44	0.052863	0.0455212	0.06020555	0.0402908	0.065436	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	45	0.052393	0.04501899	0.05976643	0.0397661	0.0650193	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	46	0.051204	0.04386919	0.05853937	0.0386438	0.0637647	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	47	0.05084	0.04353662	0.05814263	0.0383341	0.0633452	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	48	0.051991	0.04472194	0.05925981	0.0395437	0.0644381	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	49	0.053871	0.04656248	0.06118038	0.0413557	0.0663871	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	50	0.055395	0.04803883	0.06275108	0.0427985	0.0679915	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	51	0.05596	0.0485258	0.06339432	0.0432298	0.0686903	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	52	0.05515	0.04768772	0.06261193	0.0423719	0.0679278	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	53	0.052988	0.04549531	0.06048039	0.0401578	0.0658179	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	54	0.05066	0.04318537	0.05813366	0.0378609	0.0634581	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	55	0.049634	0.04217066	0.05709729	0.0368539	0.062414	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	56	0.049709	0.04230811	0.05710983	0.0370359	0.0623821	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	57	0.049131	0.04176615	0.05649564	0.0365196	0.0617421	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	58	0.046965	0.03964734	0.05428361	0.034434	0.0594969	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	59	0.04408	0.03676948	0.05138988	0.0315618	0.0565975	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	60	0.041477	0.03418376	0.04876951	0.0289885	0.0539648	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	61	0.039192	0.03184415	0.04653891	0.02661	0.051773	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	62	0.037449	0.03004975	0.04484866	0.0247785	0.0501199	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	63	0.037336	0.02986718	0.04480427	0.0245467	0.0501247	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	64	0.039336	0.03185347	0.04681913	0.0265228	0.0521498	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	65	0.042534	0.03502875	0.05003963	0.029682	0.0553864	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8F [left]	EtOH	PriorEtOH	3	66	0.046232	0.03875041	0.05371273	0.033421	0.0590422	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	67	0.050901	0.0434095	0.05839166	0.038073	0.0637282	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	68	0.056234	0.04875082	0.06371755	0.0434198	0.0690486	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	69	0.059759	0.05225333	0.0672639	0.0469067	0.0726105	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	70	0.059343	0.05186832	0.06681682	0.0465438	0.0721413	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	71	0.056275	0.04880784	0.06374238	0.0434883	0.0690619	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	72	0.05394	0.04649148	0.06138936	0.041185	0.0666959	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	73	0.053853	0.04636891	0.06133768	0.0410372	0.0666694	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	74	0.054725	0.04724106	0.06220983	0.0419093	0.0675416	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	75	0.055097	0.04758719	0.0626075	0.0422371	0.0679576	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	76	0.055028	0.04752063	0.06253544	0.0421725	0.0678836	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	77	0.055148	0.04758103	0.0627152	0.0421904	0.0681059	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	78	0.055707	0.04810302	0.06331061	0.0426862	0.0687274	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	79	0.056748	0.04908186	0.06441468	0.0436204	0.0698761	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	80	0.057811	0.05014802	0.06547437	0.0446889	0.0709335	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	81	0.057449	0.04976208	0.06513622	0.044286	0.0706123	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	82	0.054704	0.04702425	0.06238282	0.0415537	0.0678534	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	83	0.051232	0.04350262	0.05896059	0.0379966	0.0644666	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	84	0.050136	0.04241721	0.05785552	0.0369182	0.0633545	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	85	0.052084	0.04436844	0.05979977	0.0388719	0.0652963	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	86	0.054241	0.04659934	0.06188189	0.0411558	0.0673254	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	87	0.053794	0.04615568	0.06143285	0.0407141	0.0668744	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	88	0.050903	0.04325558	0.0585505	0.0378077	0.0639984	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	89	0.047309	0.0395626	0.05505491	0.0340444	0.0605731	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	90	0.043968	0.03622278	0.05171308	0.0307053	0.0572306	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	91	0.041608	0.03386927	0.04934603	0.0283566	0.0548587	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	92	0.041843	0.03419161	0.0494944	0.0287409	0.0549451	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	93	0.045286	0.0376061	0.05296585	0.0321351	0.0584368	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	94	0.049412	0.04174003	0.05708462	0.0362744	0.0625502	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	95	0.05103	0.04326232	0.05879715	0.037729	0.0643305	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	96	0.050881	0.04313824	0.05862452	0.0376222	0.0641406	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	97	0.052988	0.04514867	0.060827	0.0395642	0.0664115	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	98	0.058308	0.05052836	0.06608706	0.0449865	0.0716289	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	99	0.061575	0.05359242	0.06955841	0.0479055	0.0752453	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	100	0.056915	0.04932322	0.06450579	0.0439153	0.0699137	*
VaporWD	8F [left]	EtOH	PriorEtOH	3	101	0.045263	0.03422042	0.05630495	0.0263541	0.0641713	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	1	-0.00215	-0.0062674	0.00196658	-0.009149	0.0048481	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	2	-1.32E-05	-0.0061001	0.0060737	-0.01036	0.010334	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	3	0.00319	-0.0041156	0.01049595	-0.009229	0.0156093	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	4	0.007125	-0.0014305	0.01567981	-0.007418	0.0216676	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	5	0.00968	-1.08E-05	0.01937145	-0.006794	0.0261543	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	6	0.009401	-0.0012262	0.0200283	-0.008664	0.0274663	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	7	0.008398	-0.0028867	0.01968353	-0.010785	0.027582	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	8	0.010995	-0.0006114	0.0226011	-0.008735	0.0307243	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	9	0.018331	0.00649723	0.03016398	-0.001785	0.0384462	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	10	0.025915	0.01397862	0.03785093	0.0056245	0.0462051	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	11	0.02831	0.01622262	0.04039814	0.0077624	0.0488584	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	12	0.025186	0.01300499	0.03736792	0.0044792	0.0458938	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	13	0.0209	0.00856746	0.03323207	-6.40E-05	0.0418635	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	14	0.019141	0.00671423	0.03156828	-0.001983	0.040266	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	15	0.020323	0.00787328	0.03277237	-0.00084	0.0414858	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	16	0.023464	0.01115801	0.03576926	0.0025453	0.044382	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	17	0.0275	0.01532483	0.03967493	0.0068035	0.0481963	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	18	0.030203	0.01807424	0.04233235	0.0095851	0.0508215	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	19	0.028691	0.01643678	0.0409444	0.0078603	0.0495209	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	20	0.022723	0.01033376	0.03511312	0.0016622	0.0437847	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	21	0.016033	0.00349854	0.02856687	-0.005274	0.0373396	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	22	0.012976	0.00032764	0.02562452	-0.008525	0.0344772	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	23	0.014577	0.00175112	0.02740367	-0.007226	0.0363808	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	24	0.018274	0.00533391	0.03121321	-0.003723	0.0402697	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	25	0.020344	0.00734967	0.03333907	-0.001745	0.0424341	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	26	0.018272	0.00531102	0.03123231	-0.00376	0.0403035	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	27	0.012462	-0.0004871	0.02541095	-0.00955	0.034474	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	28	0.006528	-0.0063953	0.01945206	-0.015441	0.0284974	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	29	0.004359	-0.008601	0.01731858	-0.017672	0.0263892	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	30	0.006022	-0.0069577	0.01900188	-0.016042	0.0280865	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	31	0.008065	-0.0049618	0.02109139	-0.014079	0.0302088	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	32	0.008447	-0.0045638	0.02145728	-0.01367	0.0305634	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	33	0.008841	-0.0041965	0.02187815	-0.013321	0.031003	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	34	0.010671	-0.0024068	0.02374915	-0.01156	0.0329025	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	35	0.011635	-0.001534	0.02480399	-0.010751	0.034021	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	36	0.009017	-0.0042062	0.02224104	-0.013461	0.0314963	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	37	0.004624	-0.0086647	0.01791263	-0.017965	0.0272134	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	38	0.002946	-0.0103111	0.01620405	-0.01959	0.0254831	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	39	0.005185	-0.0080194	0.01838992	-0.017261	0.0276319	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	40	0.008462	-0.0046774	0.02160048	-0.013873	0.0307965	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	41	0.010722	-0.0024694	0.02391251	-0.011702	0.0331449	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	42	0.012896	-0.0004101	0.02620293	-0.009723	0.0355162	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	43	0.015725	0.00221866	0.02923227	-0.007235	0.0386857	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	44	0.017983	0.00436119	0.03160462	-0.005173	0.0411385	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	45	0.019234	0.00560637	0.03286184	-0.003932	0.0423999	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	46	0.021261	0.00779272	0.03472964	-0.001634	0.0441563	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	47	0.02478	0.01148377	0.0380763	0.0021777	0.0473824	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	48	0.027272	0.01410873	0.04043445	0.004896	0.0496472	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	49	0.026387	0.0131823	0.0395907	0.0039406	0.0488324	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	50	0.0235	0.01015952	0.0368414	0.0008222	0.0461788	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	51	0.021417	0.00785828	0.0349762	-0.001632	0.0444662	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	52	0.020234	0.00655726	0.03391151	-0.003015	0.0434842	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	53	0.01833	0.00461987	0.03204065	-0.004976	0.0416366	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	54	0.016251	0.00262674	0.02987512	-0.006909	0.0394107	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	55	0.016288	0.00274788	0.02982907	-0.006729	0.0393062	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	56	0.018286	0.00487876	0.03169411	-0.004505	0.0410782	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	57	0.018867	0.00554877	0.03218434	-0.003772	0.0415055	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	58	0.015546	0.00232127	0.02877131	-0.006935	0.0380275	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	59	0.009451	-0.0037543	0.02265553	-0.012996	0.0318977	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	60	0.003296	-0.0099166	0.01650852	-0.019164	0.025756	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	61	-0.00128	-0.0146263	0.01206999	-0.023969	0.0214124	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	62	-0.00355	-0.0170453	0.00995049	-0.026492	0.0193977	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	63	-0.00284	-0.0165017	0.01081434	-0.026061	0.0203736	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	64	0.000789	-0.0129342	0.01451133	-0.022539	0.0241159	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	65	0.006271	-0.0074891	0.0200304	-0.01712	0.0296609	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	66	0.012819	-0.0008805	0.0265184	-0.010469	0.0361067	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	67	0.020446	0.00679371	0.03409859	-0.002762	0.043654	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	68	0.028244	0.0146597	0.04182775	0.0051522	0.0513353	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	69	0.033576	0.0200029	0.04714863	0.0105032	0.0566483	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	70	0.034538	0.02102352	0.04805289	0.0115645	0.0575119	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	71	0.032519	0.0190234	0.04601535	0.0095775	0.0554612	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	72	0.030901	0.01743591	0.04436657	0.0080115	0.053791	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	73	0.031468	0.01796176	0.04497449	0.0085086	0.0544276	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	74	0.033034	0.01952185	0.04654606	0.0100647	0.0560032	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	75	0.033197	0.01963896	0.04675445	0.0101499	0.0562436	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	76	0.030522	0.01694591	0.04409868	0.0074438	0.0536008	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	77	0.025483	0.01178213	0.0391833	0.002193	0.0487724	*
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	78	0.020317	0.00648246	0.03415066	-0.0032	0.0438332	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	79	0.01762	0.0036116	0.03162867	-0.006193	0.0414333	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	80	0.017923	0.0038637	0.03198153	-0.005976	0.0418214	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	81	0.018746	0.00468334	0.03280907	-0.005159	0.0426517	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	82	0.017083	0.00309717	0.03106811	-0.006691	0.0408566	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	83	0.0128	-0.0012046	0.02680509	-0.011007	0.0366071	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	84	0.00872	-0.0052581	0.02269852	-0.015042	0.032482	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	85	0.007363	-0.0065786	0.02130463	-0.016336	0.0310624	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	86	0.008484	-0.0053183	0.02228626	-0.014979	0.0319465	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	87	0.009729	-0.0040856	0.02354408	-0.013755	0.0332131	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	88	0.008753	-0.0051806	0.02268673	-0.014933	0.032439	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	89	0.004798	-0.0094012	0.01899809	-0.01934	0.0289365	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	90	-0.00051	-0.0148053	0.01379439	-0.024814	0.0238029	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	91	-0.00362	-0.0179015	0.01066902	-0.0279	0.0206673	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	92	-0.00171	-0.0158166	0.01239937	-0.025691	0.0222736	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	93	0.004292	-0.0097947	0.01837813	-0.019654	0.0282372	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	94	0.01016	-0.0038786	0.02419902	-0.013704	0.0340248	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	95	0.012726	-0.0013875	0.02683885	-0.011265	0.0367167	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	96	0.013086	-0.0009527	0.02712379	-0.010778	0.0369492	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	97	0.014496	0.00035671	0.02863462	-0.009539	0.0385305	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	98	0.01761	0.00353441	0.03168473	-0.006317	0.041536	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	99	0.019265	0.00500146	0.03352936	-0.004982	0.0435127	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	100	0.016339	0.00267524	0.03000227	-0.006888	0.0395654	ns
VaporWD	8F [right]	Air + EtOH	Vapor X PriorEtOH	7	101	0.009588	-0.0100433	0.02921947	-0.023783	0.0429595	ns
VaporWD	8G [left]	Air	PriorITI	4	1	-0.00334	-0.0112545	0.00456767	-0.016789	0.0101021	ns
VaporWD	8G [left]	Air	PriorITI	4	2	-0.00285	-0.0147164	0.00902617	-0.023021	0.0173311	ns
VaporWD	8G [left]	Air	PriorITI	4	3	0.000526	-0.015005	0.01605718	-0.02587	0.0269225	ns
VaporWD	8G [left]	Air	PriorITI	4	4	0.007843	-0.0104401	0.02612711	-0.023231	0.0389181	ns
VaporWD	8G [left]	Air	PriorITI	4	5	0.016556	-0.004104	0.03721684	-0.018558	0.0516706	ns
VaporWD	8G [left]	Air	PriorITI	4	6	0.022105	-0.0006572	0.04486695	-0.016581	0.0607909	Sig.
VaporWD	8G [left]	Air	PriorITI	4	7	0.022123	-0.0021116	0.04635736	-0.019066	0.0633114	ns
VaporWD	8G [left]	Air	PriorITI	4	8	0.018454	-0.0064013	0.04330944	-0.02379	0.0606979	ns
VaporWD	8G [left]	Air	PriorITI	4	9	0.014747	-0.010344	0.03983828	-0.027897	0.0573917	ns
VaporWD	8G [left]	Air	PriorITI	4	10	0.013192	-0.0118373	0.03822206	-0.029348	0.0557324	ns
VaporWD	8G [left]	Air	PriorITI	4	11	0.014136	-0.0109838	0.03925585	-0.028557	0.0568293	ns
VaporWD	8G [left]	Air	PriorITI	4	12	0.017071	-0.0081055	0.04224773	-0.025719	0.0598609	ns
VaporWD	8G [left]	Air	PriorITI	4	13	0.020215	-0.0050975	0.04552672	-0.022806	0.0632347	ns
VaporWD	8G [left]	Air	PriorITI	4	14	0.020263	-0.0050877	0.04561391	-0.022823	0.063349	ns
VaporWD	8G [left]	Air	PriorITI	4	15	0.01503	-0.0103725	0.04043212	-0.028144	0.0582032	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8G [left]	Air	PriorITI	4	16	0.006614	-0.0186817	0.0319094	-0.036378	0.0496058	ns
VaporWD	8G [left]	Air	PriorITI	4	17	0.000432	-0.0248493	0.02571289	-0.042536	0.0433992	ns
VaporWD	8G [left]	Air	PriorITI	4	18	0.000553	-0.0248345	0.02594106	-0.042595	0.043702	ns
VaporWD	8G [left]	Air	PriorITI	4	19	0.006482	-0.0192729	0.03223704	-0.037291	0.0502548	ns
VaporWD	8G [left]	Air	PriorITI	4	20	0.014118	-0.0119892	0.04022596	-0.030254	0.0584904	ns
VaporWD	8G [left]	Air	PriorITI	4	21	0.018898	-0.0074887	0.04528459	-0.025948	0.0637443	ns
VaporWD	8G [left]	Air	PriorITI	4	22	0.018387	-0.0080709	0.04484393	-0.02658	0.0633531	ns
VaporWD	8G [left]	Air	PriorITI	4	23	0.013292	-0.0132499	0.03983305	-0.031818	0.0584011	ns
VaporWD	8G [left]	Air	PriorITI	4	24	0.006596	-0.0200177	0.03320927	-0.038636	0.0518277	ns
VaporWD	8G [left]	Air	PriorITI	4	25	0.001443	-0.0253929	0.02827826	-0.044167	0.047052	ns
VaporWD	8G [left]	Air	PriorITI	4	26	-0.00026	-0.0272864	0.02676539	-0.046193	0.0456723	ns
VaporWD	8G [left]	Air	PriorITI	4	27	0.002317	-0.0248786	0.02951259	-0.043904	0.0485382	ns
VaporWD	8G [left]	Air	PriorITI	4	28	0.008965	-0.0182613	0.03619204	-0.037309	0.0552394	ns
VaporWD	8G [left]	Air	PriorITI	4	29	0.017551	-0.009765	0.04486624	-0.028875	0.0639759	ns
VaporWD	8G [left]	Air	PriorITI	4	30	0.024369	-0.0029785	0.05171668	-0.02211	0.0708487	ns
VaporWD	8G [left]	Air	PriorITI	4	31	0.02666	-0.0007289	0.05404876	-0.01989	0.0732096	ns
VaporWD	8G [left]	Air	PriorITI	4	32	0.024256	-0.0030444	0.05155674	-0.022144	0.0706558	ns
VaporWD	8G [left]	Air	PriorITI	4	33	0.018503	-0.0087941	0.04580049	-0.027891	0.0648973	ns
VaporWD	8G [left]	Air	PriorITI	4	34	0.011335	-0.016024	0.03869427	-0.035164	0.0578343	Sig.
VaporWD	8G [left]	Air	PriorITI	4	35	0.006267	-0.0213149	0.03384803	-0.040611	0.0531436	ns
VaporWD	8G [left]	Air	PriorITI	4	36	0.00747	-0.0202911	0.0352307	-0.039712	0.0546518	ns
VaporWD	8G [left]	Air	PriorITI	4	37	0.014969	-0.0129582	0.04289567	-0.032495	0.0624329	ns
VaporWD	8G [left]	Air	PriorITI	4	38	0.022373	-0.005528	0.05027332	-0.025047	0.0697922	ns
VaporWD	8G [left]	Air	PriorITI	4	39	0.022791	-0.0050394	0.05062221	-0.024509	0.0700922	ns
VaporWD	8G [left]	Air	PriorITI	4	40	0.016564	-0.0111308	0.04425813	-0.030505	0.0636328	ns
VaporWD	8G [left]	Air	PriorITI	4	41	0.01035	-0.0173434	0.03804425	-0.036718	0.0574184	ns
VaporWD	8G [left]	Air	PriorITI	4	42	0.009244	-0.0184973	0.03698452	-0.037904	0.0563916	ns
VaporWD	8G [left]	Air	PriorITI	4	43	0.012896	-0.0150311	0.04082407	-0.034569	0.0603618	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8G [left]	Air	PriorITI	4	44	0.018697	-0.0093676	0.04676096	-0.029001	0.0663943	ns
VaporWD	8G [left]	Air	PriorITI	4	45	0.024419	-0.0037575	0.05259556	-0.023469	0.0723074	ns
VaporWD	8G [left]	Air	PriorITI	4	46	0.027075	-0.0010115	0.05516098	-0.02066	0.0748097	ns
VaporWD	8G [left]	Air	PriorITI	4	47	0.023584	-0.0043991	0.05156681	-0.023976	0.0711433	ns
VaporWD	8G [left]	Air	PriorITI	4	48	0.014953	-0.0129504	0.04285729	-0.032472	0.0623784	ns
VaporWD	8G [left]	Air	PriorITI	4	49	0.006877	-0.021165	0.03491905	-0.040783	0.0545368	ns
VaporWD	8G [left]	Air	PriorITI	4	50	0.003953	-0.0242744	0.0321813	-0.044022	0.0519291	ns
VaporWD	8G [left]	Air	PriorITI	4	51	0.005456	-0.0230166	0.03392887	-0.042936	0.053848	ns
VaporWD	8G [left]	Air	PriorITI	4	52	0.008276	-0.0203066	0.03685923	-0.040303	0.0568554	ns
VaporWD	8G [left]	Air	PriorITI	4	53	0.011082	-0.0176014	0.03976612	-0.037668	0.0598329	ns
VaporWD	8G [left]	Air	PriorITI	4	54	0.013294	-0.0153642	0.04195261	-0.035413	0.0620016	ns
VaporWD	8G [left]	Air	PriorITI	4	55	0.012974	-0.0156362	0.04158442	-0.035652	0.0615998	ns
VaporWD	8G [left]	Air	PriorITI	4	56	0.009358	-0.0190463	0.03776255	-0.038918	0.0576339	ns
VaporWD	8G [left]	Air	PriorITI	4	57	0.005871	-0.0223783	0.03411994	-0.042141	0.0538826	ns
VaporWD	8G [left]	Air	PriorITI	4	58	0.006995	-0.0211003	0.03508951	-0.040755	0.0547443	ns
VaporWD	8G [left]	Air	PriorITI	4	59	0.012552	-0.0154883	0.04059222	-0.035105	0.0602088	ns
VaporWD	8G [left]	Air	PriorITI	4	60	0.017881	-0.0101111	0.04587276	-0.029694	0.0654555	ns
VaporWD	8G [left]	Air	PriorITI	4	61	0.019496	-0.0086643	0.0476561	-0.028365	0.0673566	ns
VaporWD	8G [left]	Air	PriorITI	4	62	0.018302	-0.0100621	0.04666554	-0.029905	0.0665084	Sig.
VaporWD	8G [left]	Air	PriorITI	4	63	0.017448	-0.0111428	0.04603922	-0.031145	0.0660411	ns
VaporWD	8G [left]	Air	PriorITI	4	64	0.019138	-0.0095234	0.04779977	-0.029575	0.067851	ns
VaporWD	8G [left]	Air	PriorITI	4	65	0.023438	-0.0052828	0.05215887	-0.025375	0.0722515	ns
VaporWD	8G [left]	Air	PriorITI	4	66	0.028374	-0.0002896	0.05703803	-0.020342	0.0770908	ns
VaporWD	8G [left]	Air	PriorITI	4	67	0.031279	0.00258187	0.0599768	-0.017494	0.0800531	ns
VaporWD	8G [left]	Air	PriorITI	4	68	0.031464	0.00275079	0.06017787	-0.017337	0.0802654	ns
VaporWD	8G [left]	Air	PriorITI	4	69	0.030945	0.0021623	0.05972701	-0.017973	0.0798627	ns
VaporWD	8G [left]	Air	PriorITI	4	70	0.030915	0.00222116	0.05960943	-0.017853	0.0796834	ns
VaporWD	8G [left]	Air	PriorITI	4	71	0.028627	-1.59E-05	0.05727088	-0.020054	0.0773094	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8G [left]	Air	PriorITI	4	72	0.020412	-0.0081891	0.04901382	-0.028198	0.069023	ns
VaporWD	8G [left]	Air	PriorITI	4	73	0.007496	-0.0212146	0.0362076	-0.0413	0.0562935	ns
VaporWD	8G [left]	Air	PriorITI	4	74	-0.00397	-0.0327065	0.02477301	-0.052812	0.0448789	ns
VaporWD	8G [left]	Air	PriorITI	4	75	-0.00918	-0.0379877	0.01963002	-0.058142	0.0397843	ns
VaporWD	8G [left]	Air	PriorITI	4	76	-0.00886	-0.037689	0.01996545	-0.057856	0.0401325	ns
VaporWD	8G [left]	Air	PriorITI	4	77	-0.00666	-0.0356806	0.02235261	-0.05598	0.0426522	ns
VaporWD	8G [left]	Air	PriorITI	4	78	-0.00456	-0.0337248	0.0246084	-0.054129	0.0450129	ns
VaporWD	8G [left]	Air	PriorITI	4	79	-0.00186	-0.031209	0.02748644	-0.05174	0.0480177	ns
VaporWD	8G [left]	Air	PriorITI	4	80	0.002601	-0.0267524	0.03195471	-0.047288	0.05249	ns
VaporWD	8G [left]	Air	PriorITI	4	81	0.008394	-0.0210314	0.03781989	-0.041617	0.0584056	ns
VaporWD	8G [left]	Air	PriorITI	4	82	0.013046	-0.0164137	0.04250483	-0.037023	0.0631141	ns
VaporWD	8G [left]	Air	PriorITI	4	83	0.01389	-0.0157408	0.04352016	-0.03647	0.0642492	ns
VaporWD	8G [left]	Air	PriorITI	4	84	0.011386	-0.0182453	0.04101768	-0.038975	0.0617474	ns
VaporWD	8G [left]	Air	PriorITI	4	85	0.010027	-0.0195595	0.03961418	-0.040258	0.0603127	ns
VaporWD	8G [left]	Air	PriorITI	4	86	0.014084	-0.0152674	0.04343619	-0.035802	0.0639703	ns
VaporWD	8G [left]	Air	PriorITI	4	87	0.022585	-0.0067124	0.0518817	-0.027208	0.0723775	ns
VaporWD	8G [left]	Air	PriorITI	4	88	0.030491	0.00115063	0.05983172	-0.019376	0.0803579	ns
VaporWD	8G [left]	Air	PriorITI	4	89	0.034808	0.00518187	0.06443396	-0.015544	0.0851599	ns
VaporWD	8G [left]	Air	PriorITI	4	90	0.03709	0.00745216	0.06672705	-0.013282	0.087461	ns
VaporWD	8G [left]	Air	PriorITI	4	91	0.039503	0.00993929	0.06906681	-0.010743	0.0897492	ns
VaporWD	8G [left]	Air	PriorITI	4	92	0.041275	0.01196923	0.07058079	-0.008533	0.0910827	ns
VaporWD	8G [left]	Air	PriorITI	4	93	0.040689	0.01131876	0.07005913	-0.009228	0.0906061	ns
VaporWD	8G [left]	Air	PriorITI	4	94	0.038515	0.00908826	0.06794133	-0.011498	0.0885277	ns
VaporWD	8G [left]	Air	PriorITI	4	95	0.037252	0.00751473	0.06698874	-0.013289	0.0877923	ns
VaporWD	8G [left]	Air	PriorITI	4	96	0.037767	0.00800743	0.06752685	-0.012812	0.0883463	ns
VaporWD	8G [left]	Air	PriorITI	4	97	0.03816	0.00808073	0.0682395	-0.012962	0.0892826	ns
VaporWD	8G [left]	Air	PriorITI	4	98	0.035402	0.00519579	0.06560826	-0.015936	0.0867401	ns
VaporWD	8G [left]	Air	PriorITI	4	99	0.027233	-0.0033005	0.05776653	-0.024661	0.0791273	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8G [left]	Air	PriorITI	4	100	0.013394	-0.0163108	0.04309845	-0.037092	0.0638794	ns
VaporWD	8G [left]	Air	PriorITI	4	101	-0.00393	-0.0476024	0.03974894	-0.078157	0.0703038	ns
VaporWD	8G [left]	EtOH	PriorITI	4	1	0.001586	-0.0063325	0.00950534	-0.011964	0.0151373	ns
VaporWD	8G [left]	EtOH	PriorITI	4	2	0.000243	-0.0135224	0.01400861	-0.023313	0.0237987	ns
VaporWD	8G [left]	EtOH	PriorITI	4	3	-0.0024	-0.0191248	0.01432924	-0.031021	0.0262256	ns
VaporWD	8G [left]	EtOH	PriorITI	4	4	-0.00683	-0.0267868	0.01312413	-0.040979	0.0273166	ns
VaporWD	8G [left]	EtOH	PriorITI	4	5	-0.01231	-0.0348676	0.01024041	-0.050908	0.026281	ns
VaporWD	8G [left]	EtOH	PriorITI	4	6	-0.01832	-0.0432272	0.00658355	-0.06094	0.0242964	ns
VaporWD	8G [left]	EtOH	PriorITI	4	7	-0.0257	-0.0522297	0.00082098	-0.071095	0.0196859	ns
VaporWD	8G [left]	EtOH	PriorITI	4	8	-0.03417	-0.0612919	-0.0070493	-0.080581	0.0122395	ns
VaporWD	8G [left]	EtOH	PriorITI	4	9	-0.03899	-0.066446	-0.0115317	-0.085974	0.007996	ns
VaporWD	8G [left]	EtOH	PriorITI	4	10	-0.034	-0.0612936	-0.0066999	-0.080707	0.0127138	ns
VaporWD	8G [left]	EtOH	PriorITI	4	11	-0.01969	-0.0471853	0.00780959	-0.066742	0.0273659	ns
VaporWD	8G [left]	EtOH	PriorITI	4	12	-0.0049	-0.0323785	0.02258852	-0.051925	0.042135	ns
VaporWD	8G [left]	EtOH	PriorITI	4	13	0.002605	-0.0251096	0.03031918	-0.04482	0.0500298	ns
VaporWD	8G [left]	EtOH	PriorITI	4	14	0.004583	-0.0230994	0.03226467	-0.042787	0.0519523	ns
VaporWD	8G [left]	EtOH	PriorITI	4	15	0.008093	-0.0197326	0.0359184	-0.039522	0.055708	ns
VaporWD	8G [left]	EtOH	PriorITI	4	16	0.015359	-0.0122727	0.04299119	-0.031925	0.0626432	ns
VaporWD	8G [left]	EtOH	PriorITI	4	17	0.022814	-0.0048684	0.05049733	-0.024557	0.0701855	Sig.
VaporWD	8G [left]	EtOH	PriorITI	4	18	0.028782	0.00105338	0.05650978	-0.018667	0.0762302	ns
VaporWD	8G [left]	EtOH	PriorITI	4	19	0.035746	0.00754409	0.06394792	-0.012513	0.0840053	ns
VaporWD	8G [left]	EtOH	PriorITI	4	20	0.043405	0.01487889	0.0719307	-0.005409	0.0922185	ns
VaporWD	8G [left]	EtOH	PriorITI	4	21	0.044993	0.0160985	0.07388842	-0.004452	0.0944387	ns
VaporWD	8G [left]	EtOH	PriorITI	4	22	0.034926	0.00602953	0.06382278	-0.014522	0.0843742	ns
VaporWD	8G [left]	EtOH	PriorITI	4	23	0.018023	-0.0110326	0.04707885	-0.031697	0.0677434	ns
VaporWD	8G [left]	EtOH	PriorITI	4	24	0.007092	-0.02197	0.03615494	-0.042639	0.0568243	ns
VaporWD	8G [left]	EtOH	PriorITI	4	25	0.010571	-0.0188046	0.03994727	-0.039697	0.0608396	ns
VaporWD	8G [left]	EtOH	PriorITI	4	26	0.023855	-0.0056673	0.05337644	-0.026663	0.0743726	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8G [left]	EtOH	PriorITI	4	27	0.03347	0.00369529	0.06324477	-0.017481	0.0844207	ns
VaporWD	8G [left]	EtOH	PriorITI	4	28	0.030314	0.00058245	0.06004567	-0.020563	0.0811909	ns
VaporWD	8G [left]	EtOH	PriorITI	4	29	0.019447	-0.0104534	0.04934766	-0.031719	0.0706131	ns
VaporWD	8G [left]	EtOH	PriorITI	4	30	0.015686	-0.0141846	0.045556	-0.035429	0.0667999	ns
VaporWD	8G [left]	EtOH	PriorITI	4	31	0.027104	-0.0028872	0.0570956	-0.024217	0.0784257	ns
VaporWD	8G [left]	EtOH	PriorITI	4	32	0.043511	0.01368984	0.07333181	-0.007519	0.0945407	ns
VaporWD	8G [left]	EtOH	PriorITI	4	33	0.045554	0.01567182	0.07543586	-0.00558	0.0966881	ns
VaporWD	8G [left]	EtOH	PriorITI	4	34	0.027138	-0.0027445	0.05702073	-0.023997	0.0782734	ns
VaporWD	8G [left]	EtOH	PriorITI	4	35	0.004482	-0.0257142	0.03467798	-0.04719	0.0561536	ns
VaporWD	8G [left]	EtOH	PriorITI	4	36	-0.0018	-0.0321201	0.02852359	-0.053685	0.0500887	ns
VaporWD	8G [left]	EtOH	PriorITI	4	37	0.00889	-0.0216858	0.03946548	-0.043431	0.061211	ns
VaporWD	8G [left]	EtOH	PriorITI	4	38	0.017288	-0.0131881	0.04776444	-0.034863	0.0694393	ns
VaporWD	8G [left]	EtOH	PriorITI	4	39	0.009478	-0.0209907	0.03994589	-0.04266	0.0616151	ns
VaporWD	8G [left]	EtOH	PriorITI	4	40	-0.00569	-0.0359401	0.02455865	-0.057454	0.0460722	ns
VaporWD	8G [left]	EtOH	PriorITI	4	41	-0.00939	-0.0397051	0.02093488	-0.061269	0.0424986	ns
VaporWD	8G [left]	EtOH	PriorITI	4	42	0.002905	-0.0273962	0.03320558	-0.048946	0.0547557	ns
VaporWD	8G [left]	EtOH	PriorITI	4	43	0.018798	-0.011777	0.04937296	-0.033522	0.0711181	ns
VaporWD	8G [left]	EtOH	PriorITI	4	44	0.028438	-0.0022171	0.05909265	-0.024019	0.0808946	ns
VaporWD	8G [left]	EtOH	PriorITI	4	45	0.034545	0.00369244	0.06539821	-0.01825	0.0873409	Sig.
VaporWD	8G [left]	EtOH	PriorITI	4	46	0.039425	0.00874151	0.07010763	-0.01308	0.0919296	ns
VaporWD	8G [left]	EtOH	PriorITI	4	47	0.034152	0.00351711	0.06478668	-0.018271	0.0865743	ns
VaporWD	8G [left]	EtOH	PriorITI	4	48	0.011966	-0.0185113	0.04244314	-0.040187	0.0641187	ns
VaporWD	8G [left]	EtOH	PriorITI	4	49	-0.01445	-0.0451487	0.01625484	-0.066984	0.0380901	ns
VaporWD	8G [left]	EtOH	PriorITI	4	50	-0.02356	-0.0543924	0.0072769	-0.076322	0.0292067	ns
VaporWD	8G [left]	EtOH	PriorITI	4	51	-0.01215	-0.0433221	0.01902586	-0.065493	0.041197	ns
VaporWD	8G [left]	EtOH	PriorITI	4	52	0.001905	-0.0293105	0.03312	-0.051511	0.0553205	ns
VaporWD	8G [left]	EtOH	PriorITI	4	53	0.006164	-0.0252322	0.03756098	-0.047562	0.0598904	ns
VaporWD	8G [left]	EtOH	PriorITI	4	54	0.008176	-0.0231207	0.03947354	-0.045379	0.0617322	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8G [left]	EtOH	PriorITI	4	55	0.016714	-0.0146114	0.04803904	-0.03689	0.0703177	ns
VaporWD	8G [left]	EtOH	PriorITI	4	56	0.023333	-0.0076914	0.05435785	-0.029756	0.0764227	ns
VaporWD	8G [left]	EtOH	PriorITI	4	57	0.016335	-0.0145927	0.0472625	-0.036589	0.0692584	ns
VaporWD	8G [left]	EtOH	PriorITI	4	58	0.003381	-0.0273149	0.03407728	-0.049146	0.0559085	ns
VaporWD	8G [left]	EtOH	PriorITI	4	59	0.003194	-0.0275188	0.03390728	-0.049362	0.0557506	ns
VaporWD	8G [left]	EtOH	PriorITI	4	60	0.018106	-0.0124693	0.04868066	-0.034214	0.0704258	ns
VaporWD	8G [left]	EtOH	PriorITI	4	61	0.031118	0.000282	0.06195317	-0.021648	0.0838836	ns
VaporWD	8G [left]	EtOH	PriorITI	4	62	0.030768	-0.0002185	0.0617554	-0.022257	0.0837935	ns
VaporWD	8G [left]	EtOH	PriorITI	4	63	0.023906	-0.007402	0.05521453	-0.029669	0.0774811	ns
VaporWD	8G [left]	EtOH	PriorITI	4	64	0.020603	-0.0106998	0.05190636	-0.032963	0.0741693	ns
VaporWD	8G [left]	EtOH	PriorITI	4	65	0.020498	-0.0109502	0.05194686	-0.033317	0.0743132	ns
VaporWD	8G [left]	EtOH	PriorITI	4	66	0.020114	-0.0111876	0.05141617	-0.03345	0.0736782	ns
VaporWD	8G [left]	EtOH	PriorITI	4	67	0.021431	-0.0099869	0.05284922	-0.032332	0.0751939	ns
VaporWD	8G [left]	EtOH	PriorITI	4	68	0.025074	-0.006285	0.05643261	-0.028588	0.0787352	ns
VaporWD	8G [left]	EtOH	PriorITI	4	69	0.024913	-0.0066107	0.05643675	-0.029031	0.0788566	ns
VaporWD	8G [left]	EtOH	PriorITI	4	70	0.018446	-0.0128957	0.04978861	-0.035186	0.0720793	ns
VaporWD	8G [left]	EtOH	PriorITI	4	71	0.014515	-0.0168491	0.04587815	-0.039155	0.0681841	ns
VaporWD	8G [left]	EtOH	PriorITI	4	72	0.021279	-0.0099564	0.05251341	-0.032171	0.0747278	ns
VaporWD	8G [left]	EtOH	PriorITI	4	73	0.033217	0.0017674	0.0646657	-0.020599	0.0870325	Sig.
VaporWD	8G [left]	EtOH	PriorITI	4	74	0.04	0.00860719	0.07139198	-0.013719	0.0937184	ns
VaporWD	8G [left]	EtOH	PriorITI	4	75	0.042707	0.01115258	0.07426228	-0.011289	0.0967043	ns
VaporWD	8G [left]	EtOH	PriorITI	4	76	0.050213	0.01873862	0.08168834	-0.003646	0.1040734	ns
VaporWD	8G [left]	EtOH	PriorITI	4	77	0.063032	0.03125287	0.09481106	0.0086514	0.1174125	*
VaporWD	8G [left]	EtOH	PriorITI	4	78	0.07223	0.04038217	0.10407787	0.0177318	0.1267282	*
VaporWD	8G [left]	EtOH	PriorITI	4	79	0.073299	0.041152	0.10544533	0.0182891	0.1283082	*
VaporWD	8G [left]	EtOH	PriorITI	4	80	0.070473	0.03842771	0.10251755	0.0156372	0.1253081	*
VaporWD	8G [left]	EtOH	PriorITI	4	81	0.066763	0.03453956	0.09898718	0.0116218	0.1219049	*
VaporWD	8G [left]	EtOH	PriorITI	4	82	0.059394	0.02724299	0.09154457	0.0043772	0.1144104	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8G [left]	EtOH	PriorITI	4	83	0.046995	0.01453939	0.07945154	-0.008544	0.1025345	ns
VaporWD	8G [left]	EtOH	PriorITI	4	84	0.0332	0.00085154	0.06554765	-0.022155	0.0885538	ns
VaporWD	8G [left]	EtOH	PriorITI	4	85	0.021102	-0.0113147	0.05351791	-0.034369	0.0765726	ns
VaporWD	8G [left]	EtOH	PriorITI	4	86	0.011507	-0.0205279	0.04354248	-0.043311	0.0663261	ns
VaporWD	8G [left]	EtOH	PriorITI	4	87	0.008314	-0.0237784	0.04040672	-0.046603	0.0632311	ns
VaporWD	8G [left]	EtOH	PriorITI	4	88	0.017485	-0.0145235	0.04949252	-0.037288	0.0722568	ns
VaporWD	8G [left]	EtOH	PriorITI	4	89	0.03715	0.00467145	0.06962799	-0.018427	0.0927267	ns
VaporWD	8G [left]	EtOH	PriorITI	4	90	0.055559	0.02321475	0.08790238	0.0002116	0.1109055	*
VaporWD	8G [left]	EtOH	PriorITI	4	91	0.063135	0.03072511	0.09554574	0.0076747	0.1185961	*
VaporWD	8G [left]	EtOH	PriorITI	4	92	0.061503	0.02955277	0.09345403	0.0068293	0.1161775	*
VaporWD	8G [left]	EtOH	PriorITI	4	93	0.057171	0.02495893	0.08938283	0.0020496	0.1122921	*
VaporWD	8G [left]	EtOH	PriorITI	4	94	0.051687	0.01962007	0.08375353	-0.003186	0.1065596	ns
VaporWD	8G [left]	EtOH	PriorITI	4	95	0.042507	0.00986224	0.07515209	-0.013355	0.0983693	ns
VaporWD	8G [left]	EtOH	PriorITI	4	96	0.029587	-0.002793	0.06196696	-0.025822	0.0849958	ns
VaporWD	8G [left]	EtOH	PriorITI	4	97	0.016673	-0.0163471	0.049694	-0.039831	0.0731784	ns
VaporWD	8G [left]	EtOH	PriorITI	4	98	0.008484	-0.023802	0.04076921	-0.046764	0.0637309	ns
VaporWD	8G [left]	EtOH	PriorITI	4	99	0.009299	-0.0242933	0.04289093	-0.048184	0.0667818	ns
VaporWD	8G [left]	EtOH	PriorITI	4	100	0.021161	-0.010443	0.05276436	-0.03292	0.0752411	ns
VaporWD	8G [left]	EtOH	PriorITI	4	101	0.040703	-0.0045093	0.08591488	-0.036664	0.11807	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	1	0.004571	-0.0064894	0.01563111	-0.014305	0.0234465	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	2	0.003318	-0.0146559	0.02129231	-0.027357	0.0339933	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	3	-0.00237	-0.0252115	0.02047483	-0.041353	0.0366164	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	4	-0.01431	-0.0412629	0.01263958	-0.060307	0.031684	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	5	-0.02918	-0.0597078	0.0013502	-0.08128	0.0229227	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	6	-0.04136	-0.0750434	-0.0076679	-0.098848	0.0161367	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	7	-0.04864	-0.0845169	-0.0127549	-0.109871	0.0125995	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	8	-0.05248	-0.0892251	-0.0157369	-0.115189	0.0102274	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	9	-0.05262	-0.0897604	-0.0154891	-0.116001	0.0107518	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	10	-0.04607	-0.0830535	-0.0090802	-0.109189	0.0170555	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	11	-0.03366	-0.0708391	0.00351616	-0.09711	0.0297868	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	12	-0.02274	-0.0599604	0.01448053	-0.086261	0.0407814	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	13	-0.01848	-0.0559464	0.01898434	-0.08242	0.0454583	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	14	-0.01606	-0.0535434	0.02142266	-0.08003	0.0479091	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	15	-0.00695	-0.0445569	0.03065627	-0.071131	0.05723	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	16	0.008898	-0.028508	0.04630379	-0.05494	0.0727357	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	17	0.022932	-0.0144845	0.06034838	-0.040924	0.0867877	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	18	0.029243	-0.0082933	0.06677978	-0.034818	0.093304	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	19	0.029949	-0.0081715	0.06806939	-0.035108	0.0950062	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	20	0.02864	-0.009974	0.06725312	-0.037259	0.0945384	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	21	0.024342	-0.0147175	0.06340174	-0.042318	0.0910022	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	22	0.015259	-0.0238641	0.05438164	-0.051509	0.0820268	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	23	0.005188	-0.0340925	0.04446874	-0.061849	0.0722254	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	24	0.002198	-0.037151	0.04154666	-0.064956	0.0693515	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	25	0.010386	-0.0293292	0.05010117	-0.057393	0.0781649	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	26	0.023843	-0.016124	0.06380998	-0.044366	0.0920516	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	27	0.029867	-0.0103861	0.07011934	-0.03883	0.0985629	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	28	0.020552	-0.0197054	0.06080847	-0.048152	0.089255	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	29	0.002605	-0.0378208	0.04303026	-0.066386	0.0715959	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	30	-0.00709	-0.0475286	0.03335237	-0.076105	0.0619286	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	31	0.000969	-0.0395722	0.04151056	-0.06822	0.0701581	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	32	0.017471	-0.0228996	0.05784188	-0.051427	0.0863688	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	33	0.02443	-0.0159669	0.06482712	-0.044512	0.0933726	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	34	0.015485	-0.0249698	0.0559396	-0.053556	0.0845259	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	35	0.001145	-0.0396763	0.04196641	-0.068522	0.0708118	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	36	-0.00621	-0.0472658	0.03483807	-0.076274	0.0638464	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	37	-0.00659	-0.0479245	0.03474735	-0.077133	0.0639563	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	38	-0.00854	-0.0498048	0.03271564	-0.07896	0.0618711	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	39	-0.01546	-0.0566514	0.02572909	-0.085757	0.0548351	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	40	-0.02084	-0.0617916	0.02011096	-0.090729	0.0490481	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	41	-0.01719	-0.0581806	0.02379246	-0.087143	0.0527546	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	42	-0.00576	-0.0467795	0.03526101	-0.075765	0.0642469	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	43	0.005074	-0.0362598	0.04640695	-0.065467	0.0756141	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	44	0.009783	-0.0317184	0.05128442	-0.061044	0.0806103	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	45	0.010662	-0.0310453	0.05236987	-0.060517	0.0818415	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	46	0.011132	-0.0304041	0.05266864	-0.059755	0.0820193	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	47	0.008038	-0.0333754	0.04945183	-0.062639	0.0787157	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	48	-0.0035	-0.0447575	0.03776054	-0.073912	0.0669152	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	49	-0.01871	-0.060214	0.02279042	-0.08954	0.0521169	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	50	-0.025	-0.0667443	0.01674169	-0.096241	0.0462383	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	51	-0.01806	-0.0602013	0.02408523	-0.089981	0.0538647	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	52	-0.0082	-0.0504683	0.03406197	-0.080334	0.0639276	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	53	-0.0051	-0.0475521	0.03734898	-0.077549	0.0673456	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	54	-0.0041	-0.0464792	0.03827422	-0.076424	0.0682186	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	55	0.0033	-0.0390479	0.04564748	-0.068972	0.0755714	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	56	0.01219	-0.0298128	0.05419219	-0.059493	0.0838722	Sig.
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	57	0.010276	-0.0315325	0.05208438	-0.061075	0.0816273	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	58	-0.00139	-0.0429348	0.04016414	-0.072295	0.069524	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	59	-0.00764	-0.0491476	0.03386753	-0.078478	0.0631978	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	60	-0.00083	-0.0422162	0.04056362	-0.071463	0.0698107	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	61	0.009467	-0.0322119	0.05114627	-0.061663	0.0805978	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	62	0.011987	-0.0299595	0.05393412	-0.0596	0.0835748	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	63	0.007626	-0.0346948	0.04994679	-0.0646	0.0798517	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	64	0.002319	-0.0400639	0.04470097	-0.070012	0.0746494	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	65	-0.00305	-0.0455629	0.03945992	-0.075603	0.0694995	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	66	-0.00846	-0.050845	0.03391956	-0.080793	0.0638679	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	67	-0.00985	-0.0523178	0.03262647	-0.08233	0.0626383	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	68	-0.00667	-0.0491309	0.03578502	-0.079133	0.0657868	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	69	-0.0064	-0.0490123	0.03620294	-0.07912	0.0663105	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	70	-0.01226	-0.0546929	0.03017153	-0.084677	0.0601552	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	71	-0.01369	-0.0560809	0.02870715	-0.086038	0.0586638	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	72	0.000534	-0.0417552	0.04282397	-0.071638	0.0727068	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	73	0.024951	-0.0175513	0.0674534	-0.047585	0.0974866	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	74	0.044143	0.00164293	0.08664305	-0.028389	0.1166746	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	75	0.053105	0.01045974	0.09575088	-0.019675	0.1258853	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	76	0.059738	0.01711817	0.10235744	-0.012998	0.1324735	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	77	0.06897	0.02601955	0.11192136	-0.004331	0.1422715	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	78	0.075906	0.03278007	0.11903129	0.0023064	0.1495049	*
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	79	0.07541	0.03196396	0.11885663	0.0012637	0.1495569	*
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	80	0.068643	0.02524532	0.11204059	-0.005421	0.1427064	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	81	0.058285	0.0147302	0.10183925	-0.016047	0.132616	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	82	0.045386	0.0018386	0.0889334	-0.028933	0.1197051	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	83	0.0324	-0.0114639	0.07626488	-0.04246	0.1072605	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	84	0.02195	-0.0218604	0.06576106	-0.052818	0.0967188	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	85	0.011684	-0.0321205	0.05548867	-0.063074	0.0864421	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	86	-0.0019	-0.0452867	0.04149206	-0.075947	0.0721521	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	87	-0.01365	-0.0570174	0.02971533	-0.087661	0.0603591	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	88	-0.01274	-0.0561038	0.03062244	-0.086745	0.0612639	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	89	0.001955	-0.0419186	0.04582921	-0.072921	0.0768316	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	90	0.01772	-0.0260949	0.06153523	-0.057056	0.092496	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	91	0.023174	-0.0206059	0.06695304	-0.051542	0.0978887	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	92	0.020256	-0.0230446	0.06355592	-0.053642	0.0941529	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	93	0.016657	-0.0268398	0.06015417	-0.057576	0.0908902	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	94	0.013259	-0.0302127	0.05673147	-0.060931	0.0874499	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	95	0.005312	-0.038749	0.04937219	-0.069883	0.0805065	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	96	-0.00815	-0.0520941	0.03578935	-0.083144	0.0668396	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	97	-0.02155	-0.0660718	0.02297047	-0.097532	0.0544302	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	98	-0.02693	-0.071102	0.01723812	-0.102314	0.0484498	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	99	-0.01774	-0.0631389	0.02765802	-0.095219	0.0597377	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	100	0.007941	-0.035208	0.05108981	-0.065698	0.0815799	ns
VaporWD	8G [right]	Air + EtOH	Vapor X PriorITI	8	101	0.0444	-0.018496	0.10729536	-0.06294	0.151739	ns
VaporWD	8H [left]	Air	DSDuration	5	1	0.02949	0.0220094	0.03697047	0.0167139	0.042266	*
VaporWD	8H [left]	Air	DSDuration	5	2	0.054396	0.04288227	0.06591054	0.0347314	0.0740614	*
VaporWD	8H [left]	Air	DSDuration	5	3	0.063114	0.04816934	0.0780596	0.0375897	0.0886393	*
VaporWD	8H [left]	Air	DSDuration	5	4	0.049173	0.0315825	0.06676438	0.0191298	0.079217	*
VaporWD	8H [left]	Air	DSDuration	5	5	0.022248	0.00234891	0.04214629	-0.011737	0.0562326	ns
VaporWD	8H [left]	Air	DSDuration	5	6	-0.00059	-0.0225312	0.02134281	-0.03806	0.0368721	ns
VaporWD	8H [left]	Air	DSDuration	5	7	-0.00977	-0.0331255	0.01359319	-0.049662	0.0301293	ns
VaporWD	8H [left]	Air	DSDuration	5	8	-0.00882	-0.0327671	0.01512717	-0.049719	0.0320794	ns
VaporWD	8H [left]	Air	DSDuration	5	9	-0.00725	-0.0314369	0.01692935	-0.048556	0.0340486	ns
VaporWD	8H [left]	Air	DSDuration	5	10	-0.00997	-0.0340837	0.01414629	-0.051155	0.0312173	ns
VaporWD	8H [left]	Air	DSDuration	5	11	-0.01377	-0.0379819	0.01044556	-0.055123	0.0275865	ns
VaporWD	8H [left]	Air	DSDuration	5	12	-0.01235	-0.0366096	0.0119156	-0.053785	0.0290911	ns
VaporWD	8H [left]	Air	DSDuration	5	13	-0.00375	-0.0281519	0.02065239	-0.045426	0.0379267	ns
VaporWD	8H [left]	Air	DSDuration	5	14	0.006672	-0.0177617	0.03110628	-0.035059	0.0484031	ns
VaporWD	8H [left]	Air	DSDuration	5	15	0.010922	-0.0135695	0.03541407	-0.030907	0.0527518	ns
VaporWD	8H [left]	Air	DSDuration	5	16	0.006813	-0.0175667	0.03119287	-0.034825	0.0484514	ns
VaporWD	8H [left]	Air	DSDuration	5	17	0.001028	-0.0233412	0.02539621	-0.040592	0.0426468	ns
VaporWD	8H [left]	Air	DSDuration	5	18	0.00213	-0.0223332	0.02659386	-0.039651	0.0439116	ns
VaporWD	8H [left]	Air	DSDuration	5	19	0.011351	-0.0134727	0.0361752	-0.031046	0.0537481	ns
VaporWD	8H [left]	Air	DSDuration	5	20	0.022657	-0.0025018	0.04781635	-0.020312	0.0656265	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8H [left]	Air	DSDuration	5	21	0.030987	0.00555329	0.05642098	-0.012451	0.0744256	ns
VaporWD	8H [left]	Air	DSDuration	5	22	0.036431	0.01093457	0.06192659	-0.007114	0.0799753	ns
VaporWD	8H [left]	Air	DSDuration	5	23	0.039938	0.01435311	0.06552218	-0.003758	0.0836335	ns
VaporWD	8H [left]	Air	DSDuration	5	24	0.039911	0.01426232	0.06555952	-0.003894	0.0837162	ns
VaporWD	8H [left]	Air	DSDuration	5	25	0.035947	0.01007879	0.0618156	-0.008234	0.0801279	ns
VaporWD	8H [left]	Air	DSDuration	5	26	0.03229	0.0062445	0.05833498	-0.012193	0.0767724	ns
VaporWD	8H [left]	Air	DSDuration	5	27	0.033571	0.0073583	0.0597845	-0.011198	0.0783408	ns
VaporWD	8H [left]	Air	DSDuration	5	28	0.038787	0.01255203	0.06502224	-0.00602	0.0835941	ns
VaporWD	8H [left]	Air	DSDuration	5	29	0.042515	0.01618795	0.06884177	-0.002449	0.0874786	ns
VaporWD	8H [left]	Air	DSDuration	5	30	0.040802	0.01444948	0.06715465	-0.004206	0.0858097	ns
VaporWD	8H [left]	Air	DSDuration	5	31	0.033736	0.00733606	0.0601351	-0.011352	0.0788234	ns
VaporWD	8H [left]	Air	DSDuration	5	32	0.024489	-0.0018193	0.05079641	-0.020443	0.0694198	ns
VaporWD	8H [left]	Air	DSDuration	5	33	0.018551	-0.0077587	0.04486129	-0.026384	0.0634862	ns
VaporWD	8H [left]	Air	DSDuration	5	34	0.021206	-0.0051586	0.04756982	-0.023822	0.0662331	ns
VaporWD	8H [left]	Air	DSDuration	5	35	0.031762	0.00517676	0.05834648	-0.013643	0.077166	ns
VaporWD	8H [left]	Air	DSDuration	5	36	0.041999	0.01524759	0.06875105	-0.00369	0.0876886	ns
VaporWD	8H [left]	Air	DSDuration	5	37	0.04427	0.01735224	0.07118845	-0.001703	0.0902438	ns
VaporWD	8H [left]	Air	DSDuration	5	38	0.039765	0.0128792	0.06665165	-0.006154	0.0856845	ns
VaporWD	8H [left]	Air	DSDuration	5	39	0.035057	0.0082335	0.06188125	-0.010755	0.0808699	Sig.
VaporWD	8H [left]	Air	DSDuration	5	40	0.032652	0.00596588	0.05933787	-0.012925	0.0782289	ns
VaporWD	8H [left]	Air	DSDuration	5	41	0.030191	0.00349928	0.0568837	-0.015396	0.0757792	ns
VaporWD	8H [left]	Air	DSDuration	5	42	0.027493	0.00075999	0.05422622	-0.018164	0.0731506	ns
VaporWD	8H [left]	Air	DSDuration	5	43	0.027676	0.000755	0.05459737	-0.018303	0.0736549	ns
VaporWD	8H [left]	Air	DSDuration	5	44	0.030636	0.00358779	0.05768435	-0.01556	0.0768319	ns
VaporWD	8H [left]	Air	DSDuration	5	45	0.031682	0.00451903	0.05884429	-0.014709	0.0780728	ns
VaporWD	8H [left]	Air	DSDuration	5	46	0.028866	0.00179915	0.05593366	-0.017362	0.0750946	ns
VaporWD	8H [left]	Air	DSDuration	5	47	0.026622	-0.0003479	0.05359251	-0.01944	0.0726848	ns
VaporWD	8H [left]	Air	DSDuration	5	48	0.029499	0.00261331	0.05638531	-0.016419	0.0754179	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8H [left]	Air	DSDuration	5	49	0.036389	0.00936316	0.06341402	-0.009768	0.0825454	ns
VaporWD	8H [left]	Air	DSDuration	5	50	0.043352	0.016152	0.07055185	-0.003103	0.0898067	ns
VaporWD	8H [left]	Air	DSDuration	5	51	0.048297	0.02085329	0.07574149	0.0014256	0.0951692	*
VaporWD	8H [left]	Air	DSDuration	5	52	0.050358	0.02281388	0.07790267	0.0033152	0.0974014	*
VaporWD	8H [left]	Air	DSDuration	5	53	0.048423	0.0207756	0.07607037	0.001204	0.095642	*
VaporWD	8H [left]	Air	DSDuration	5	54	0.043271	0.0156554	0.07088703	-0.003894	0.0904363	ns
VaporWD	8H [left]	Air	DSDuration	5	55	0.038201	0.01062525	0.06577648	-0.008896	0.0852973	ns
VaporWD	8H [left]	Air	DSDuration	5	56	0.034967	0.00759706	0.06233607	-0.011778	0.081711	ns
VaporWD	8H [left]	Air	DSDuration	5	57	0.031837	0.00461217	0.05906268	-0.014661	0.0783355	ns
VaporWD	8H [left]	Air	DSDuration	5	58	0.027578	0.00050654	0.05464927	-0.018657	0.0738131	ns
VaporWD	8H [left]	Air	DSDuration	5	59	0.023867	-0.0031587	0.05089172	-0.02229	0.0700229	ns
VaporWD	8H [left]	Air	DSDuration	5	60	0.02164	-0.0053315	0.0486106	-0.024424	0.0677034	ns
VaporWD	8H [left]	Air	DSDuration	5	61	0.019074	-0.0080668	0.04621519	-0.02728	0.0654283	ns
VaporWD	8H [left]	Air	DSDuration	5	62	0.015886	-0.011447	0.04321898	-0.030796	0.062568	ns
VaporWD	8H [left]	Air	DSDuration	5	63	0.01526	-0.0122992	0.04281922	-0.031808	0.0623285	ns
VaporWD	8H [left]	Air	DSDuration	5	64	0.018202	-0.0094188	0.04582229	-0.028971	0.0653749	ns
VaporWD	8H [left]	Air	DSDuration	5	65	0.020732	-0.0069522	0.04841703	-0.02655	0.068015	ns
VaporWD	8H [left]	Air	DSDuration	5	66	0.020967	-0.0066548	0.04858801	-0.026208	0.0681413	ns
VaporWD	8H [left]	Air	DSDuration	5	67	0.023832	-0.0038278	0.05149101	-0.023408	0.0710711	ns
VaporWD	8H [left]	Air	DSDuration	5	68	0.032776	0.00510862	0.06044384	-0.014477	0.0800298	ns
VaporWD	8H [left]	Air	DSDuration	5	69	0.041499	0.01375704	0.06924004	-0.005881	0.0888783	ns
VaporWD	8H [left]	Air	DSDuration	5	70	0.041777	0.01412874	0.06942578	-0.005444	0.0889982	ns
VaporWD	8H [left]	Air	DSDuration	5	71	0.036361	0.00875562	0.06396647	-0.010786	0.0835084	ns
VaporWD	8H [left]	Air	DSDuration	5	72	0.035117	0.00755956	0.0626751	-0.011949	0.0821833	ns
VaporWD	8H [left]	Air	DSDuration	5	73	0.039847	0.01217474	0.06751885	-0.007414	0.0871079	ns
VaporWD	8H [left]	Air	DSDuration	5	74	0.042718	0.01502602	0.07041038	-0.004577	0.0900137	ns
VaporWD	8H [left]	Air	DSDuration	5	75	0.040414	0.01264757	0.06817948	-0.007008	0.087835	ns
VaporWD	8H [left]	Air	DSDuration	5	76	0.03952	0.01174559	0.06729498	-0.007916	0.0869567	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8H [left]	Air	DSDuration	5	77	0.044191	0.01622465	0.07215764	-0.003573	0.0919552	ns
VaporWD	8H [left]	Air	DSDuration	5	78	0.04753	0.01942557	0.07563452	-0.00047	0.0955297	ns
VaporWD	8H [left]	Air	DSDuration	5	79	0.041445	0.01315559	0.06973435	-0.006871	0.0897604	ns
VaporWD	8H [left]	Air	DSDuration	5	80	0.028781	0.0004946	0.05706641	-0.019529	0.0770901	ns
VaporWD	8H [left]	Air	DSDuration	5	81	0.019157	-0.0092062	0.04751993	-0.029285	0.0675982	ns
VaporWD	8H [left]	Air	DSDuration	5	82	0.017062	-0.0113225	0.04544649	-0.031416	0.0655399	ns
VaporWD	8H [left]	Air	DSDuration	5	83	0.019962	-0.0085973	0.04852184	-0.028815	0.0687392	ns
VaporWD	8H [left]	Air	DSDuration	5	84	0.024434	-0.0041173	0.05298496	-0.024329	0.0731963	ns
VaporWD	8H [left]	Air	DSDuration	5	85	0.027921	-0.0005967	0.05643878	-0.020784	0.0766265	ns
VaporWD	8H [left]	Air	DSDuration	5	86	0.027341	-0.0009375	0.05562041	-0.020956	0.0756391	ns
VaporWD	8H [left]	Air	DSDuration	5	87	0.022576	-0.0056599	0.05081223	-0.025648	0.0708006	ns
VaporWD	8H [left]	Air	DSDuration	5	88	0.019574	-0.0086947	0.04784208	-0.028706	0.0678533	ns
VaporWD	8H [left]	Air	DSDuration	5	89	0.02346	-0.0051015	0.05202138	-0.02532	0.0722401	ns
VaporWD	8H [left]	Air	DSDuration	5	90	0.029788	0.00122646	0.05834931	-0.018992	0.078568	ns
VaporWD	8H [left]	Air	DSDuration	5	91	0.029809	0.00130698	0.05831199	-0.01887	0.078489	ns
VaporWD	8H [left]	Air	DSDuration	5	92	0.024337	-0.0038987	0.0525731	-0.023887	0.0725613	ns
VaporWD	8H [left]	Air	DSDuration	5	93	0.024099	-0.0042148	0.05241376	-0.024258	0.0724575	ns
VaporWD	8H [left]	Air	DSDuration	5	94	0.033613	0.00526324	0.06196184	-0.014805	0.0820304	ns
VaporWD	8H [left]	Air	DSDuration	5	95	0.04242	0.01375002	0.07108978	-0.006545	0.0913852	Sig.
VaporWD	8H [left]	Air	DSDuration	5	96	0.038148	0.00948395	0.0668121	-0.010807	0.0871035	ns
VaporWD	8H [left]	Air	DSDuration	5	97	0.023298	-0.0056806	0.05227698	-0.026195	0.0727911	ns
VaporWD	8H [left]	Air	DSDuration	5	98	0.012315	-0.0166899	0.04131986	-0.037222	0.0618524	ns
VaporWD	8H [left]	Air	DSDuration	5	99	0.014555	-0.0149225	0.04403299	-0.03579	0.0649003	ns
VaporWD	8H [left]	Air	DSDuration	5	100	0.026964	-0.0014661	0.05539369	-0.021592	0.0755192	ns
VaporWD	8H [left]	Air	DSDuration	5	101	0.042552	0.00082366	0.08428017	-0.028716	0.1138197	ns
VaporWD	8H [left]	EtOH	DSDuration	5	1	0.025998	0.01852053	0.03347583	0.0131678	0.0388286	*
VaporWD	8H [left]	EtOH	DSDuration	5	2	0.123948	0.11105283	0.13684331	0.101822	0.1460741	*
VaporWD	8H [left]	EtOH	DSDuration	5	3	0.180957	0.16518775	0.19672646	0.1538996	0.2080146	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8H [left]	EtOH	DSDuration	5	4	0.174213	0.15543709	0.19298827	0.1419969	0.2064284	*
VaporWD	8H [left]	EtOH	DSDuration	5	5	0.123908	0.10267348	0.14514312	0.0874729	0.1603437	*
VaporWD	8H [left]	EtOH	DSDuration	5	6	0.079005	0.05555991	0.10245077	0.0387769	0.1192337	*
VaporWD	8H [left]	EtOH	DSDuration	5	7	0.068755	0.04378352	0.09372631	0.0259082	0.1116016	*
VaporWD	8H [left]	EtOH	DSDuration	5	8	0.0782	0.05266272	0.10373812	0.034382	0.1220188	*
VaporWD	8H [left]	EtOH	DSDuration	5	9	0.079636	0.05378766	0.10548477	0.0352845	0.123988	*
VaporWD	8H [left]	EtOH	DSDuration	5	10	0.073141	0.04743545	0.09884585	0.0290349	0.1172464	*
VaporWD	8H [left]	EtOH	DSDuration	5	11	0.077992	0.05210571	0.103879	0.0335753	0.1224095	*
VaporWD	8H [left]	EtOH	DSDuration	5	12	0.09556	0.06968	0.1214405	0.0511541	0.1399664	*
VaporWD	8H [left]	EtOH	DSDuration	5	13	0.106288	0.08019661	0.13237887	0.0615198	0.1510557	*
VaporWD	8H [left]	EtOH	DSDuration	5	14	0.101818	0.07574972	0.12788566	0.0570895	0.1465459	*
VaporWD	8H [left]	EtOH	DSDuration	5	15	0.09571	0.06951485	0.12190613	0.0507632	0.1406578	*
VaporWD	8H [left]	EtOH	DSDuration	5	16	0.098077	0.07205794	0.12409596	0.0534327	0.1427212	*
VaporWD	8H [left]	EtOH	DSDuration	5	17	0.101704	0.07564444	0.12776328	0.0569903	0.1464174	*
VaporWD	8H [left]	EtOH	DSDuration	5	18	0.101526	0.07541806	0.12763366	0.0567293	0.1463224	*
VaporWD	8H [left]	EtOH	DSDuration	5	19	0.107586	0.08103877	0.13413384	0.0620352	0.1531374	*
VaporWD	8H [left]	EtOH	DSDuration	5	20	0.125841	0.09898223	0.15269911	0.0797561	0.1719252	*
VaporWD	8H [left]	EtOH	DSDuration	5	21	0.14217	0.11497016	0.16937027	0.0954995	0.1888409	*
VaporWD	8H [left]	EtOH	DSDuration	5	22	0.140938	0.11372903	0.16814644	0.0942522	0.1876233	*
VaporWD	8H [left]	EtOH	DSDuration	5	23	0.128278	0.10092445	0.15563119	0.0813441	0.1752116	*
VaporWD	8H [left]	EtOH	DSDuration	5	24	0.121356	0.09398963	0.1487233	0.0743996	0.1683133	*
VaporWD	8H [left]	EtOH	DSDuration	5	25	0.122359	0.09470332	0.15001377	0.0749069	0.1698102	*
VaporWD	8H [left]	EtOH	DSDuration	5	26	0.119118	0.09132046	0.14691564	0.0714221	0.166814	*
VaporWD	8H [left]	EtOH	DSDuration	5	27	0.107326	0.07929672	0.13535434	0.0592328	0.1554182	*
VaporWD	8H [left]	EtOH	DSDuration	5	28	0.096339	0.06834382	0.12433321	0.0483043	0.1443727	*
VaporWD	8H [left]	EtOH	DSDuration	5	29	0.092891	0.06474331	0.12103771	0.0445947	0.1411863	*
VaporWD	8H [left]	EtOH	DSDuration	5	30	0.092468	0.06434323	0.12059311	0.0442105	0.1407258	*
VaporWD	8H [left]	EtOH	DSDuration	5	31	0.08995	0.06171772	0.11818239	0.0415081	0.138392	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8H [left]	EtOH	DSDuration	5	32	0.088692	0.06061361	0.1167706	0.0405141	0.1368701	*
VaporWD	8H [left]	EtOH	DSDuration	5	33	0.094219	0.06608942	0.12234921	0.0459532	0.1424855	*
VaporWD	8H [left]	EtOH	DSDuration	5	34	0.10466	0.07652311	0.13279675	0.0563819	0.152938	*
VaporWD	8H [left]	EtOH	DSDuration	5	35	0.111436	0.08301075	0.13986195	0.0626628	0.1602099	*
VaporWD	8H [left]	EtOH	DSDuration	5	36	0.107311	0.07876104	0.1358619	0.0583238	0.1562992	*
VaporWD	8H [left]	EtOH	DSDuration	5	37	0.093139	0.0643564	0.12192217	0.0437527	0.1425259	*
VaporWD	8H [left]	EtOH	DSDuration	5	38	0.07851	0.04981399	0.1072053	0.0292727	0.1277465	*
VaporWD	8H [left]	EtOH	DSDuration	5	39	0.074035	0.04535408	0.10271682	0.0248231	0.1232478	*
VaporWD	8H [left]	EtOH	DSDuration	5	40	0.080191	0.05170993	0.10867268	0.0313221	0.1290605	*
VaporWD	8H [left]	EtOH	DSDuration	5	41	0.086359	0.05781763	0.11490081	0.0373867	0.1353318	*
VaporWD	8H [left]	EtOH	DSDuration	5	42	0.084109	0.0555778	0.1126395	0.0351545	0.1330628	*
VaporWD	8H [left]	EtOH	DSDuration	5	43	0.077269	0.04848547	0.10605265	0.0278813	0.1266568	*
VaporWD	8H [left]	EtOH	DSDuration	5	44	0.074045	0.04517943	0.10291116	0.0245163	0.1235743	*
VaporWD	8H [left]	EtOH	DSDuration	5	45	0.074435	0.04539018	0.10348059	0.0245987	0.1242721	*
VaporWD	8H [left]	EtOH	DSDuration	5	46	0.073375	0.04448381	0.1022654	0.0238029	0.1229463	*
VaporWD	8H [left]	EtOH	DSDuration	5	47	0.072075	0.04323661	0.10091247	0.0225935	0.1215556	*
VaporWD	8H [left]	EtOH	DSDuration	5	48	0.075569	0.04687403	0.10426442	0.0263331	0.1248053	*
VaporWD	8H [left]	EtOH	DSDuration	5	49	0.080627	0.05172739	0.10952702	0.03104	0.1302144	*
VaporWD	8H [left]	EtOH	DSDuration	5	50	0.078299	0.04926721	0.10733142	0.0284851	0.1281135	*
VaporWD	8H [left]	EtOH	DSDuration	5	51	0.070368	0.04102231	0.0997145	0.0200155	0.1207213	*
VaporWD	8H [left]	EtOH	DSDuration	5	52	0.070948	0.04155506	0.10034045	0.0205149	0.1213807	*
VaporWD	8H [left]	EtOH	DSDuration	5	53	0.085794	0.05623749	0.11535075	0.0350799	0.1365083	*
VaporWD	8H [left]	EtOH	DSDuration	5	54	0.100402	0.0709327	0.12987069	0.0498379	0.1509655	*
VaporWD	8H [left]	EtOH	DSDuration	5	55	0.097955	0.06846758	0.127443	0.0473594	0.1485512	*
VaporWD	8H [left]	EtOH	DSDuration	5	56	0.082674	0.05346309	0.11188543	0.0325528	0.1327957	*
VaporWD	8H [left]	EtOH	DSDuration	5	57	0.074931	0.0458183	0.10404385	0.0249785	0.1248837	*
VaporWD	8H [left]	EtOH	DSDuration	5	58	0.085475	0.05657465	0.11437604	0.0358866	0.1350641	*
VaporWD	8H [left]	EtOH	DSDuration	5	59	0.103833	0.07492367	0.13274276	0.0542293	0.1534371	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8H [left]	EtOH	DSDuration	5	60	0.11292	0.08413255	0.14170697	0.0635258	0.1623138	*
VaporWD	8H [left]	EtOH	DSDuration	5	61	0.107616	0.07858992	0.13664211	0.0578121	0.1574199	*
VaporWD	8H [left]	EtOH	DSDuration	5	62	0.096127	0.06695118	0.12530332	0.046066	0.1461885	*
VaporWD	8H [left]	EtOH	DSDuration	5	63	0.088118	0.05864539	0.11758991	0.0375482	0.1386871	*
VaporWD	8H [left]	EtOH	DSDuration	5	64	0.085623	0.05614766	0.11509784	0.0350485	0.136197	*
VaporWD	8H [left]	EtOH	DSDuration	5	65	0.083996	0.05439122	0.11360065	0.0331992	0.1347926	*
VaporWD	8H [left]	EtOH	DSDuration	5	66	0.078648	0.04917386	0.10812173	0.0280755	0.1292201	*
VaporWD	8H [left]	EtOH	DSDuration	5	67	0.069893	0.04031787	0.09946865	0.0191469	0.1206396	*
VaporWD	8H [left]	EtOH	DSDuration	5	68	0.061584	0.03205776	0.09111043	0.0109219	0.1122463	*
VaporWD	8H [left]	EtOH	DSDuration	5	69	0.05626	0.0265871	0.0859338	0.005346	0.1071749	*
VaporWD	8H [left]	EtOH	DSDuration	5	70	0.053882	0.02437165	0.08339156	0.0032475	0.1045157	*
VaporWD	8H [left]	EtOH	DSDuration	5	71	0.055632	0.02610896	0.08515441	0.0049757	0.1062877	*
VaporWD	8H [left]	EtOH	DSDuration	5	72	0.065091	0.03568236	0.09450056	0.0146304	0.1155525	*
VaporWD	8H [left]	EtOH	DSDuration	5	73	0.081838	0.05223526	0.11144004	0.0310449	0.1326303	*
VaporWD	8H [left]	EtOH	DSDuration	5	74	0.096093	0.06653606	0.12565024	0.0453782	0.1468081	*
VaporWD	8H [left]	EtOH	DSDuration	5	75	0.095765	0.06606352	0.12546743	0.0448019	0.146729	*
VaporWD	8H [left]	EtOH	DSDuration	5	76	0.080451	0.0508157	0.11008685	0.0296016	0.1313009	*
VaporWD	8H [left]	EtOH	DSDuration	5	77	0.063703	0.03378941	0.09361633	0.0123764	0.1150293	*
VaporWD	8H [left]	EtOH	DSDuration	5	78	0.057718	0.02773043	0.08770578	0.0062643	0.1091719	*
VaporWD	8H [left]	EtOH	DSDuration	5	79	0.059059	0.02879804	0.0893194	0.0071365	0.1109809	*
VaporWD	8H [left]	EtOH	DSDuration	5	80	0.055057	0.02488241	0.08523233	0.0032822	0.1068325	*
VaporWD	8H [left]	EtOH	DSDuration	5	81	0.043324	0.01299049	0.07365789	-0.008723	0.0953717	ns
VaporWD	8H [left]	EtOH	DSDuration	5	82	0.037454	0.00718035	0.06772851	-0.014491	0.0893996	ns
VaporWD	8H [left]	EtOH	DSDuration	5	83	0.049519	0.01896801	0.08006954	-0.002901	0.1019387	ns
VaporWD	8H [left]	EtOH	DSDuration	5	84	0.072525	0.04206575	0.10298406	0.0202621	0.1247877	*
VaporWD	8H [left]	EtOH	DSDuration	5	85	0.08776	0.0572477	0.11827293	0.0354058	0.1401148	*
VaporWD	8H [left]	EtOH	DSDuration	5	86	0.087688	0.05752375	0.11785205	0.0359313	0.1394445	*
VaporWD	8H [left]	EtOH	DSDuration	5	87	0.082581	0.05237345	0.11278798	0.0307502	0.1344113	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8H [left]	EtOH	DSDuration	5	88	0.082275	0.05213412	0.11241525	0.0305586	0.1339908	*
VaporWD	8H [left]	EtOH	DSDuration	5	89	0.08081	0.0502389	0.11138132	0.0283551	0.1332651	*
VaporWD	8H [left]	EtOH	DSDuration	5	90	0.067109	0.03665042	0.09756782	0.0148471	0.1193711	*
VaporWD	8H [left]	EtOH	DSDuration	5	91	0.045182	0.01467392	0.07568913	-0.007164	0.0975274	ns
VaporWD	8H [left]	EtOH	DSDuration	5	92	0.032372	0.00228254	0.06246127	-0.019256	0.0840002	ns
VaporWD	8H [left]	EtOH	DSDuration	5	93	0.036902	0.00658339	0.06722017	-0.015119	0.088923	ns
VaporWD	8H [left]	EtOH	DSDuration	5	94	0.046936	0.01673667	0.07713571	-0.004881	0.0987535	ns
VaporWD	8H [left]	EtOH	DSDuration	5	95	0.046491	0.01576862	0.07721425	-0.006224	0.0992066	ns
VaporWD	8H [left]	EtOH	DSDuration	5	96	0.03535	0.0048518	0.06584814	-0.01698	0.0876797	ns
VaporWD	8H [left]	EtOH	DSDuration	5	97	0.026655	-0.0044144	0.05772526	-0.026655	0.079966	ns
VaporWD	8H [left]	EtOH	DSDuration	5	98	0.028345	-0.0020895	0.05877994	-0.023876	0.0805661	ns
VaporWD	8H [left]	EtOH	DSDuration	5	99	0.034291	0.00266366	0.06591917	-0.019976	0.0885593	ns
VaporWD	8H [left]	EtOH	DSDuration	5	100	0.034271	0.004499	0.0640435	-0.016813	0.0853554	ns
VaporWD	8H [left]	EtOH	DSDuration	5	101	0.026903	-0.0158116	0.06961814	-0.046388	0.1001948	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	1	0.00488	-0.0055976	0.01535752	-0.012832	0.0225915	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	2	0.066353	0.05031872	0.08238633	0.0392486	0.0934565	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	3	0.108746	0.08789356	0.12959924	0.0734962	0.1439966	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	4	0.119438	0.09489455	0.14398243	0.0779488	0.1609282	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	5	0.104982	0.07722479	0.13273981	0.0580603	0.1519043	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	6	0.087234	0.05663753	0.11783127	0.0355127	0.1389561	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	7	0.081446	0.04886575	0.11402534	0.0263718	0.1365193	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	8	0.083554	0.05015092	0.11695689	0.0270886	0.1400192	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	9	0.083942	0.05021319	0.11767141	0.0269258	0.1409589	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	10	0.08508	0.05144272	0.11871653	0.0282189	0.1419403	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	11	0.094501	0.06073037	0.12827151	0.0374143	0.1515876	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	12	0.106595	0.07275432	0.14043581	0.0493898	0.1638003	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	13	0.10703	0.07299743	0.14106212	0.0495006	0.1645589	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	14	0.095139	0.06106041	0.12921754	0.0375317	0.1527463	*

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	15	0.086786	0.05262964	0.12094245	0.0290472	0.1445249	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	16	0.091258	0.05725455	0.12526112	0.0337778	0.1487379	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	17	0.099239	0.06525213	0.13322574	0.0417868	0.1566911	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	18	0.10025	0.06612771	0.13437135	0.0425691	0.1579299	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	19	0.09885	0.06422759	0.13347228	0.0403234	0.1573764	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	20	0.103183	0.06809188	0.13827479	0.0438638	0.1625028	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	21	0.108009	0.07253665	0.1434821	0.0480454	0.1679734	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	22	0.102728	0.06716623	0.13828909	0.0426137	0.1628416	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	23	0.090261	0.05457894	0.12594344	0.029943	0.1505794	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	24	0.083661	0.04788725	0.11943403	0.0231884	0.1441329	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSduration	9	25	0.085661	0.04958314	0.12173922	0.0246739	0.1466484	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	26	0.084872	0.04854534	0.12119936	0.0234642	0.1462805	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	27	0.07375	0.03719001	0.11030936	0.0119483	0.1355511	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	28	0.058992	0.02239902	0.09558514	-0.002866	0.1208499	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	29	0.050703	0.01398382	0.08742186	-0.011368	0.1127736	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	30	0.050697	0.0139399	0.08745313	-0.011438	0.1128308	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	31	0.055967	0.01914757	0.09278679	-0.006274	0.118208	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	32	0.065409	0.02871511	0.1021031	0.0033806	0.1274376	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	33	0.076839	0.04014405	0.11353426	0.0148088	0.1388695	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	34	0.083079	0.04630645	0.11985163	0.0209177	0.1452404	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	35	0.077884	0.04080584	0.11496222	0.0152061	0.140562	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	36	0.063628	0.02631538	0.10094147	0.0005535	0.1267034	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	37	0.04895	0.01140732	0.08649319	-0.014513	0.1124138	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	38	0.040745	0.00324387	0.07824528	-0.022648	0.1041367	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	39	0.040886	0.0034741	0.07829812	-0.022356	0.1041283	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	40	0.047231	0.01000946	0.08445324	-0.015689	0.1101522	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	41	0.054255	0.01702636	0.09148277	-0.008677	0.1171861	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	42	0.05569	0.01840342	0.09297697	-0.00734	0.1187207	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	43	0.050457	0.01291075	0.08800334	-0.013012	0.1139263	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	44	0.044179	0.00645397	0.08190432	-0.019592	0.1079508	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	45	0.042324	0.00444183	0.08020701	-0.021713	0.1063621	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	46	0.044321	0.00656881	0.08207368	-0.019496	0.1081389	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	47	0.046412	0.00879624	0.08402858	-0.017175	0.1099998	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	48	0.046345	0.00884399	0.08384688	-0.017048	0.1097388	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	49	0.042479	0.00478477	0.08017237	-0.02124	0.1061971	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	50	0.033485	-0.0044535	0.07142406	-0.030647	0.097618	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	51	0.023758	-0.0145185	0.06203463	-0.040946	0.0884617	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	52	0.023751	-0.0146674	0.0621694	-0.041193	0.0886945	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSduration	9	53	0.037523	-0.0010373	0.0760829	-0.02766	0.1027058	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	54	0.053566	0.01504745	0.09208455	-0.011547	0.1186787	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	55	0.056945	0.01848485	0.09540563	-0.008069	0.1219597	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	56	0.049208	0.01103254	0.08738354	-0.015325	0.1137409	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	57	0.046892	0.00891966	0.08486449	-0.017297	0.1110816	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	58	0.059487	0.02172733	0.09724653	-0.004343	0.1233167	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	59	0.078077	0.0403845	0.1157705	0.0143603	0.1417947	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	60	0.088608	0.05098815	0.12622814	0.0250143	0.1522019	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	61	0.087827	0.04997248	0.1256812	0.0238369	0.1518168	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	62	0.081495	0.0433718	0.11961912	0.0170502	0.1459407	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	63	0.07428	0.03584329	0.11271678	0.0093056	0.1392545	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	64	0.067669	0.02914437	0.10619339	0.0025461	0.1327917	*
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	65	0.062482	0.02387012	0.10109314	-0.002788	0.1277515	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	66	0.05691	0.01838352	0.09543583	-0.008216	0.1220353	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	67	0.045966	0.00738855	0.08454303	-0.019246	0.1111777	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	68	0.029044	-0.0095477	0.06763473	-0.036192	0.0942791	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	69	0.01476	-0.0239321	0.05345137	-0.050646	0.0801651	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	70	0.012218	-0.026347	0.05078251	-0.052973	0.0774086	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	71	0.020313	-0.0181895	0.0588157	-0.044773	0.0853989	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	72	0.031463	-0.006976	0.06990119	-0.033515	0.0964402	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	73	0.042009	0.00341408	0.08060428	-0.023233	0.1072513	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	74	0.051108	0.01248178	0.08973329	-0.014186	0.1164015	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	75	0.052912	0.01418629	0.09163859	-0.012551	0.1183761	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	76	0.041175	0.0024339	0.07991666	-0.024314	0.1066647	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	77	0.022154	-0.0168522	0.0611593	-0.043783	0.0880899	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	78	0.011753	-0.0274477	0.05095326	-0.054513	0.0780183	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	79	0.015967	-0.0234877	0.05542189	-0.050728	0.0826625	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	80	0.023736	-0.015717	0.06318912	-0.042956	0.0904285	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	81	0.024517	-0.0150407	0.06407537	-0.042353	0.0913872	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	82	0.023569	-0.0160225	0.06316094	-0.043358	0.0904961	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	83	0.031523	-0.0083095	0.07135552	-0.035811	0.0988569	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	84	0.046397	0.0065731	0.08622098	-0.020922	0.1137164	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	85	0.057041	0.01726696	0.0968151	-0.010194	0.1242761	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	86	0.060245	0.02079963	0.09969	-0.006434	0.126924	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	87	0.062128	0.0227465	0.10151028	-0.004444	0.1287006	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	88	0.063207	0.02377643	0.10263702	-0.003447	0.1298607	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	89	0.054994	0.01516054	0.09482648	-0.012341	0.1223282	Sig.
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	90	0.035484	-0.004353	0.07532048	-0.031857	0.1028248	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	91	0.017049	-0.0227012	0.05679947	-0.050146	0.0842441	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	92	0.011306	-0.0280786	0.05069055	-0.055271	0.0778827	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	93	0.013487	-0.0260008	0.05297578	-0.053265	0.0802395	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	94	0.010785	-0.0287592	0.05032841	-0.056061	0.0776305	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	95	0.001821	-0.0381629	0.04180461	-0.065769	0.0694104	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	96	-0.00207	-0.0420557	0.03791426	-0.069662	0.0655209	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	97	0.005643	-0.0347769	0.04606352	-0.062684	0.0739707	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	98	0.016766	-0.0237235	0.05725567	-0.051679	0.0852107	ns

Table 3: Results of functional linear mixed modeling analyses

Model	Figure	Vapor Group	Covariate Effect	Beta Coeff	% DS Time	Beta Hat	CI Pointwise (Lower)	CI Pointwise (Upper)	CI Joint (Lower)	CI Joint (Upper)	Sig.
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	99	0.018268	-0.0228303	0.05936724	-0.051206	0.0877429	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	100	0.005964	-0.0337495	0.04567677	-0.061169	0.0730957	ns
VaporWD	8H [right]	Air + EtOH	Vapor X DSDuration	9	101	-0.01451	-0.0728247	0.0438124	-0.113089	0.084077	ns