



# ANEBULO

PHARMACEUTICALS

NASDAQ: ANEB

Inaugural R&D Day  
September 26, 2022



# Cautionary Note Regarding Forward-Looking Statements

## Forward-Looking Statements

Statements contained in this presentation that are not statements of historical fact are forward-looking statements as defined in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. In some cases, these forward-looking statements can be identified by words such as “anticipate,” “believe,” “designed,” “expect,” “intend,” “may,” “will,” “should” and other comparable terms. Forward-looking statements include statements regarding Anebulo’s intentions, beliefs, projections, outlook, analyses or current expectations regarding: market opportunities and growth in these markets; the PK/PD model we are developing in collaboration with MIDD and its expected design and capabilities; the potential of ANEB-001 to treat ACI; the planned observational study in ACI subjects in the emergency department setting and its expected benefits; statements related to the remainder of Part B of the Phase 2 study; the potential regulatory pathway for ANEB-001; our expectation that the pharmacology of ANEB-001 will support a single dose product; drug product manufacturing; and ANEB-001 parenteral product development. You are cautioned that any such forward-looking statements are not guarantees of future performance and are subject to a number of risks, uncertainties and assumptions, including, but not limited to: initial and interim results from clinical studies are not necessarily indicative of results that may be observed in the future; clinical trial site challenges that may impact the expected timing of Anebulo’s ongoing clinical trials, including challenges related to COVID-19; the timing and success of clinical trials and potential safety and other complications thereof; future supply or manufacturing issues; our ability to successfully commercialize and distribute ANEB-001, if approved; any negative effects on Anebulo’s business and product development plans caused by or associated with COVID-19 or geopolitical issues; and our need for additional capital. These and other risks are described in under the “Risk Factors” heading of Anebulo’s most recent annual report on Form 10-K filed with the Securities and Exchange Commission (SEC) on September 9, 2022. All forward-looking statements made in this presentation speak only as of the date of this presentation and are based on management’s assumptions and estimates as of such date. Except as required by law, Anebulo undertakes no obligation to update or revise forward-looking statements to reflect new information, future events, changed conditions or otherwise after the date of this presentation.

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# Today's Agenda

- Introduction: Dr. Joseph Lawler, MD, PhD, Chairman of the Board
- Corporate Overview: Simon Allen, Chief Executive Officer
- Clinical Program Highlights and Progress Updates: Dr. Ken Cundy, PhD, Chief Scientific Officer
- Q&A Session
- Concluding Remarks: Simon Allen, Chief Executive Officer

# Introductory Remarks

Dr. Joseph Lawler, MD, PhD, Founder and Chairman  
of the Board



Simon Allen, Chief Executive Officer



# Anebulo overview

- Biopharmaceutical company developing novel antidote for acute cannabinoid intoxication and, longer term, other indications related to abuse and addiction
- ANEB-001 has the potential to reverse the negative effects of acute cannabinoid intoxication within one hour of administration
  - Potent, small molecule CB1 antagonist with a high affinity for the human CB1 receptor
  - Positive topline (Part A) and interim (Part B) data comparing ANEB-001 to placebo in healthy subjects challenged with THC
  - Significant improvement in key symptoms of THC intoxication
  - Completed clinical trials demonstrate ANEB-001 is rapidly absorbed and well tolerated
- May 6, 2021 IPO raised gross proceeds of \$21 million



# Value highlights



## Potential to address unmet medical need to treat acute cannabinoid intoxication, a large and growing market

- No product is approved for this indication and no other compound is further along in clinical testing
- In 2019, ~1.7 million cannabinoid-related emergency department (ED) visits in the U.S., growing 15% annually
- Legalization of cannabis for medical and recreational use is driving intoxications and hospital ED visits



## ANEB-001 has a well-understood mechanism of action

- In-licensed from Vernalis/Ligand Pharmaceuticals
- Central effects of THC are CB1 mediated and ANEB-001 is a CB1 antagonist
- Rapidly absorbed, well tolerated and crosses the blood-brain barrier



## Rapid path to proof-of-concept

- Positive Phase 2 human proof-of-concept data (Part A complete, Part B continues)
- Study being conducted in the Netherlands (experienced with these type of trials)



## Capital-efficient business model

- Outsourcing clinical research and data management
- Exploring strategic collaborations for commercialization
- Rapid clinical trials matched with a lean corporate structure



# ANEB-001 for Acute Cannabinoid Intoxication



# Acute Cannabinoid Intoxication

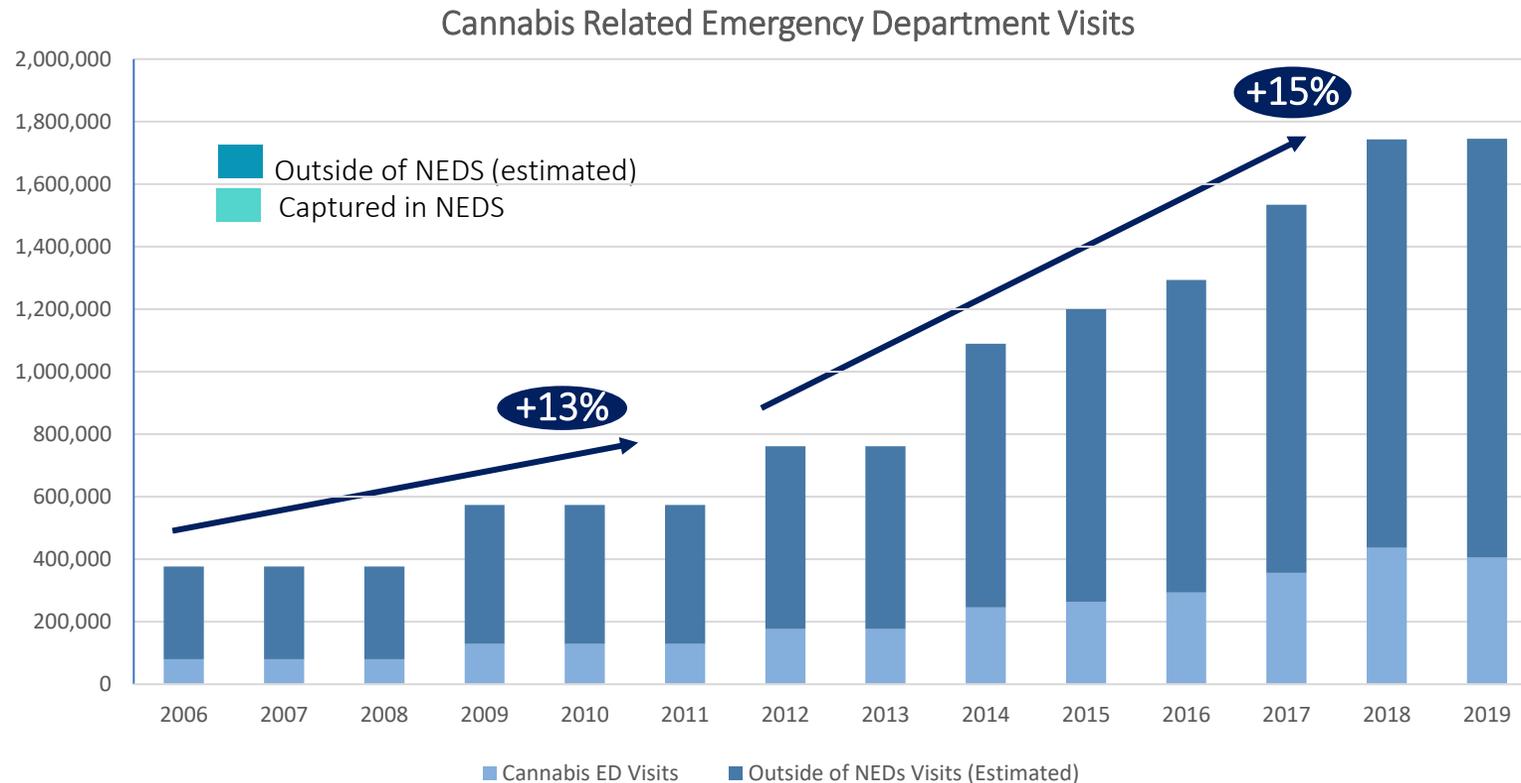
## Symptoms of Acute Cannabinoid Intoxication

- Over 140 million people use cannabis worldwide
- In U.S., decriminalization of marijuana by states has led to an increase in reports to poison control centers and in cannabis-related ED visits
  - Catalyzed by excessive use in adults and inadvertent ingestions in small children
  - Synthetic cannabinoids are the most abused synthetic drug and the second most abused drug among adolescents
- Duration of toxicity
  - Inhalation lasts 2-6 hours
  - Ingestion lasts approximately 8-12 hours
- Physiological effects include decreased systemic vascular resistance, elevated heart rate, decreased intraocular pressure, nystagmus, conjunctival injection, lethargy, decreased concentration and generalized psychomotor impairment
- Synthetic cannabinoid toxicity symptoms include sympathomimetic toxicity, psychosis and agitation, as well as seizures and sedation
- Severe cases have experienced hyperthermia, rhabdomyolysis and renal failure
- In children can lead to decreased muscle coordination, lethargy, seizures, dulled senses and death



# Number of cannabis-associated ED visits is large with accelerated growth

## Annual cannabis-associated ED visits in the U.S., 2006-2019



Growth of cannabis-associated emergency department visits has accelerated to a 15% CAGR since the first states legalized cannabis in 2012

We believe that **over 1.7M** ED visits in 2019 were associated with cannabis

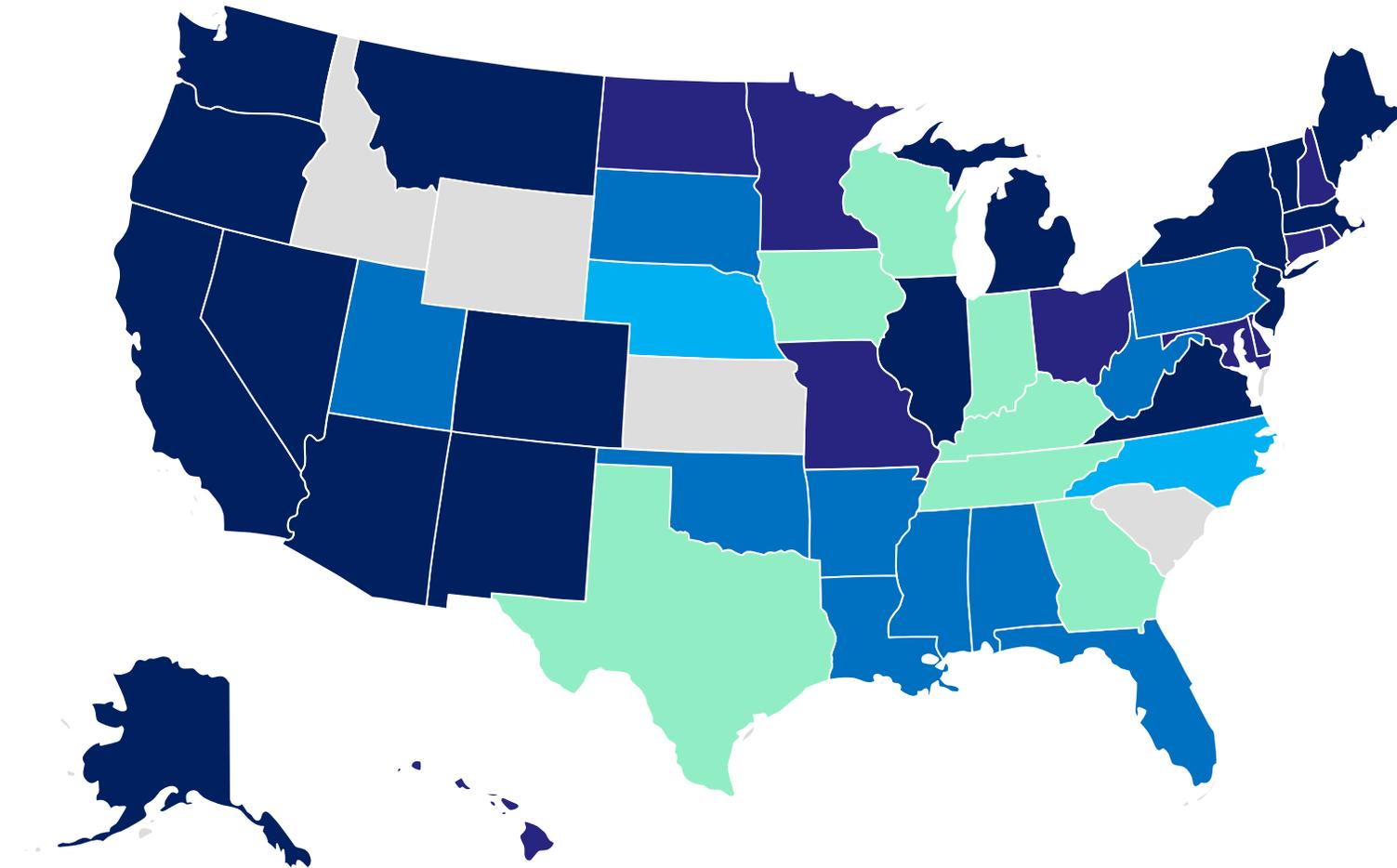
Note: Between 21% and 23% of all emergency department visits were captured by the National Emergency Department Sample (NEDS) in the years 2006-2014. The number of visits outside of the NEDS sample was extrapolated. Source for 2006-2014: Shen, J. J., Shan, G., Kim, P. C., Yoo, J. W., Dodge-Francis, C., & Lee, Y.-J. (2018). Trends and Related Factors of Cannabis-Associated Emergency Department Visits in the United States. Journal of Addiction Medicine, 1. doi:10.1097/adm.0000000000000479, Source for 2015-2018: Company analysis of NEDS database

# Marijuana legalization is increasing



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Legalized Medical and Decriminalized Medical Decriminalized CBD only Fully illegal



Since 2012, recreational marijuana has gone from legal in no states to legal in 19 states

Marijuana is legal for medical use in 37 states

# Potency of edibles tends to be deceiving

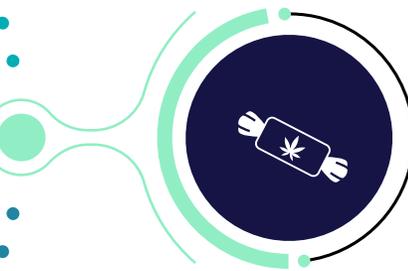


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Manufactured and packaged as familiar products to consumers, including candy bars or gummy snacks

- Consumers often approach cannabis edibles with the same serving size expectations as non-cannabis products
- Cannabis candy bar may contain 4x or more a safe dose of THC, much higher than a consumer may expect



Children are particularly vulnerable to intoxication given lower body mass and lack of awareness

- Poses a unique risk for pediatric exposure with brightly colored packaging and formulation into flavored candies and other sweets
- National Poison Data System call volumes increased 30% in pediatric-related calls in states post-legalization



Peak plasma THC concentrations occur in 3-10 minutes with inhalation versus 2-4 hours with ingestion

- Delayed reaction increases the risk of intoxication with edibles, particularly for inexperienced users
- Homemade edibles where dosing may be unexpectedly strong is another common cause of intoxication



# Promising potential solution for acute cannabinoid intoxication



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## ANEB-001

- **CB1 antagonist.** Blocks the effect of THC at the CB1 receptor. Well-understood pharmacology.
- **Oral bioavailability.** ANEB-001 is administered as an oral treatment in the form of a pill, capsule or tablet.
- **Rapid absorption.** ANEB-001 is believed to rapidly reverse the signs and symptoms of acute cannabinoid intoxication in as little as 1 hour.
- **Low likelihood of drug-drug interactions.** Preclinical testing demonstrated that ANEB-001 did not inhibit the metabolic cytochromes 1A2, 2C9, 2C19, 2D6 and 3A4 at pharmacologically relevant concentrations.
- **Differentiated treatment option.** Not aware of any competing products to reverse the symptoms of acute cannabinoid intoxication that are further along in the development process than ANEB-001.



# Well-understood pharmacology



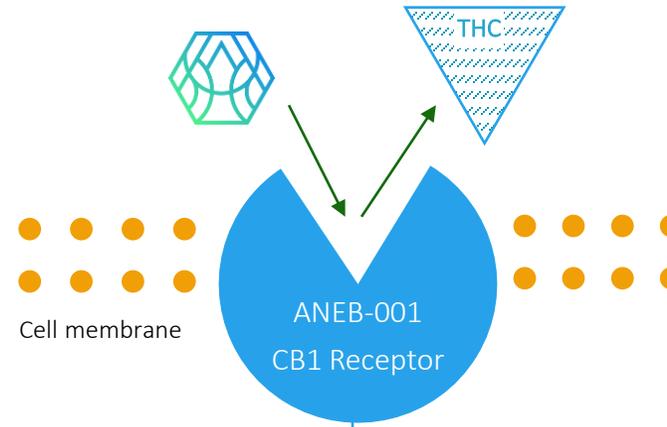
## Potential Effects

Feeling high

Reduction in alertness

Body Sway

Tachycardia



## Potential Effects

Decrease in feeling high

Inhibit reduction in alertness

Reduction of body sway

Normalization of heartbeat

ANEB-001 is a competitive antagonist at the human CB1 receptor with an affinity of 0.6nM

Good bioavailability and brain penetration (brain:plasma ratio = 1.5)

Antagonizes THC-induced hypolocomotion in mice, a CB1 receptor-mediated response

# Phase 2 proof-of-concept trial design

- N = up to 150 subjects
  - Part A included 60 subjects, 20 healthy volunteers (HV) randomized to 50mg and 100mg doses of ANEB-001 or placebo
  - Ongoing Part B expected to include 6 cohorts of 15 healthy subjects (10 active and 5 placebo) evaluating lower doses of ANEB-001 in healthy subjects that are challenged with higher doses of THC
  - Part B to explore delayed dosing to better understand real-world conditions
- Endpoints:
  - 1° inhibition of primary central nervous system effect of THC
    - o Visual analogue scale “Feeling High,” visual analogue scale “Alertness,” body sway, heart rate
  - 2° additional efficacy metrics, PK, safety/tolerability, PK/PD correlation



# ANEB-001: Next Steps

## Development

- Continue Part B to explore lower ANEB-001 doses and higher THC challenge doses
- Discussions ongoing with FDA's Model-Informed Drug Development team
- Preparation for a US observational study in ACI subjects to support PK/PD model development and dose selection

## Commercial

- Continued market analysis
  - Competitive landscape / Target Product Profile
  - Evolving commercial opportunity
- Expand IP position
- Explore different routes of administration and Animal Health / Canine ACI

# Development plan

H1 CY22  
Readout



## Proof of-Concept

- Phase 2 study at single site in Netherlands
- Up to 150 healthy volunteers
- THC + doses of ANEB-001 or placebo



## Pivotal Program

- FDA pre-IND meeting provided valuable guidance on U.S. regulatory path



## New Drug Application

- Exploration of strategic options for rights outside of the U.S.



## Intellectual Property Portfolio

- Method of use patent
  - Issued October 2021
  - Protection through 2040
- Strategy to enhance IP portfolio



Lifecycle management

# In summary



Addressing unmet medical need in a large and growing market, with acute cannabinoid intoxication becoming an increasingly widespread health issue



ANEB-001 has a well-understood mechanism of action as a CB1 antagonist



Phase 2 proof-of-concept study continues  
Part A Complete, Part B ongoing



Capital-efficient business model

# ANEB-001 Development Update

Dr. Ken Cundy, PhD, Chief Scientific Officer



# ANEB-001 Clinical Development for ACI - Update

**Phase 2 Part A Proof of Concept:** New PK data, additional post-hoc efficacy data

**Ongoing Phase 2 Part B Extension:** 2 cohorts completed - interim PK/PD/safety update

**Plans for Completion of Part B:** Cohort 3 initiated – 6 cohorts total for PK/PD modeling

**Regulatory Update:** Discussions ongoing with FDA/MIDD

**Planned First US Clinical Study:** Observational study in ACI patients

**Path to Potential Approval:** To be finalized after Phase 2 study is completed

**Parenteral Product:** Prototype formulations in development for preclinical testing

# ANEB-001 Development for ACI: Background



- Potent CB1 receptor antagonist
- Oral bioavailability and half-life expected to support single dose product
- Extensive Phase 1 PK data from previous development studies



- More than 140 subjects have been dosed with oral ANEB-001 to date: 80+ in Phase 1 and 50+ in Phase 2
- Well tolerated after dosing for up to 4 weeks in Phase 1 - no serious AEs
- All Phase 2 Part A adverse events mild and transient except one case of moderate nausea/vomiting



- Positive proof of concept data in Phase 2 Part A THC challenge study
- Substantial reduction in feeling high, reduction in THC-induced effects on body sway/heart rate
- Improved alertness
- Data supported testing lower doses of ANEB-001 and a higher dose of THC

# ANEB-001 Phase 2 Proof of Concept Clinical Trial

- Study Title:** A randomized, double-blind, placebo-controlled study to assess the safety, tolerability, pharmacokinetics and pharmacodynamics of single oral doses of CB1 antagonist ANEB-001 in healthy occasional cannabis users
- Primary Objective:** To investigate the ability of ANEB-001 to inhibit the psychotropic effects of  $\Delta$ 9-Tetrahydrocannabinol (THC), the main psychoactive constituent of cannabis.
- Study Design:** Randomized, double-blind, placebo-controlled study in two parts. Healthy subjects challenged with an oral dose of THC and treated with ANEB-001.
- Part A:** Proof of concept – **completed, positive topline data released**
- Part B:** Extension of dose selection – **ongoing (first 2 cohorts completed and third initiated)**
- Study Site:** Center for Human Drug Research (CHDR), Leiden, Netherlands
- Clinicaltrials.gov:** NCT05282797

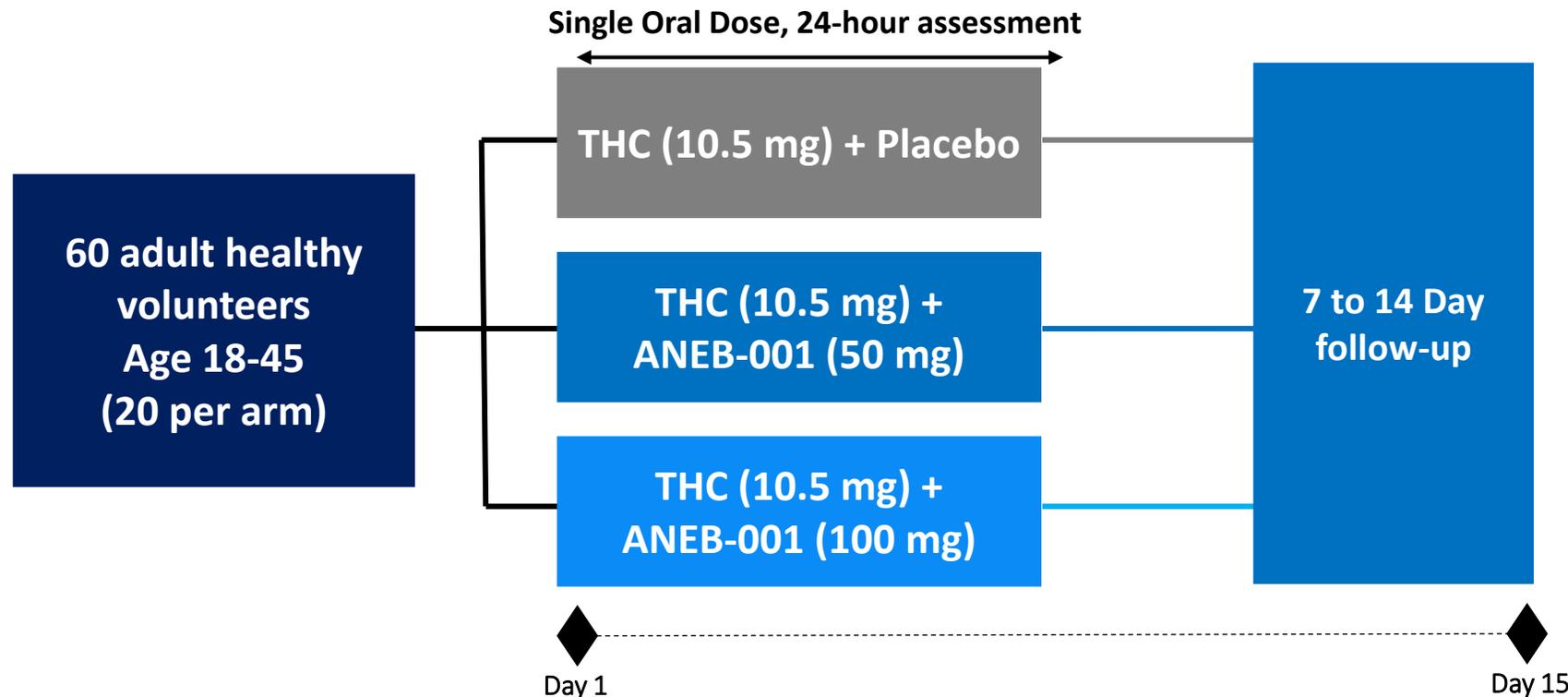


# ANEB-001: Clinical Trial Design – Part A Challenge Study

**Primary Objective:** To investigate the ability of ANEB-001 to inhibit the psychotropic effects of  $\Delta$ 9-Tetrahydrocannabinol (THC), the main psychoactive constituent of cannabis.

## Randomized, double-blind, placebo-controlled study

Single Oral Dose, 24-hour assessment



## Endpoints:

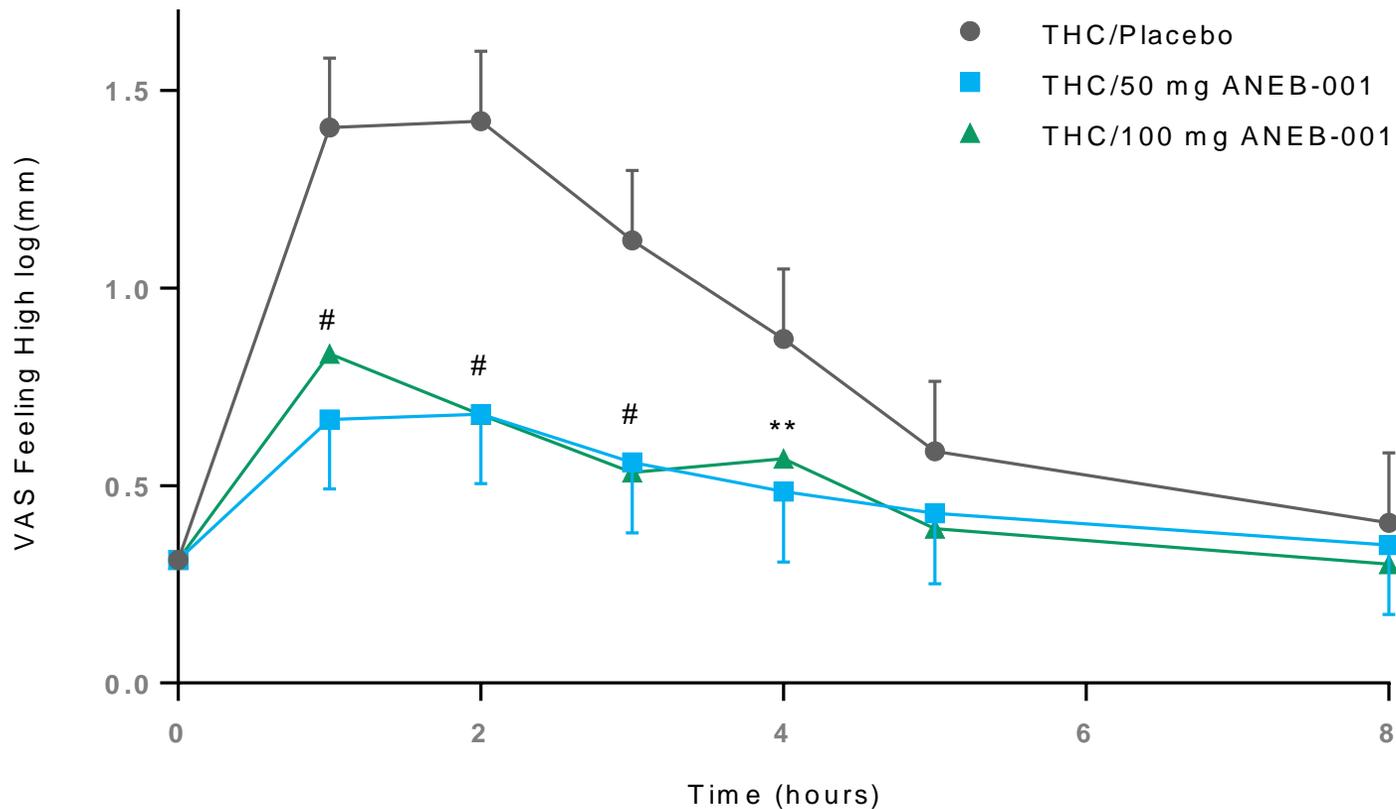
Primary: inhibition of central nervous system effects of THC

- Visual analog scale “Feeling High”
- Visual analog scale “Alertness”
- Body sway
- Heart rate

Secondary: additional efficacy metrics, safety/tolerability, PK, PK/PD correlations

# ANEB-001: Produced Sustained Reduction of Feeling High

## Time Course of VAS Feeling High



- Administration of 10.5 mg oral THC alone produced a substantial increase in the VAS feeling high score
- Coadministration of THC with ANEB-001 led to a substantial reduction in feeling high compared to THC alone (overall  $p < 0.0001$ )
- The effect of ANEB-001 in reducing feeling high was sustained for the duration of the THC effect
- The 50 mg dose of ANEB-001 was as effective as the 100 mg dose

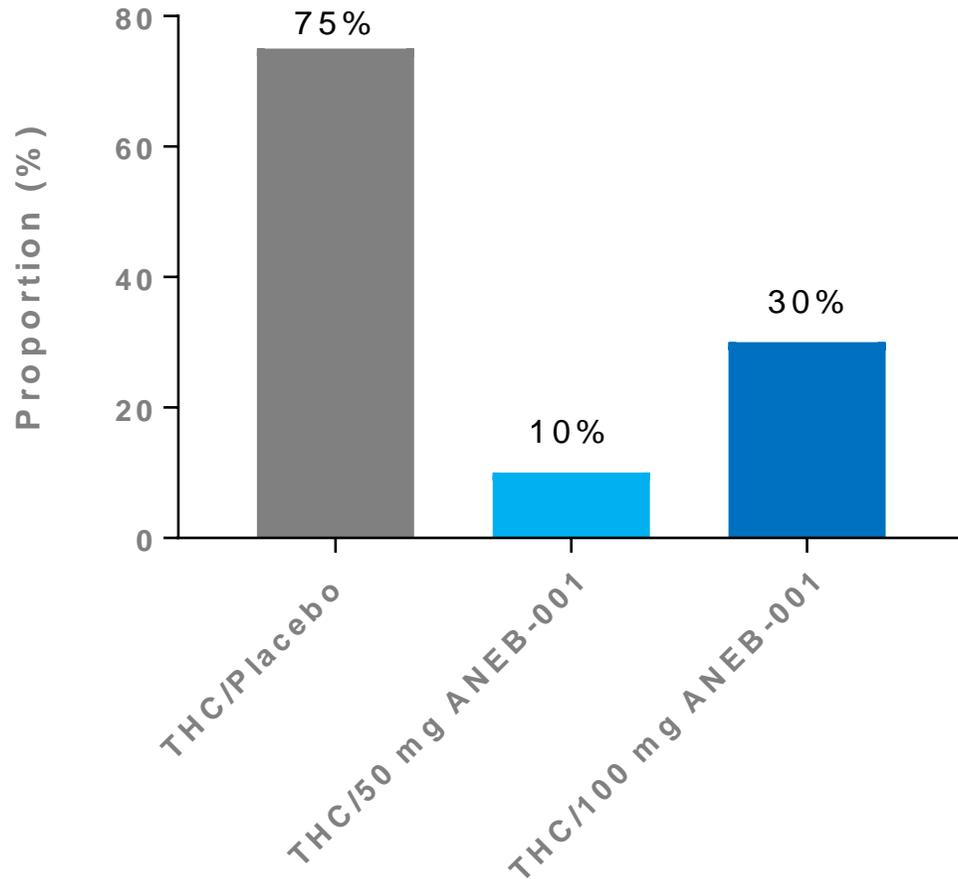
Data are least squares mean, 95% CI

#  $p < 0.0001$  for both dose levels

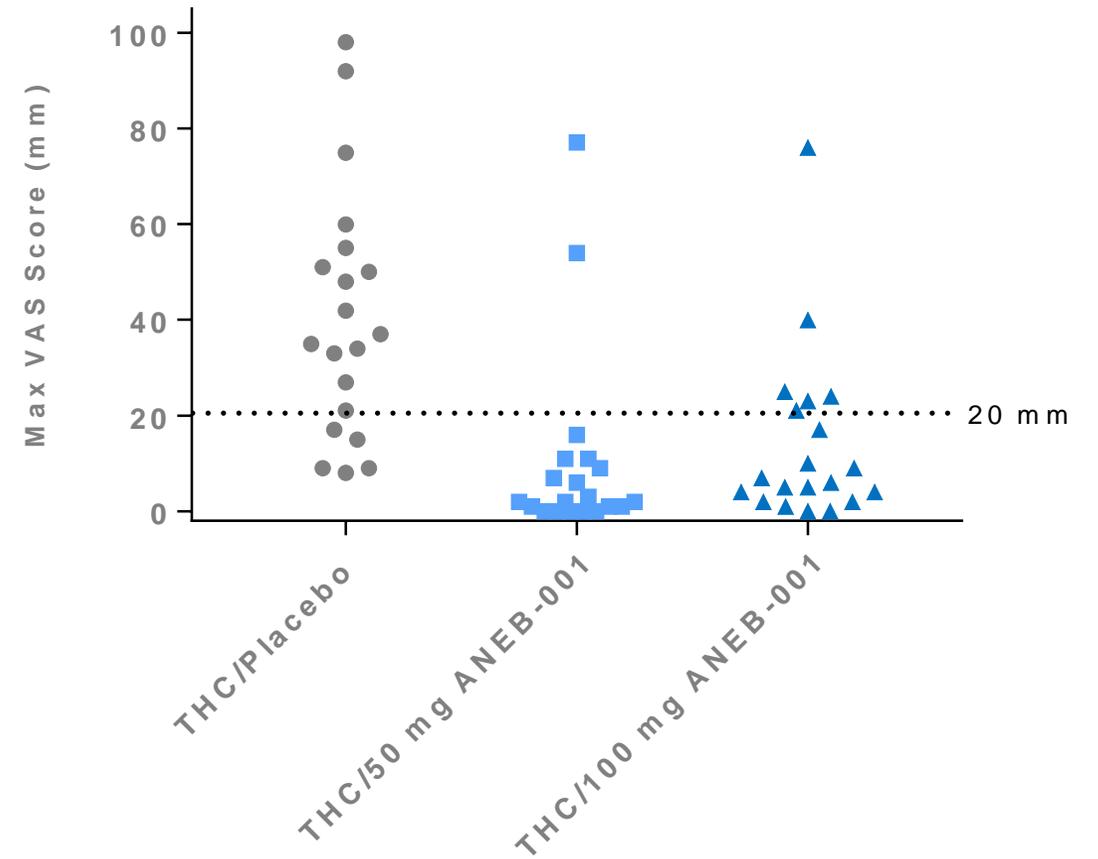
\*\* $p < 0.01$  for 50 mg,  $p < 0.05$  for 100 mg

# ANEB-001: Subjects Feeling High (VAS 20 mm)

Proportion of Subjects Reporting Feeling High\*



Maximum VAS Feeling High Scores (mm)

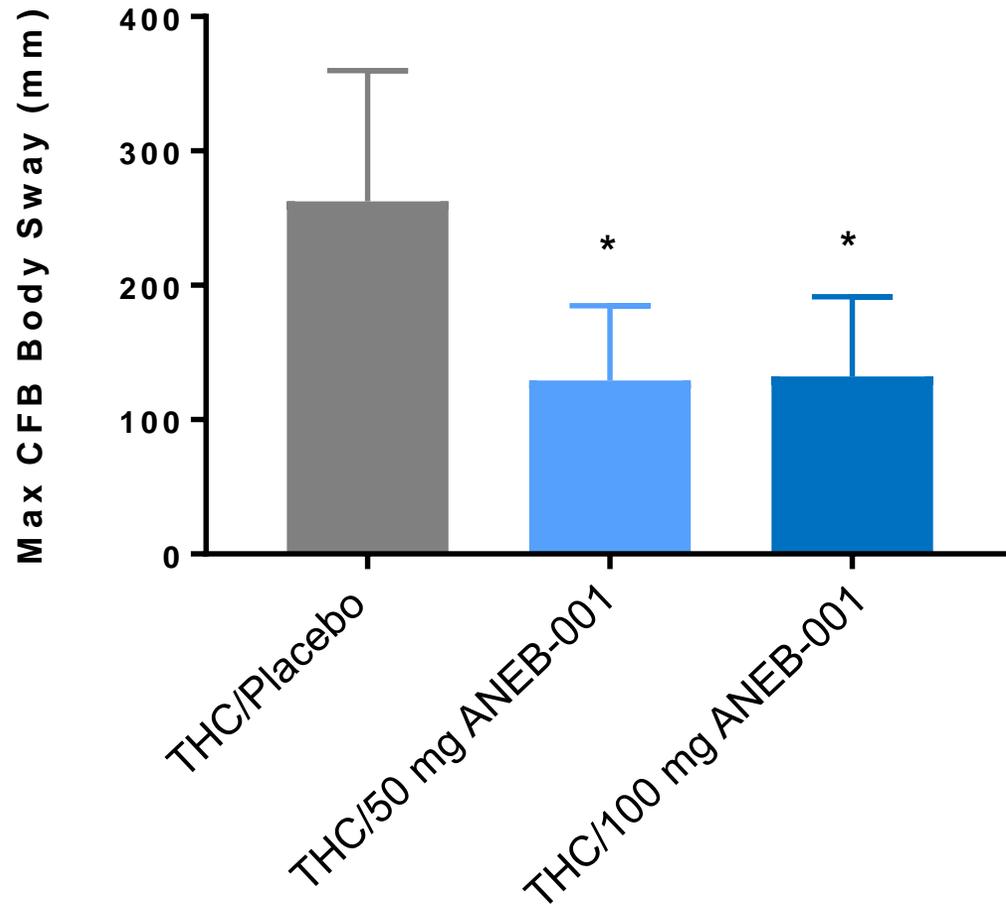


\* Maximum VAS recorded during study > 20 mm (pre-specified cut-off)



# ANEB-001 Reduced THC-Induced Body Sway

## Maximum Change from Baseline in Body Sway



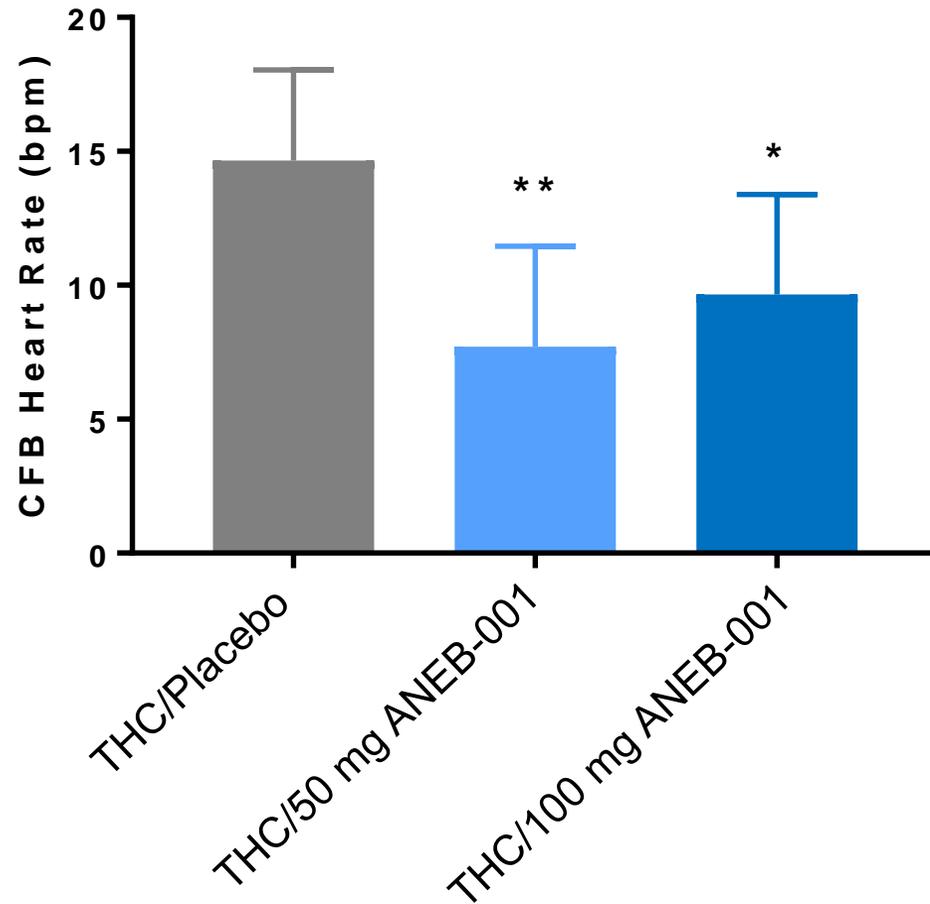
- Administration of 10.5 mg oral THC alone produced an increase in body sway over 8 hours
- ANEB-001 showed a significant reduction in the maximum change from baseline for body sway
- The 50 mg dose of ANEB-001 produced a similar effect to the 100 mg dose

Data are mean, 95% CI

\*p <0.05, unpaired t-test

# ANEB-001 Reduced THC-Induced Heart Rate Increase

## Maximum Change from Baseline in Heart Rate

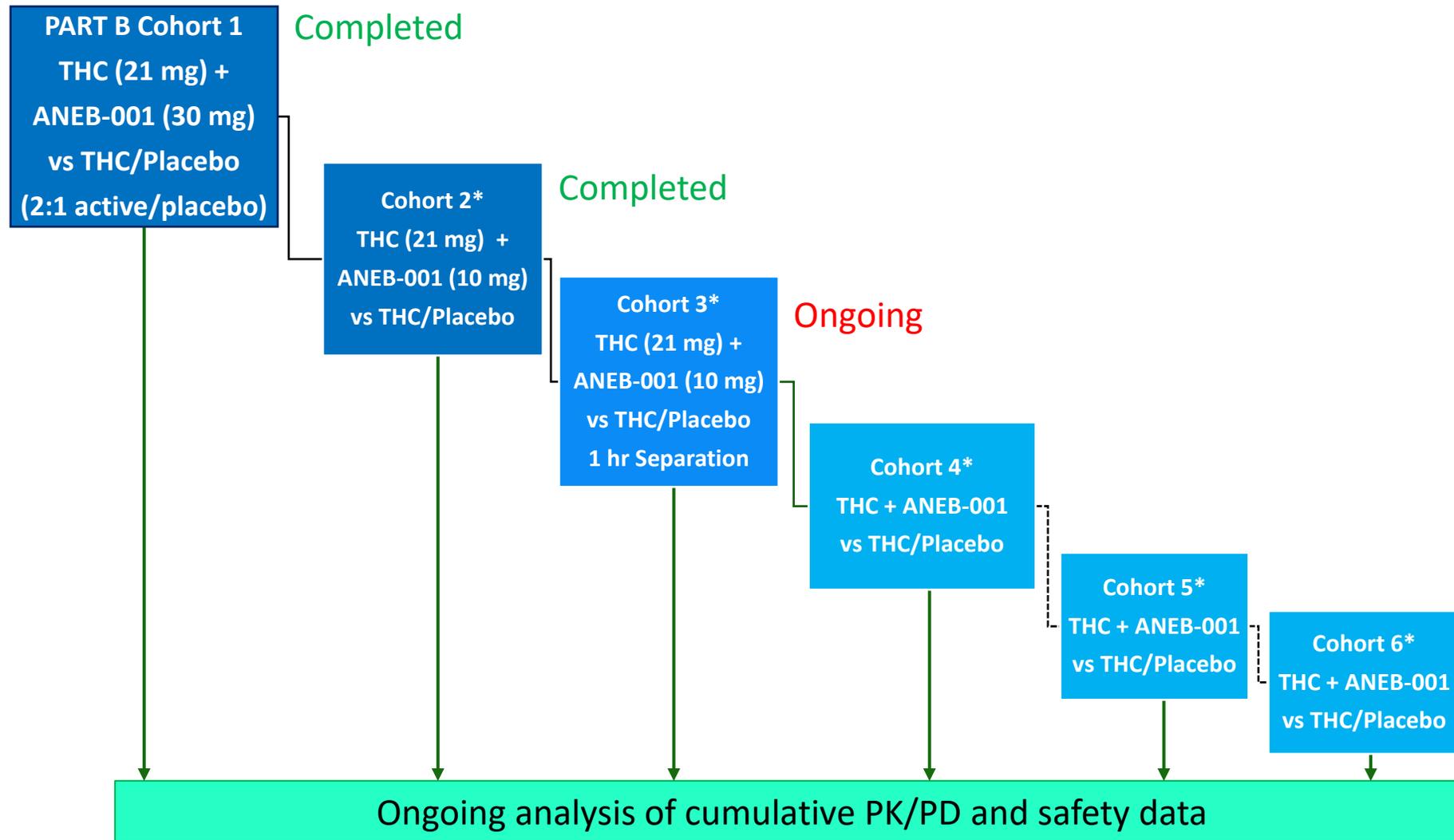


- Administration of 10.5 mg oral THC alone produced an increase in heart rate
- ANEB-001 showed a significant reduction in the maximum change from baseline for heart rate
- The 50 mg dose of ANEB-001 produced a similar effect to the 100 mg dose

Data are mean, 95% CI

\*p < 0.05, unpaired t-test; \*\*p < 0.01, unpaired t-test

# Phase 2 (Part B) Adaptive Study Design



\*Iterative decisions on dose levels in subsequent cohorts driven by emerging data. Cohorts of up to 15 (2:1 active/placebo)

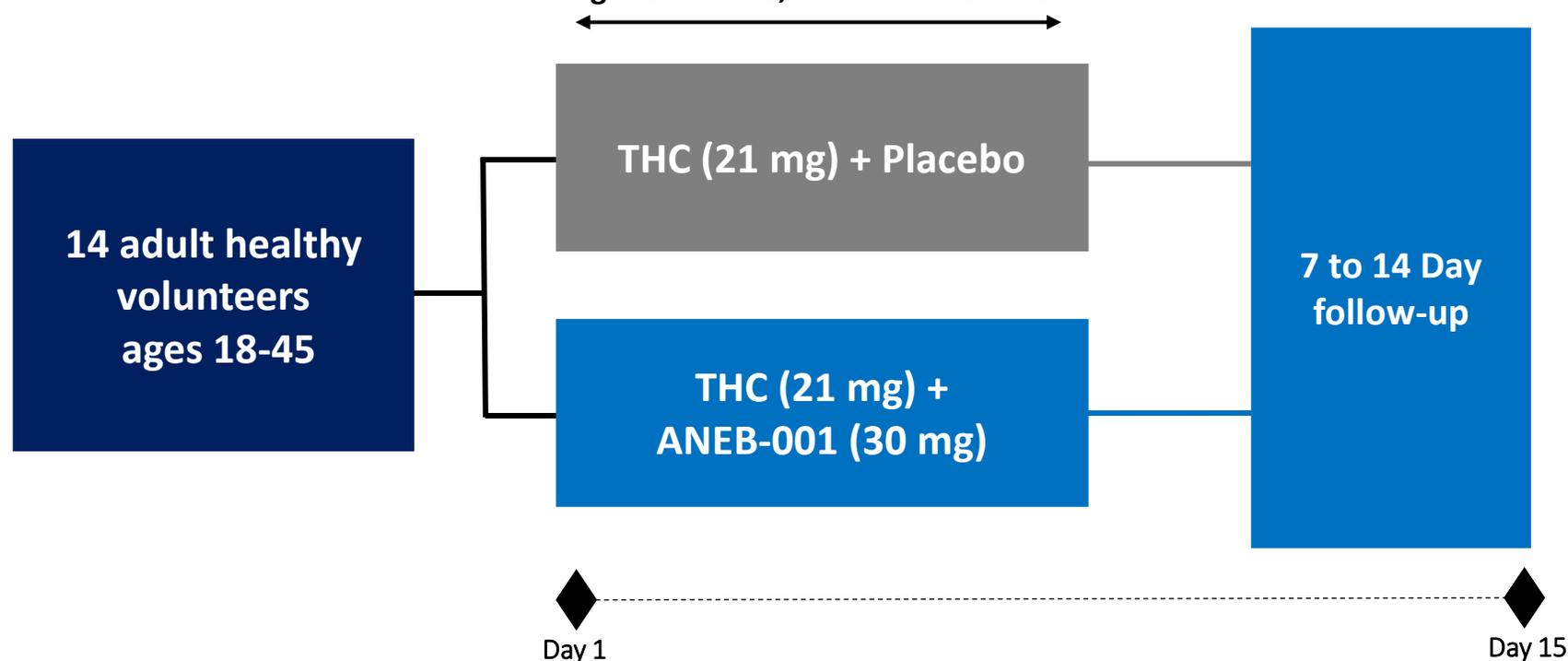


# Part B Cohort 1 – Study Design

**Primary Objective:** To investigate the ability of ANEB-001 to inhibit the psychotropic effects of  $\Delta$ 9-Tetrahydrocannabinol (THC), the main psychoactive constituent of cannabis.

## Randomized, double-blind, placebo-controlled study

Single Oral Dose, 24-hour assessment



## Endpoints:

Primary: inhibition of central nervous system effects of THC

- Visual analog scale “Feeling High”
- Visual analog scale “Alertness”
- Body sway
- Heart rate

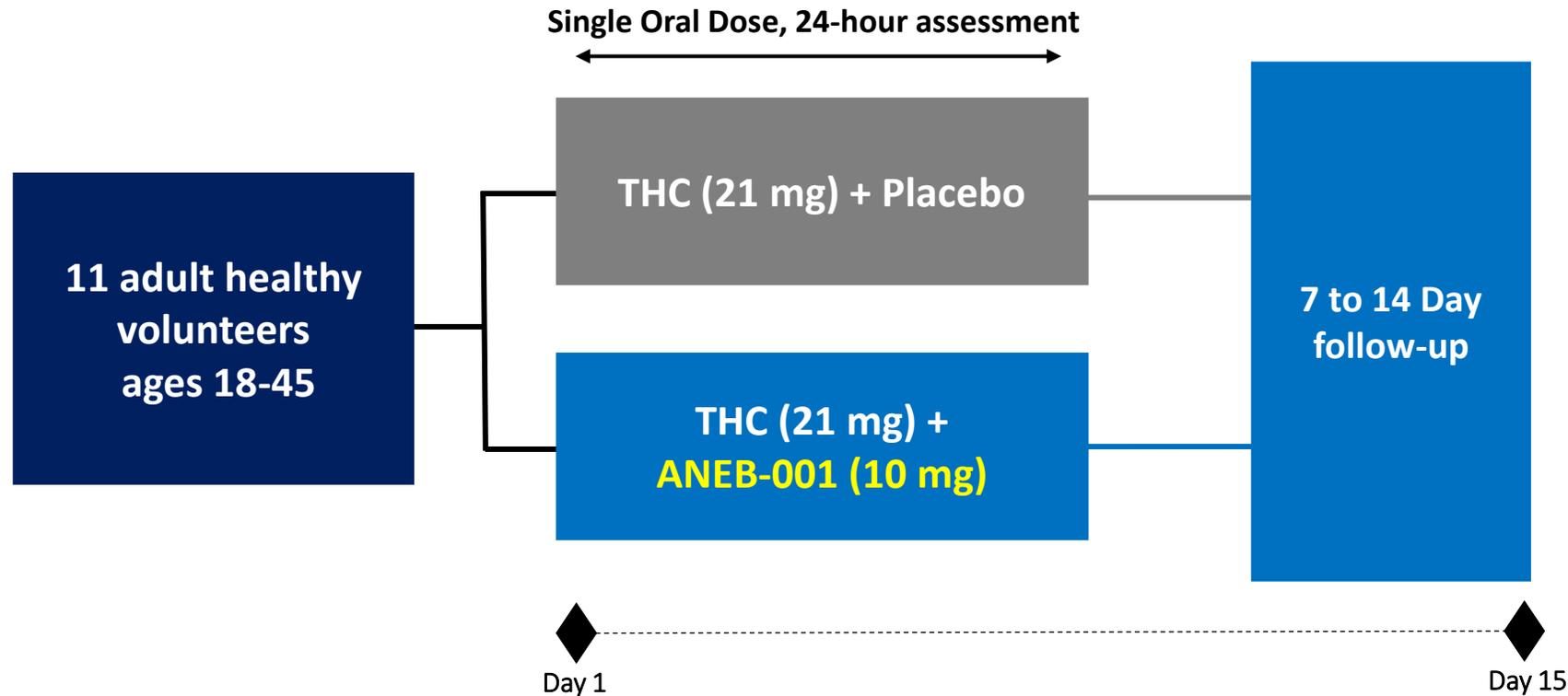
Secondary: additional efficacy metrics, safety/tolerability, PK, PK/PD correlations

# Part B Cohort 2 – Study Design

**Primary Objective:** To investigate the ability of ANEB-001 to inhibit the psychotropic effects of  $\Delta$ 9-Tetrahydrocannabinol (THC), the main psychoactive constituent of cannabis.

## Randomized, double-blind, placebo-controlled study

Single Oral Dose, 24-hour assessment



## Endpoints:

Primary: inhibition of central nervous system effects of THC

- Visual analog scale “Feeling High”
- Visual analog scale “Alertness”
- Body sway
- Heart rate

Secondary: additional efficacy metrics, safety/tolerability, PK, PK/PD correlations

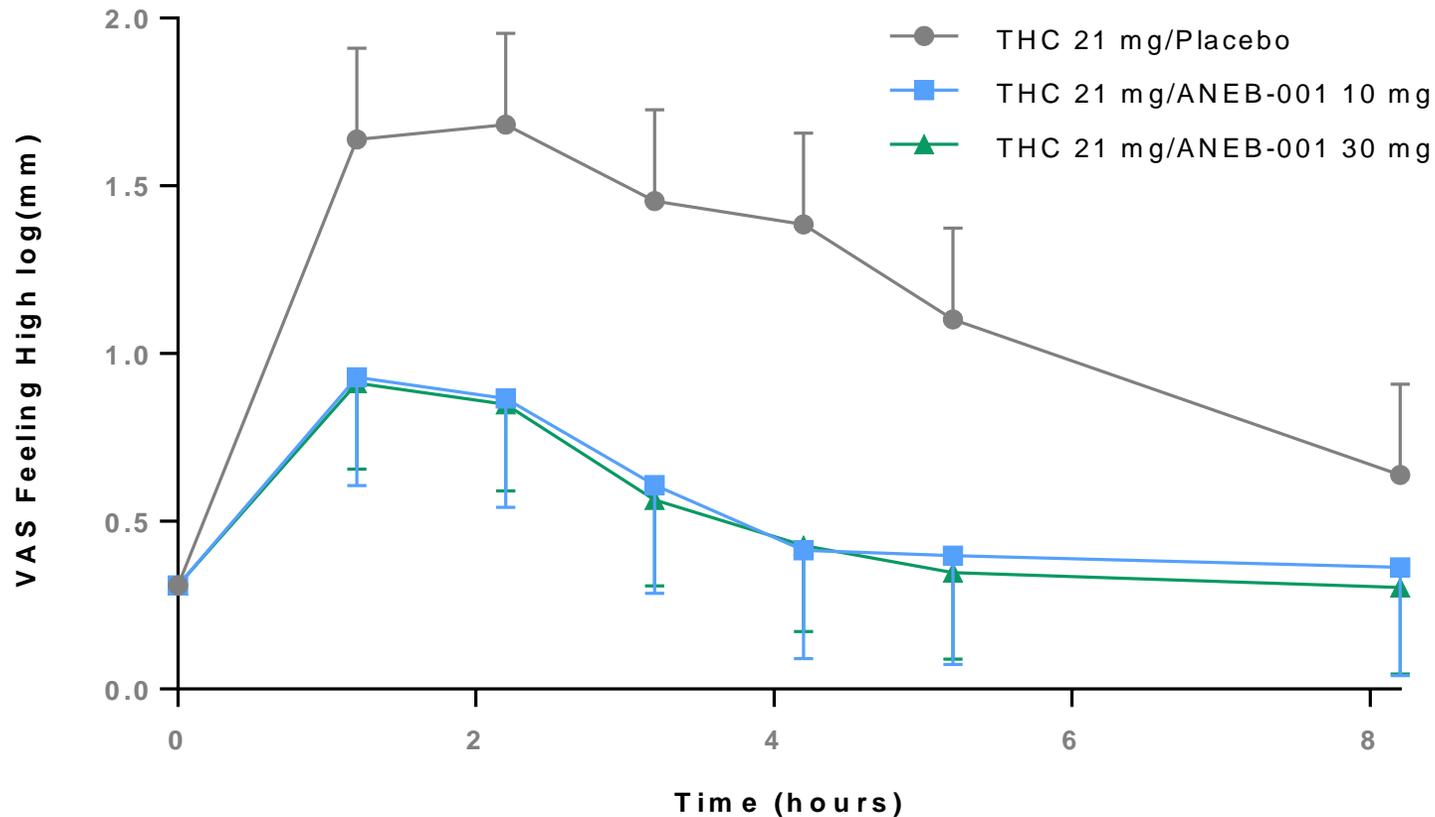
# Part B Cohorts 1 and 2 - Interim Data Update

## Available Interim data:

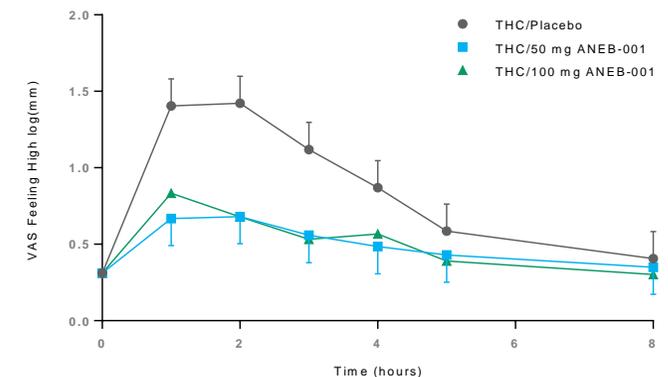
- Blinded safety data
- Primary PD data (VAS feeling high, VAS alertness, body sway, heart rate) by treatment group with statistical analysis
- Placebo data for the first two cohorts (21 mg THC) were pooled for the analysis
- PK data for ANEB-001 and THC in plasma
- PD analysis of relationship between THC dose and maximum VAS feeling high
- Impact of ANEB-001 on the THC dose response for VAS feeling high

# Part B Cohort 1 & 2 Preliminary Data - Effect on Feeling High

## Time Course of VAS Feeling High



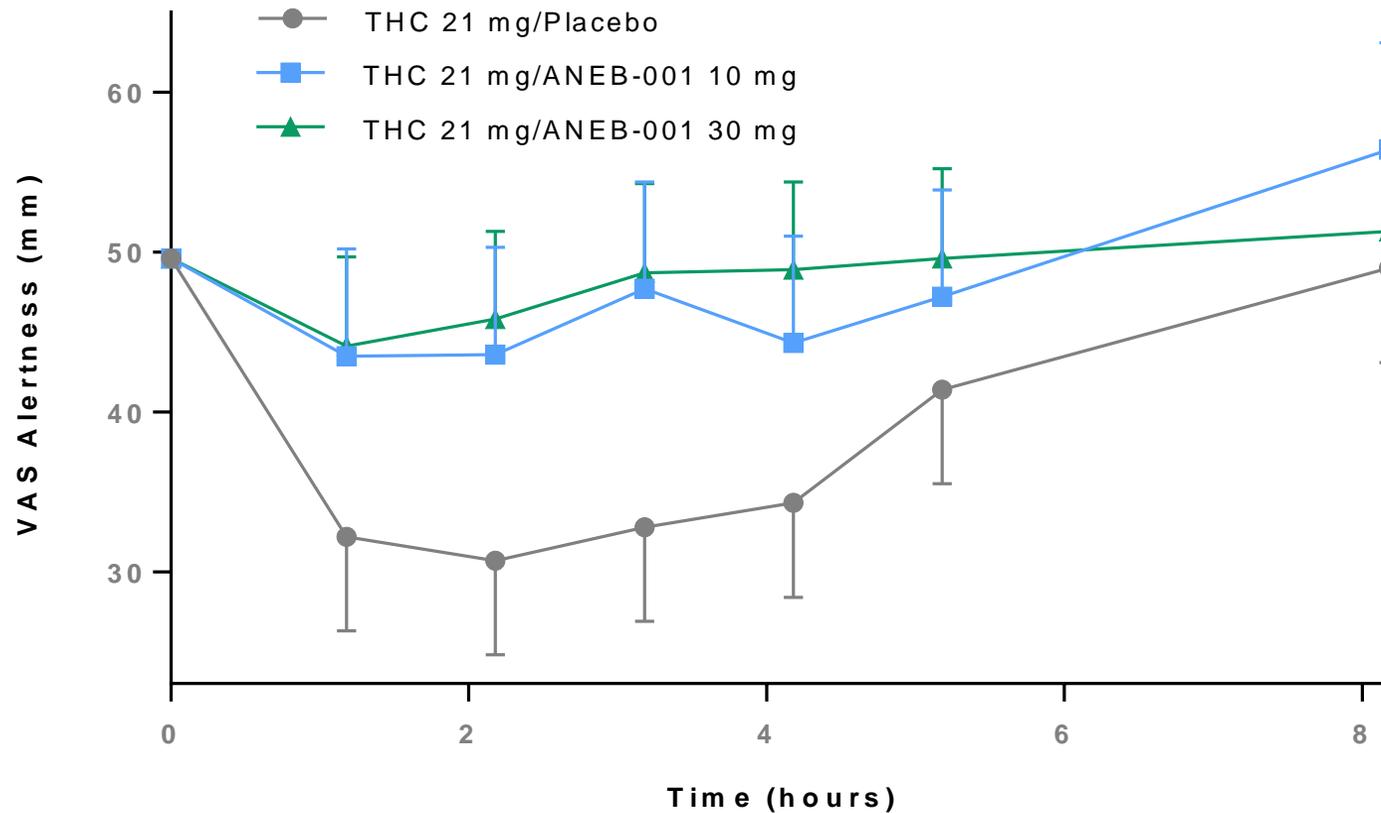
- Oral administration of 21 mg THC alone produced a substantial increase in the VAS feeling high score
- Coadministration of THC with 10 mg or 30 mg ANEB-001 led to a substantial reduction in feeling high versus THC alone ( $p < 0.001$ )
- Effect of 10 mg ANEB-001 equivalent to 30 mg dose and comparable to the prior 50/100 mg data despite doubling the THC dose



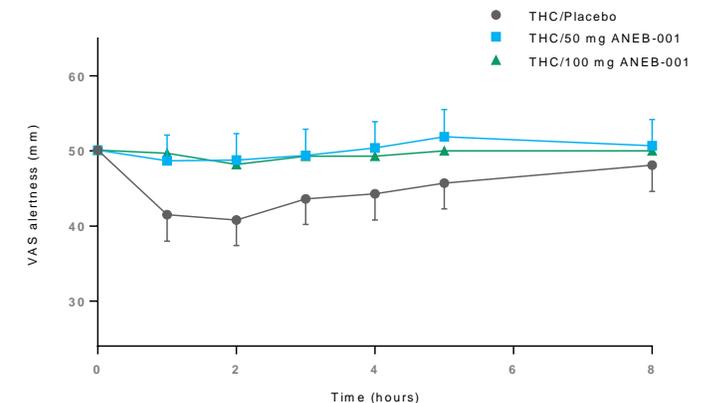
Data are least squares mean, 95% CI

# Part B Cohort 1 & 2 Preliminary Data - Effect on Alertness

## Time Course of VAS Alertness



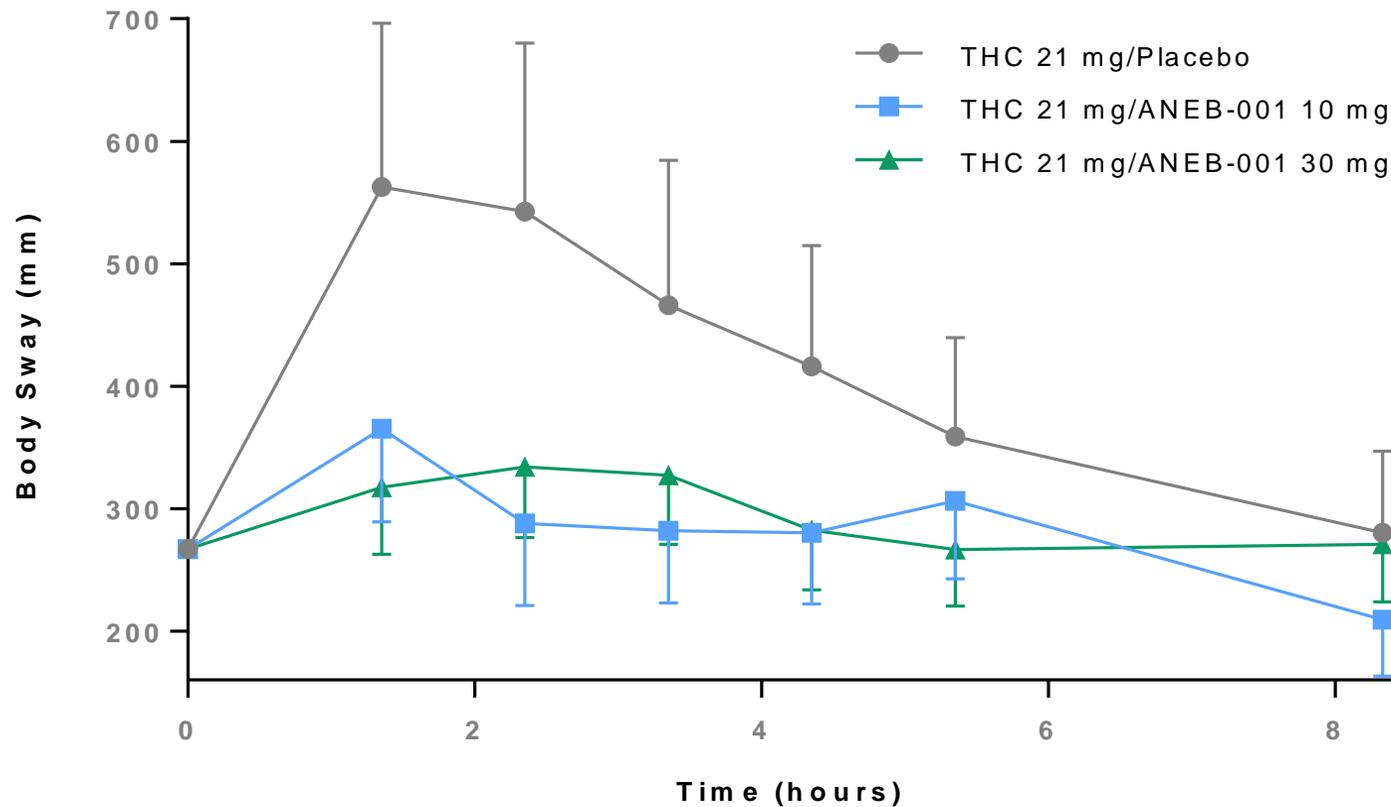
- Oral administration of 21 mg THC alone produced a substantial decrease in VAS alertness score
- Coadministration of THC with 10 mg or 30 mg ANEB-001 blocked the change compared to THC alone ( $p < 0.01$ )
- Effect of 10 mg ANEB-001 equivalent to 30 mg dose and comparable to the prior 50/100 mg data despite doubling the THC dose



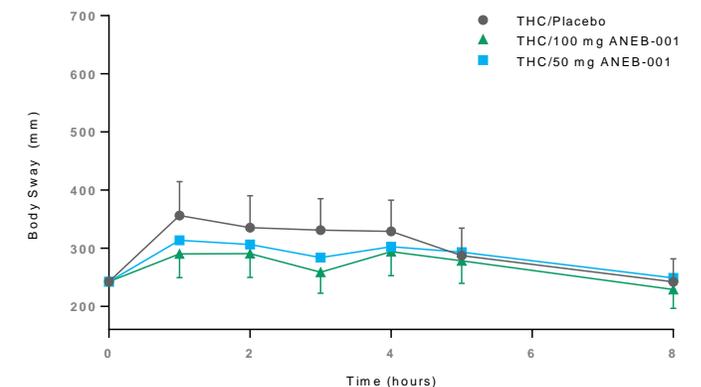
Data are least squares mean, 95% CI

# Part B Cohort 1 & 2 Preliminary Data - Effect on Body Sway

## Time Course of Body Sway

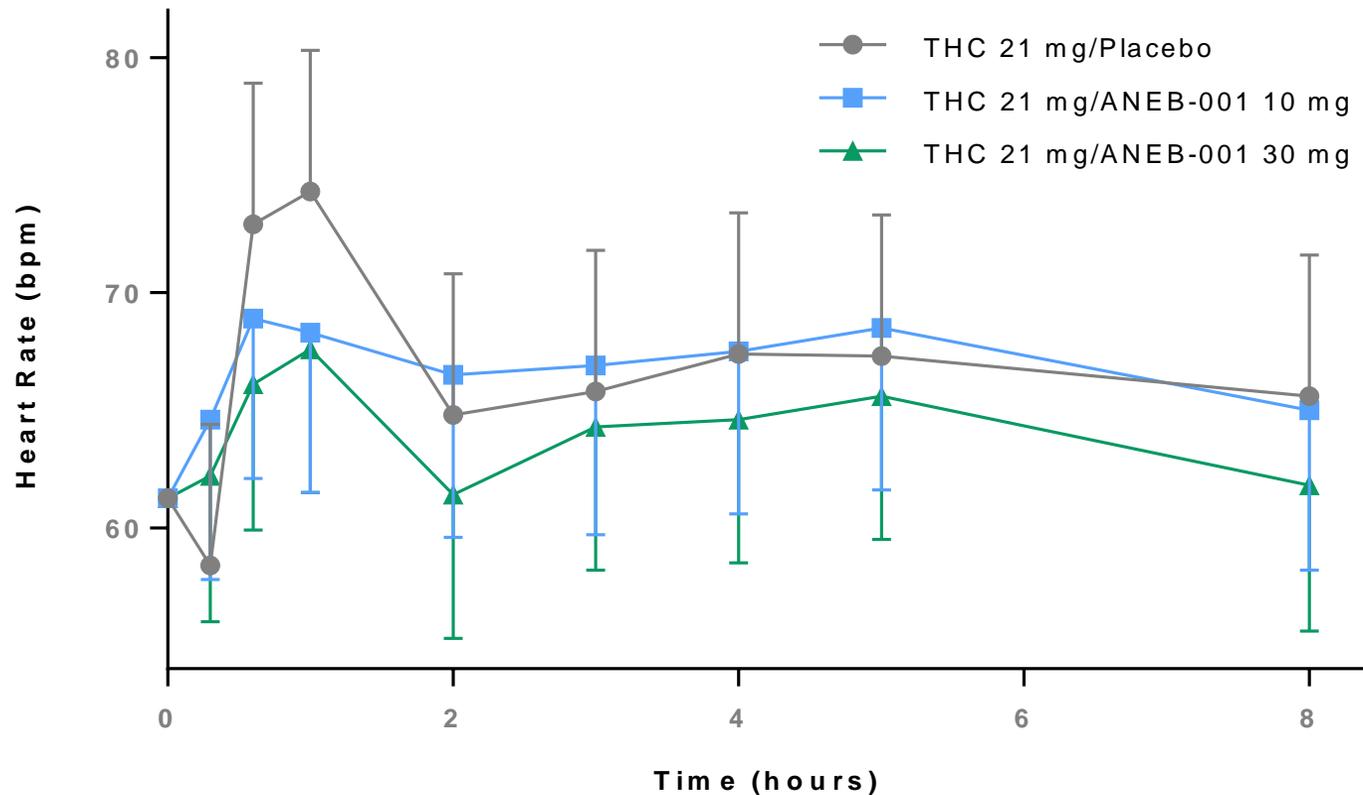


- Administration of 21 mg THC alone produced an increase in body sway, and 2 subjects were too dizzy to perform the test
- Coadministration of THC with ANEB-001 showed a significant reduction in mean body sway ( $p < 0.01$ )
- Effect of 10 mg ANEB-001 equivalent to 30 mg dose and comparable to the prior 50/100 mg data despite doubling the THC dose

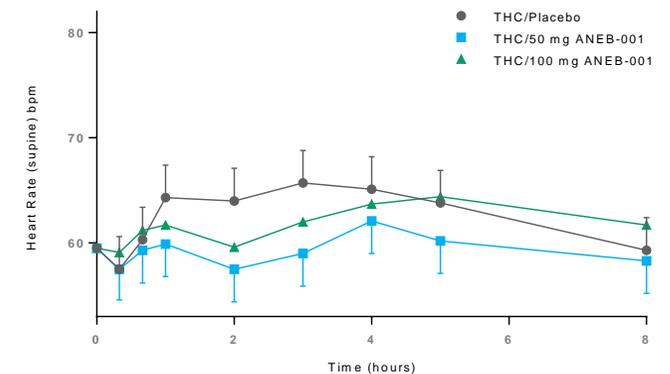


# Part B Cohort 1 & 2 Preliminary Data - Effect on Heart Rate

## Time Course of Heart Rate



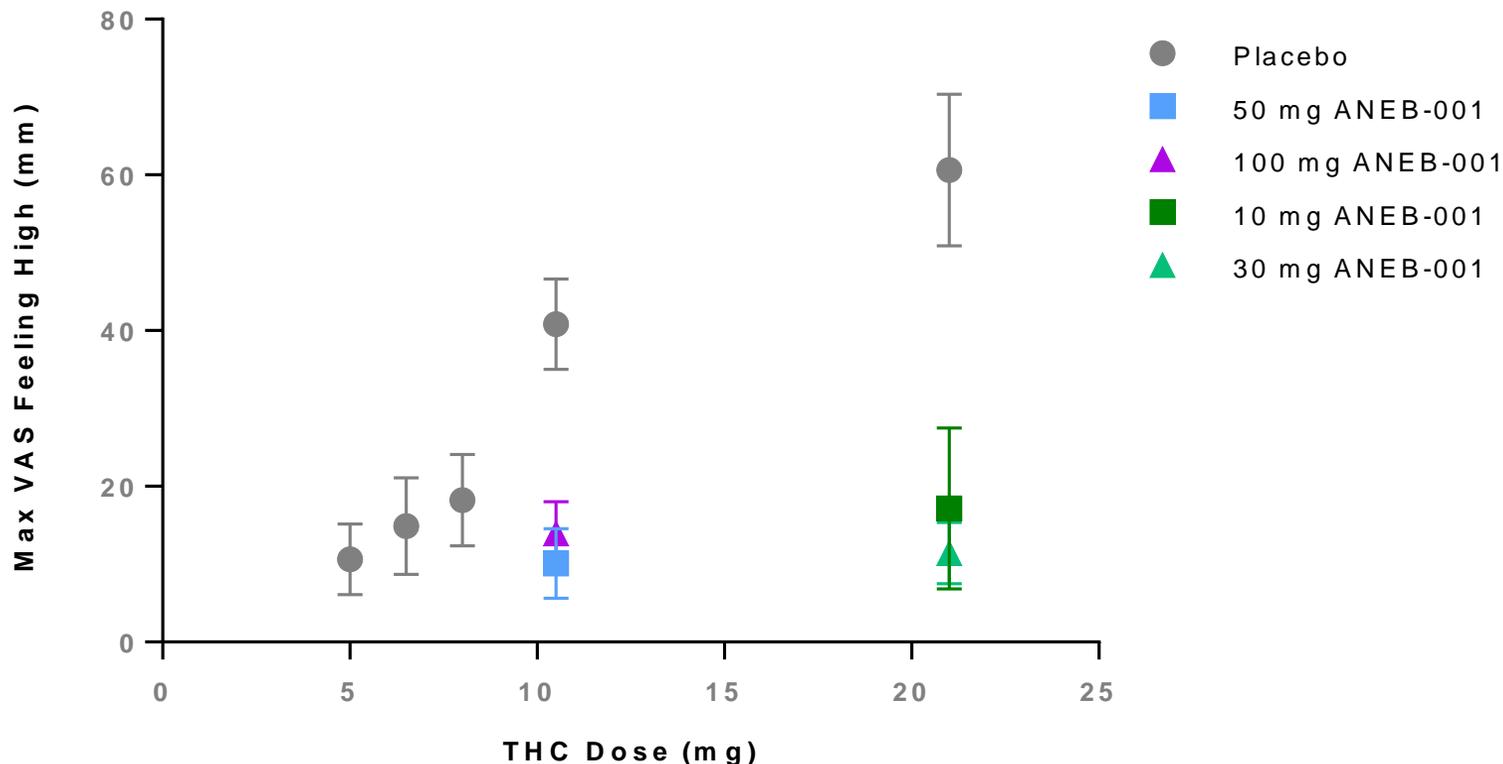
- Administration of 21 mg THC alone had only a minor effect on heart rate
- Coadministration of THC with ANEB-001 showed a trend towards normalization of heart rate
- The 10 mg dose of ANEB-001 was as effective as the 30 mg dose



Data are least squares mean, 95% CI

# Effect of THC Dose on Feeling High

## Maximum VAS Feeling High Score vs. THC Dose



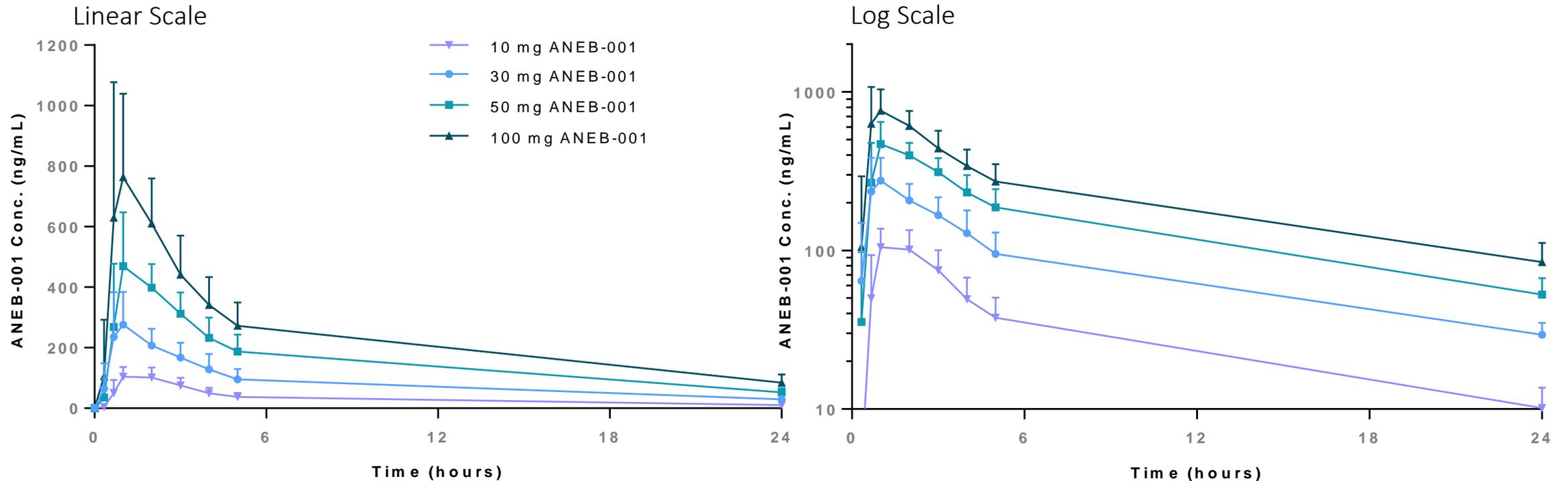
Values are mean (SEM)

- Plot compares PD data from THC Challenge studies: Part A, Part B Cohorts 1 and 2, and published data for THC challenge at lower doses<sup>1</sup>
- Clear dose response for THC/placebo – increased feeling high with increasing THC dose
- 100% of subjects given 21 mg THC and placebo were high (>20 mm VAS score) vs. only one subject in each of the 10 mg and 30 mg ANEB-001 groups
- All ANEB-001 doses effective in reducing the THC effect on feeling high
- The 10 mg ANEB-001 was as effective as higher doses in reducing VAS feeling high despite the higher 21 mg THC dose
- Confirms potent effect of ANEB-001 on CB1 receptor

<sup>1</sup>Source: Klumpers LK et al, Br J Clin Pharmacol 2012 Jul;74(1):42-53.

# Phase 2 Part A and Part B Interim Data: PK of ANEB-001

## Pharmacokinetics of ANEB-001 in Plasma of Subjects Challenged with THC<sup>1</sup>

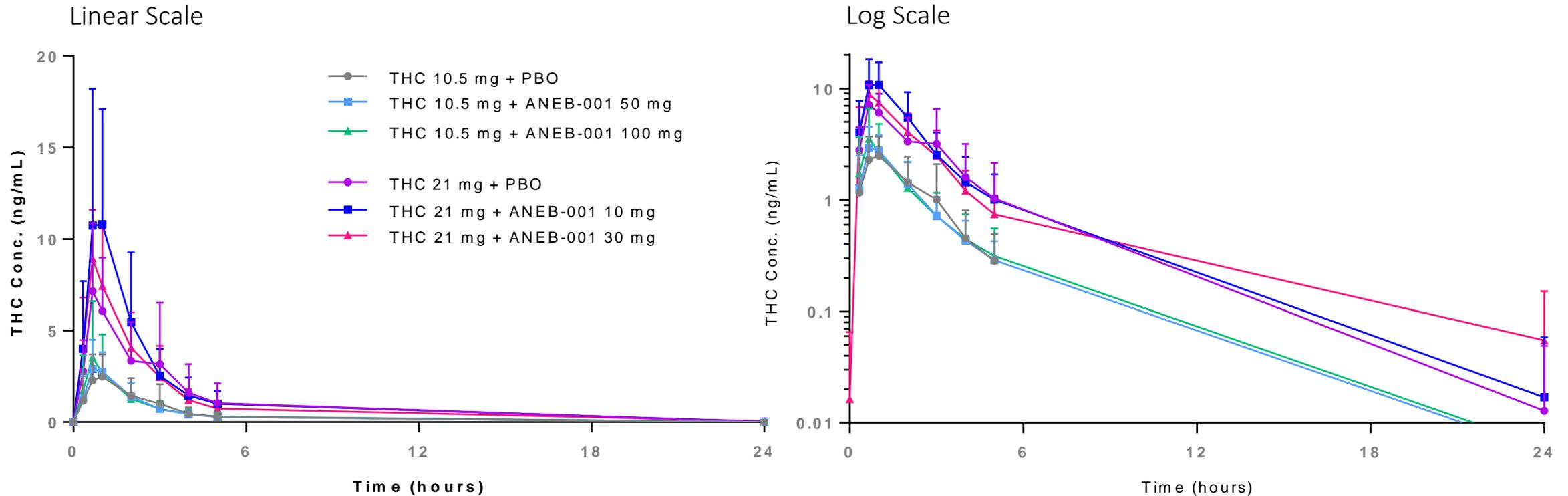


- Rapidly absorbed ( $T_{max} = 1$  hour)
- Dose-related exposure to ANEB-001
- Long half-life supports once daily dosing

<sup>1</sup>Data are Mean (SD)

# Phase 2 Part A and Part B Interim Data: PK of THC in Plasma

## Pharmacokinetics of THC in Plasma of Healthy Subjects Challenged with THC<sup>1</sup>



- Oral THC tablets provided dose-related THC exposure
- Consistent with published exposure data for THC tablets

<sup>1</sup>Data are Mean (SD)

# Part B Cohorts 1 and 2 - Interim Data Conclusions

- THC Dose Effect:** 21 mg THC produced stronger intoxication effects compared to 10.5 mg in Part A
- VAS Feeling High:** ANEB-001 (10 or 30 mg) produced a sustained reduction in feeling high ( $p < 0.001$ )
- VAS Alertness:** ANEB-001 (10 or 30 mg) produced a sustained improvement in alertness ( $p < 0.01$ )
- Body Sway:** ANEB-001 (10 or 30 mg) produced a significant improvement in body sway  $p < 0.01$
- Heart Rate:** THC effect on heart rate was small – trend towards reduction by ANEB-001
- Dose response:** 10 mg ANEB-001 was as effective as higher doses despite the higher THC dose, confirming potency of ANEB-001 as an antagonist of CB1-mediated effects of THC
- Preliminary Safety: Data Still Blinded:** All adverse events in cohort 1 were mild and transient except two cases of moderate dizziness likely attributable to THC. All adverse events in cohort 2 were mild and transient.

# Part B Cohort 3 - Protocol Amended and Dosing Initiated

- Protocol amended to allow staggered dosing and add additional time points/subjective measures
- Cohort 3: staggered single oral doses of 21 mg oral THC and 10 mg ANEB-001 or placebo
- THC will be administered 1 hour before ANEB-001/placebo
- Study endpoints include all of those assessed in Part A
- New “post-THC baseline” assessments added prior to administration of ANEB-001
- Allows for evaluation of within subject changes
- New “drug effect” VAS scores added
- Protocol details will be posted in the [clinicaltrials.gov](https://clinicaltrials.gov) record
- Protocol includes 6 cohorts in total for Part B

# Observational Study in ACI Patients

**Study Title:** Multi-center observational study of plasma concentrations of THC and its metabolites in subjects visiting emergency departments for acute cannabinoid intoxication

**Primary Objective:** To determine plasma concentrations of THC and its metabolites, 11-OH-THC and THC-COOH (and/or other cannabinoids), in plasma of subjects who visit the ED due to ACI

**Study Design:** Subjects presenting to Emergency Departments with ACI based on a subset of DSM-V diagnostic criteria. Collection of THC PK, signs and symptoms, interventions, disposition, and selected subjective PD assessments at entry and discharge. Targeting 10 to 20 sites and approx. 120 subjects. Plasma sample at entry and possible additional time points.

**Est. completion:** Approx. 12 months total but data will be used as generated for PK/PD modeling during the study

**Clinicaltrials.gov:** Registration planned



# Pharmacokinetic/Pharmacodynamic (PK/PD) Modeling

**Objective:** To develop a PK/PD model to predict the optimal ANEB-001 dose for treating ACI

**Components:**

- Historical data for THC PK and PD outcomes in healthy subjects
- New PK/PD data for THC and ANEB-001 from Anebulo Phase 2 challenge study
- New data for THC PK/PD in ACI patients from Anebulo observational study

**FDA involvement:**

- Discussed with FDA/MIDD (Model-Informed Drug Development) Group
- Initial meeting with MIDD completed in June 2022
- Next meeting scheduled for November 2022

# ANEB-001 Potential Regulatory Path

- Previous Pre-IND Meeting held in December 2021
- Discussions ongoing with FDA's Model-Informed Drug Development team
- First Proposed US Study: Multi-center Observational study in ACI subjects
- Intended to support PK/PD model development and dose selection for ACI
- Study initiation expected in 4Q 2022
- Next MIDD meeting scheduled for November 2022
- Potential End of Phase 2A meeting following completion of Part B with ongoing PK/PD modeling
- Potential for first ANEB-001 study in US to be a registrational study subject to FDA agreement

# ANEB-001: Additional Activities – CMC and Nonclinical

## CMC Activities:

- Emerging Phase 2 data supportive of a lower ANEB-001 dose than originally projected
- Drug substance manufacturing already ongoing at “commercial” scale
- Drug product manufacturing on track to support clinical and commercial use

## Nonclinical Activities:

- IND enabling studies previously completed including up to 4 weeks tox in 2 species
- Intended as a single dose product – we do not anticipate chronic dosing for ANEB-001
- Remaining nonclinical studies to support potential Phase 3 clinical studies are planned

# ANEB-001 Parenteral Product Development Program

## Status:

- Potential for use in ACI subjects unable to swallow oral capsules
- Preferred route of administration for pediatric subjects
- Targeting single dose IV or IM injection to be administered in Emergency Department
- Multiple novel prototype parenteral formulations currently being evaluated

## Next Steps:

- Initial evaluation in nonclinical PK models
- Selection of a lead formulation for clinical development
- GMP scale up and initiation of IND enabling studies
- Scope of required studies depends on PK comparability versus existing safety data
- First in human dosing of parenteral formulation would be a Phase 1 study
- New opportunities for additional IP coverage

# ANEB-001 Clinical Development for ACI - Summary

**Phase 2 Part A New Data:** Dose related exposure, reductions in body sway/heart rate

**Ongoing Phase 2 Part B:** 2 cohorts completed – 10 mg and 30 mg doses reduced THC-related effects despite a higher THC dose, appears safe and well tolerated

**Plans for Completion of Part B:** Cohort 3 ongoing using staggered dosing – 3 more cohorts currently planned for PK/PD modeling

**Regulatory Update:** Next FDA/MIDD meeting in November

**Planned First US Clinical Study:** Observational study in ACI patients

**Path to Potential Approval:** To be finalized after Phase 2 study is completed

**Parenteral Product:** Prototype formulations in development for preclinical testing

# Q&A Session

# Concluding Remarks

Simon Allen, Chief Executive Officer



# Development plan

H2 CY22  
Readout



## Proof of-Concept

- Phase 2 study at single site in Netherlands
- Up to 150 healthy volunteers
- THC + doses of ANEB-001 or placebo



## Pivotal Program

- FDA pre-IND meeting provided valuable guidance on U.S. regulatory path



## New Drug Application

- Exploration of strategic options for rights outside of the U.S.



## Intellectual Property Portfolio

- Method of use patent
  - Issued October 2021
  - Protection through 2040
- Strategy to enhance IP portfolio



Lifecycle  
management

# In summary



Addressing unmet medical need in a large and growing market, with acute cannabinoid intoxication becoming an increasingly widespread health issue



ANEB-001 has a well-understood mechanism of action as a CB1 antagonist



Phase 2 proof-of-concept study continues (Part A topline data released July 5, 2022; Part B initiated in Q3 2022)



Capital-efficient business model with \$14.5M cash (06/30/22)

## Investor Contacts:

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