UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

> Date of Report: March 26, 2018 (Date of earliest event reported)

ANAPTYSBIO, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

001-37985 (Commission File Number)

10421 Pacific Center Court, Suite 200 San Diego, CA (Address of Principal Executive Offices) 20-3828755 (IRS Employer Identification No.)

> 92121 (Zip Code)

(858) 362-6295

(Registrant's Telephone Number, Including Area Code)

Not Applicable

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Dere-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

D Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ⊠

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 7.01 Regulation FD.

On March 26, 2018, AnaptysBio, Inc. ("AnaptysBio") issued a press release announcing top-line proof-of-concept data from an interim analysis of AnaptysBio's ongoing ANB020 Phase 2a trial in adult patients with peanut allergy. A copy of the press release is furnished as Exhibit 99.1 to this report and incorporated herein by reference.

On March 26, 2018, AnaptysBio held an investor conference call. A copy of the slides presented during the investor conference call are furnished as Exhibit 99.2 to this report and incorporated herein by reference.

The information furnished with this report, including Exhibit 99.1 and Exhibit 99.2, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended ("Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference into any other filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description of Exhibit		
99.1	Press release dated March 26, 2018.		

99.2 <u>Slides presented by AnaptysBio on March 26, 2018.</u>

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

AnaptysBio, Inc.

By: /s/ Dominic Piscitelli

Name: Dominic Piscitelli Title: Chief Financial Officer

Date: March 26, 2018



AnaptysBio Announces Positive Top-Line Proof-of-Concept Data For ANB020 In Moderate-to-Severe Baseline Adult Peanut Allergy Patients

- 46% of adult peanut allergy patients with moderate-to-severe baseline symptoms tolerated 500mg cumulative peanut challenge at 14 days after a single dose of ANB020 compared to zero percent dosed with placebo
- Concomitant allergy symptoms, typically overlapping with peanut allergy, occurred in 80% of placebo dosed but only 7% of ANB020 dosed patients
- ANB020 was well tolerated and no patients have discontinued from the study
- AnaptysBio plans to initiate a multi-dose Phase 2b trial in moderate-to-severe baseline adult peanut allergy patients
- Management to host conference call today at 5:00p.m. EDT

SAN DIEGO, March 26, 2018 — AnaptysBio, Inc. (Nasdaq: ANAB), a clinical-stage biotechnology company developing first-in-class antibody product candidates focused on unmet medical needs in inflammation, today announced top-line proof-of-concept data from an interim analysis of an ongoing Phase 2a trial in adult patients with peanut allergy. Six of 13 (46%) patients exhibiting moderate-to-severe symptoms during a baseline oral food challenge at enrollment improved peanut tolerance to cumulative 500mg at day 14 after a single dose of ANB020 compared to zero of three (0%) dosed with placebo. Allergic symptoms that typically overlap with peanut allergy were observed in four of five (80%) patients dosed with placebo but only one of 15 (7%) ANB020-dosed patients. ANB020 was generally well-tolerated and all patients remain enrolled in the clinical trial. AnaptysBio plans to continue development of ANB020 in moderate-to-severe baseline adult peanut allergy patients in a Phase 2b multi-dose clinical trial.

"Peanut allergy is a serious medical condition often associated with other food allergies, atopic dermatitis and asthma," said Stephen Tilles, M.D., Clinical Professor at the University of Washington, Executive Director of Asthma Inc Clinical Research Center, Immediate Past President of the American College of Allergy, Asthma, and Immunology (ACAAI) and an investigator in this Phase 2a clinical trial. "The data from this trial suggest that ANB020 may be a promising new paradigm for peanut allergy patients. Patients suffering from this debilitating condition are motivated to pursue new treatments that provide protection from the life-threating symptoms of accidental peanut exposure."

Phase 2a Trial Design

This Phase 2a proof-of-concept trial enrolled 20 adult peanut allergy patients with a clinical history of anaphylaxis. The baseline peanut tolerance of each patient was evaluated at enrollment using a blinded, placebo-controlled oral food challenge (OFC) according to PRACTALL guidelines, where each patient experienced dose limiting symptoms at or before a

cumulative 500mg dose of peanut protein. Patients were subsequently randomized on a 3:1 basis to receive a single intravenous 300mg dose of ANB020 or placebo at 14 days following the baseline OFC, and then administered a second OFC at 14 days after dosing. Each OFC was limited to a maximum of 500mg cumulative peanut dose. Symptom severity was adjudicated by an independent, blinded assessor that was not involved in performing the baseline or day 14 OFC.

Interim Analysis

This interim analysis focused on patients with moderate-to-severe baseline symptoms, which is the patient population that AnaptysBio plans to target for future development of ANB020 in adult peanut allergy. Thirteen ANB020 dosed and three placebo dosed patients exhibiting moderate-to-severe symptoms during the baseline OFC were included in the analysis, while two ANB020 dosed and two placebo dosed patients with mild baseline symptoms were excluded. The average age and baseline peanut tolerability of moderate-to-severe baseline patients was 31 and 239mg, respectively, which were consistent with the age and baseline peanut tolerance of all 20 enrolled patients.

In patients with moderate-to-severe symptoms at baseline, six of 13 (46%) patients administered a single dose of ANB020 improved peanut tolerance at the day 14 OFC to the maximum tested cumulative 500mg dose, compared to none of the placebo dosed patients. Amongst the patients excluded due to mild baseline symptoms, one ANB020 dosed patient and two placebo dosed patients improved peanut tolerance to the 500mg cumulative dose at the day 14 OFC. Concomitant allergy symptoms, typically overlapping with peanut allergy, including urticaria, pruritus, rhinitis, asthma flares and other nut allergies, occurred in four of five (80%) patients following placebo administration but only occurred in one of fifteen (7%) patients after ANB020 dosing.

ANB020 was generally well-tolerated during the study and all 20 patients remain enrolled with no dropouts. No serious adverse events have been reported and the most frequent treatment-emergent adverse event reported in ANB020 dosed patients was headache in four of fifteen patients, of which three were mild cases and one was moderate severity, while the most frequently reported adverse events in placebo dosed patients were mild and moderate severity allergy-related events in four of five patients.

"We are encouraged by the rapid improvement in peanut tolerance and favorable safety profile observed to date in this study following a single dose of ANB020," said Hamza Suria, president and chief executive officer of AnaptysBio. "We believe ANB020 has the potential to prophylactically protect moderate-to-severe baseline adult peanut allergy patients from anaphylaxis. In addition, we believe ANB020 may address multiple concomitant allergic conditions irrespective of the specific allergens involved."

2

The company plans to report detailed data from this trial at a future medical conference following study completion.

AnaptysBio plans to continue development of ANB020 in a randomized, double-blinded, placebo-controlled subcutaneously-administered multidose Phase 2b trial in moderate-to-severe baseline adult peanut allergy patients.

Conference Call & Webcast Information

The AnaptysBio management team will host a conference call and live webcast with slides with the investment community today, Monday March 26th 2018, at 5:00pm EDT to discuss the information in this press release. When: March 26 2018, 5:00pm EDT Dial-in: (833) 696-8361 (Domestic), (430) 775-1625 (International) Conference ID: 2289207

The live webcast and accompanying slides can be accessed under the investor relations section of AnaptysBio's website at www.anaptysbio.com. A replay of the conference call will be archived under the investor relations section of the AnaptysBio website for 30 days shortly after the call.

About ANB020

ANB020 is an antibody that potently binds and inhibits the activity of interleukin-33, or IL-33, a pro-inflammatory cytokine that multiple studies have indicated is a central mediator of atopic diseases, including atopic dermatitis, food allergies and asthma. Following completion of a healthy volunteer Phase 1 trial of ANB020, AnaptysBio has demonstrated proof-of-concept for ANB020 in a 12-patient Phase 2a trial of moderate-to-severe adult atopic dermatitis and in the aforementioned 20-patient placebo-controlled Phase 2a trial in adult peanut allergy patients. Enrollment is ongoing in a 24-patient placebo-controlled Phase 2a trial of ANB020 in severe adult eosinophilic asthma patients where top-line data are anticipated in the third quarter of 2018. During the first half of 2018, AnaptysBio plans to initiate a placebo-controlled multi-dose Phase 2b clinical trial of subcutaneously-administered ANB020 in 200-300 moderate-to-severe adult atopic dermatitis patients where data is anticipated in 2019.

About AnaptysBio

AnaptysBio is a clinical-stage biotechnology company developing first-in-class antibody product candidates focused on unmet medical needs in inflammation. The company's proprietary anti-inflammatory pipeline includes its anti-IL-33 antibody (ANB020) for the treatment of moderate-to-severe adult atopic dermatitis, moderate-to-severe adult peanut allergy and severe adult eosinophilic asthma; its anti-IL-36R antibody (ANB019) for the treatment of rare inflammatory diseases, including generalized pustular psoriasis and palmo-plantar pustular psoriasis; and a portfolio of checkpoint receptor agonist antibodies for the treatment of certain autoimmune diseases where immune checkpoint receptors are insufficiently activated, which have demonstrated efficacy in an animal model of graft-versus-host disease. AnaptysBio's antibody pipeline has been developed using its proprietary somatic hypermutation (SHM) platform, which uses in vitro SHM for antibody discovery and is designed to replicate key features of the human immune system to overcome the limitations of competing antibody discovery technologies. AnaptysBio has also developed multiple therapeutic antibodies in an immuno-oncology partnership with TESARO and an inflammation partnership with Celgene, including an anti-PD-1 antagonist antibody (TSR-042), an anti-TIM-3 antagonist antibody (TSR-022) and an anti-LAG-3 antagonist antibody (TSR-033), which are currently under clinical development with TESARO, and an anti-PD-1 checkpoint agonist antibody (CC-90006) currently in the clinic with Celgene.

3

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, including, but not limited to: the results of, and timing of the release of data from, our clinical trials; the applicability of interim results to the results of later trials, the potential of ANB020 as a prophylactic therapeutic for the treatment of moderate-to-severe adult peanut allergy patients; our ability to launch future clinical trials and the success of our partnership with TESARO and Celgene. Statements including words such as "plan," "continue," "expect," or "ongoing" and statements in the future tense are forward-looking statements. These forward-looking statements involve risks and uncertainties, as well as assumptions, which, if they do not fully materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. Forward-looking statements are subject to risks and uncertainties that may cause the company's actual activities or results to differ significantly from those expressed in any forward-looking statement, including risks and uncertainties related to the company's ability to advance its product candidates, obtain regulatory approval of and ultimately commercialize its product candidates, the timing and results of preclinical and clinical trials, the company's ability to fund development activities and achieve development goals, the company files from time to time with the Securities and Exchange Commission. These forward-looking statements speak only as of the date of this press release, and the company undertakes no obligation to revise or update any forward-looking statements to reflect events or circumstances after the date hereof.

###

4

Contact: Monique Allaire THRUST Investor Relations 617.895.9511 monique@thrustir.com

Chelcie Lister THRUST Investor Relations 910.777.3049 Chelcie@thrustir.com



Anti-IL-33 (ANB020) Program

Phase 2a Peanut Allergy Clinical Trial Interim Data Update

March 26th 2018



NASDAQ: ANAB

Safe Harbor Statement

This presentation and the accompanying oral presentation contain "forward-looking" statements that are based on our management's beliefs and assumptions and on information currently available to management. Forward-looking statements include all statements other than statements of historical fact contained in this presentation, including information concerning the timing and success of our ongoing and planned clinical trials and the anticipated timing for the release of data therefrom, our ability to obtain regulatory approval, our ability to achieve anticipated milestones, the potential therapeutic benefits of ANB020 in atopic dermatitis or any other indication and the potential therapeutic benefits of any of our other product candidates.

Forward-looking statements are subject to known and unknown risks, uncertainties, assumptions and other factors that may cause our actual activities or results to differ materially from those expressed or implied in any forward-looking statement, including, but not limited to, those

related to the success, cost and timing of our product candidate development activities and planned clinical trials; our plans to develop and commercialize antibodies, including our lead product candidates ANB020, ANB019 and our checkpoint agonist antibodies; the timing and ability of our collaborators to develop and commercialize our partnered product candidates; the applicability of interim results to the results of later trials; or the potential benefits and advantages of our product candidates and approaches versus those of our competitors; our ability to execute on our strategy; our ability to obtain funding for our operations, including funding necessary to complete further development and commercialization of our product candidates; the timing of and our ability to obtain and maintain regulatory approvals for our product candidates; the rate and degree of market acceptance and clinical utility of any approved product candidates; the size and growth potential of the markets for any approved product candidates, and our ability to serve those markets; our commercialization, marketing and manufacturing capabilities and strategy; our ability to obtain and maintain intellectual property protection for our product candidates; regulatory developments in the United States, Australia, United Kingdom and other foreign countries; the success of competing therapies that are or may become available; our ability to attract and retain key scientific or management personnel; our use of the net proceeds from our recent initial public offering; our ability to identify additional product candidates with significant commercial potential consistent with our commercial objectives; and our apidy changing environment, and new risks may emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking

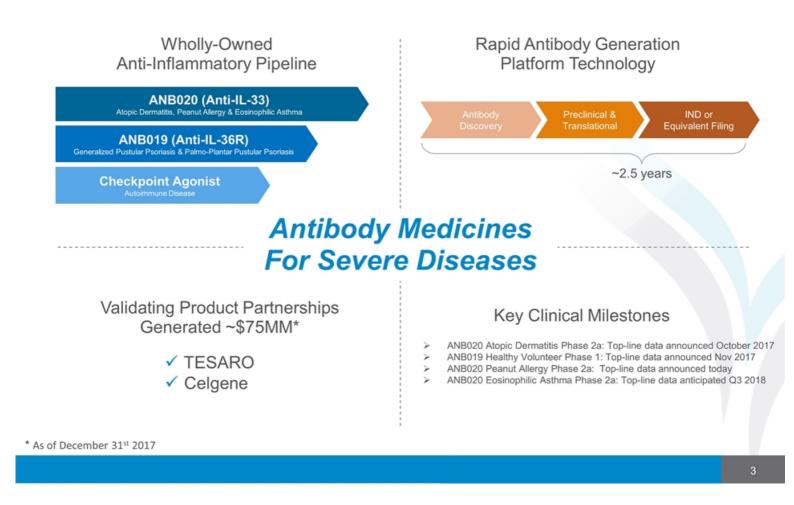
You should not rely upon forward-looking statements as predictions of future events. Although our management believes that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances described in the forward-looking statements will be achieved or occur. We undertake no obligation to publicly update any forward-looking statements, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

Certain information contained in this presentation may be derived from information provided by industry sources. The Company believes such information is accurate and that the sources from which it has been obtained are reliable. However, the Company cannot guarantee the accuracy of, and has not independently verified, such information.

The trademarks included herein are the property of the owners thereof and are used for reference purposes only. Such use should not be construed as an endorsement of such products.

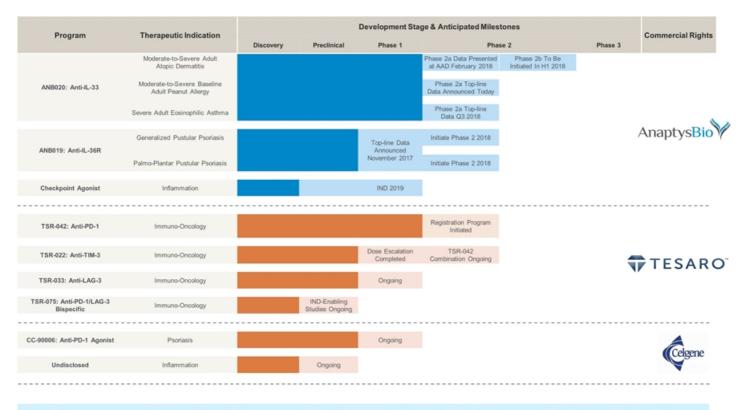
AnaptysBio: Clinical-Stage Antibody Development Company

Focused on Novel Antibody Medicines for Severe Inflammatory Diseases



Wholly-Owned and Partnered Product Pipeline

6 AnaptysBio-Generated Antibodies Advanced to Clinic Since Q1 2016



All programs generated internally using AnaptysBio's proprietary antibody generation platform technology

4

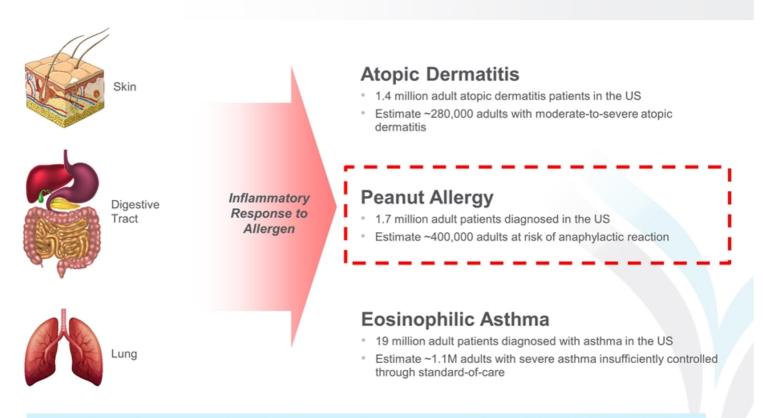


Wholly-Owned Pipeline: Anti-IL-33 (ANB020)

Moderate-to-Severe Adult Atopic Dermatitis Moderate-to-Severe Baseline Adult Peanut Allergy Severe Adult Eosinophilic Asthma

Atopic Diseases: Large Unmet Medical Need

IL-33-driven Disease Mechanism Affects Multiple Organ Systems



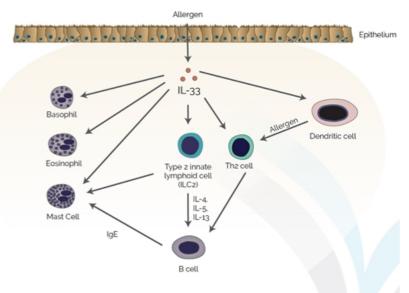
Atopic diseases occur through a common inflammatory response to an allergen, leading to concomitant incidence of multiple atopic diseases amongst some patients

ANB020: First-in-Class Anti-IL-33 Antibody

Broadly Applicable to Atopic Diseases

V

- IL-33 is an upstream driver of atopic disease
 - Human genetics validate key role of IL-33 in atopic dermatitis and asthma
 - Pro-inflammatory cytokine released upon allergen contact with epithelium
 - Activates downstream release of IL-4, IL-5 and IL-13
 - Modulates IgE-mediated mast cell and basophil degranulation
- ANB020 is a potentially first-in-class anti-IL-33 cytokine antibody
 - Phase I healthy volunteer trial completed without dose-limiting toxicities
 - Up to 3 month pharmacodynamic effect after a single dose of ANB020 at certain doses
 - Proof-of-concept demonstrated in moderate-to-severe atopic dermatitis



IL-33 acts as a gatekeeper of allergic response with demonstrated activity in the initiation (activation of ILC2 cells)¹, propagation (activation of allergen-specific T and B cells)² and amplification (degranulation of mast cells and basophils)³.

Cayrol et al. *Curr Opin Immunol* (2014) 31:31
 Peine et al. Trends Immunol (2016) 37(5):321
 Saluja et al. *Clin Transl Allergy (2015) 5:33*

ANB020 Phase 2a Trials

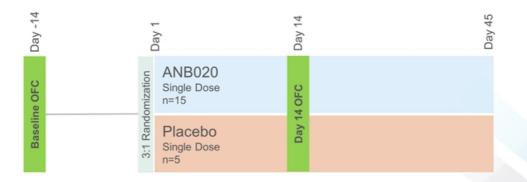


Indication	Trial Design	Clinical Endpoint	Data Readout
Moderate-to-Severe Adult Atopic Dermatitis	12 patients, all dosed with placebo followed by single dose of ANB020	Eczema Area & Severity Index (EASI)	Top-line data announced October 2017 Detailed data presented at AAD February 2018
Moderate-to-Severe Baseline Adult Peanut Allergy	20 patients, randomized 3:1 to single dose of ANB020 or placebo	Oral Food Challenge (OFC)	Top-line data announced today
Severe Adult Eosinophilic Asthma	24 patients, randomized 1:1 to single dose of ANB020 or placebo	Forced Expiratory Volume in 1 Second (FEV1)	Anticipate top-line data in Q3 2018

8

ANB020 Peanut Allergy Phase 2a Clinical Trial

Assess Peanut Tolerance Improvement At Day 14 Following A Single Dose Of ANB020 vs Placebo



- Enrolled 20 adult peanut allergy patients with a history of anaphylaxis
- Blinded, placebo-controlled oral food challenge (OFC) evaluated peanut tolerance at Baseline OFC and Day 14 OFC in accordance with PRACTALL guidelines
- Each OFC limited to a maximum tested cumulative peanut dose of 500mg
 Patients administered a single 300mg intravenous dose of ANB020 or placebo on a 3:1 randomized
- basis on Day 1
 Symptom severity at Baseline OFC and symptom improvement at Day 14 OFC adjudicated by blinded independent assessor

Enrolled Patient Characteristics

Interim Analysis Focused on Moderate-to-Severe Baseline Patients

Characteristic	All Patients	Moderate-to-Severe Baseline Patients*
N	20	16
Average Age	30	31
Average Cumulative Peanut Tolerance at Baseline OFC	229mg	236mg
Randomization	15 ANB020 5 Placebo	13 ANB020 3 Placebo

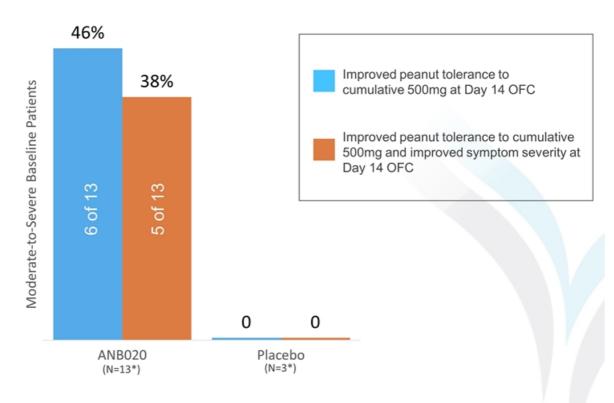
We believe peanut allergy patients with moderate-to-severe baseline symptoms represent an unmet medical need

* Excludes two ANB020 and two placebo dosed patients that exhibited mild symptoms at baseline

10

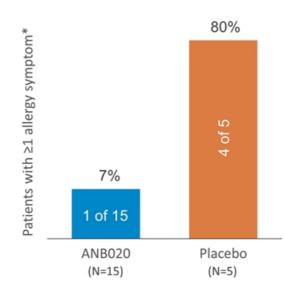
Top-Line Proof-of-Concept Data

46% ANB020 Dosed vs 0% Placebo Dosed Patients With Moderate-to-Severe Baseline Symptoms Improved Peanut Tolerance to Maximum Tested Cumulative Dose of 500mg



* Excludes two ANB020 and two placebo dosed patients that exhibited mild symptoms at baseline, of which one ANB020 dosed and two placebo dosed patients improved peanut tolerance to 500mg cumulative at Day 14

Peanut allergy is associated with other allergic conditions, such as atopic dermatitis and asthma, which can lead to concomitant allergy symptoms, such as rhinitis, pruritus, urticaria, asthma flares and other nut allergies



* Incidence of allergy symptoms observed as part of adverse event reporting for the trial; excludes symptoms observed during baseline and Day 14 OFC

Favorable ANB020 Safety Profile In Peanut Allergy Patients No Serious Adverse Events Or Dropouts Reported

- Most frequently reported adverse events to date were:
 - Headache in 4 of 15 patients dosed with ANB020, 3 mild cases and 1 moderate case
 - Mild and moderate cases of allergy-related events occurring in 4 of 5 placebo dosed patients
- · No serious adverse events have been reported to date
- · All 20 patients remain enrolled and no dropouts to date

Peanut Allergy Phase 2a Trial Interim Analysis Summary and Next Steps



- Day 14 readout supports potential for rapid patient benefit
- Potential to further improve peanut tolerance with multiple doses
- Concomitant allergy symptoms observed in 80% of placebo dosed but only 7% of ANB020 dosed patients
 - Overlapping allergic diagnoses, such as atopic dermatitis and asthma, often result in concomitant pruritus, rhinitis, asthma flares and other nut allergies
 - Suggests ANB020 may address multiple concomitant allergic conditions on an allergen-independent basis
- ANB020 was well-tolerated and no patients have dropped out
- Plan to present detailed data from this trial at a future medical conference
- Interim analysis from this Phase 2a trial supports advancement of ANB020 development in moderate-to-severe baseline adult peanut allergy
 - Plan to initiate a multi-dose Phase 2b trial

AnaptysBio: Clinical-Stage Antibody Development Company

Focused on Novel Antibody Medicines for Severe Inflammatory Diseases

