

altimmune

H.C. WAINWRIGHT GLOBAL LIFE SCIENCES PRESENTATION

APRIL 2018



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Any statements made in this presentation relating to future financial or business performance, conditions, plans, prospects, trends, or strategies and other financial and business matters, including without limitation, the prospects for commercializing or selling any products or drug candidates and available cash and cash commitments, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. In addition, when or if used in this press release, the words “may,” “could,” “should,” “anticipate,” “believe,” “estimate,” “expect,” “intend,” “plan,” “predict” and similar expressions and their variants, as they relate to Altimune, Inc. (the “Company”) may identify forward-looking statements. The Company cautions that these forward-looking statements are subject to numerous assumptions, risks, and uncertainties, which change over time. Important factors that may cause actual results to differ materially from the results discussed in the forward-looking statements or historical experience include risks and uncertainties, including risks relating to: realizing the benefits of the merger between Altimune, Inc. and PharmAthene, Inc.; clinical trials and the commercialization of proposed product candidates (such as marketing, regulatory, product liability, supply, competition, dependence on third parties and other risks); the regulatory approval process; dependence on intellectual property; the Company’s BARDA contract and other government programs, reimbursement and regulation; and the lack of financial resources and access to capital to fund proposed operations. Further information on the factors and risks that could affect the Company’s business, financial conditions and results of operations are contained in the Company’s filings with the U.S. Securities and Exchange Commission, including under the heading “Risk Factors” in the Form 10-K filed April 2, 2018 which is available for no charge at www.sec.gov.

The statements made herein speak only as of the date stated herein, and any forward-looking statements contained herein are based on assumptions that the Company believes to be reasonable as of this date. The Company undertakes no obligation to update these statements as result of new information or future events.

ALTIMMUNE INVESTMENT HIGHLIGHTS

DEVELOPING RATIONALLY DESIGNED PRODUCTS THAT HARNESS THE IMMUNE SYSTEM TO PREVENT AND CURE INFECTIONS

- POSITIVE DATA RECENTLY REPORTED ON TWO PHASE 2 CLINICAL STAGE PROGRAMS
 - PARADIGM SHIFT OPPORTUNITY FOR SEASONAL INFLUENZA
 - ROOM TEMPERATURE STABLE ANTHRAX VACCINE
- KEY CLINICAL POC DATA FOR SINGLE DOSE ANTHRAX VACCINE EXPECTED EARLY 3Q18



NasoVAX: SEASONAL INFLUENZA VACCINE

**POTENTIAL FOR A MORE EFFECTIVE INFLUENZA VACCINE
THROUGH BROADER IMMUNITY AND BETTER MATCHED STRAINS**

MARKET SIZE: \$2.0B ANNUAL U.S. FLU VACCINE MARKET¹ (\$10.2B GLOBALLY BY 2022²)

CURRENT INFLUENZA VACCINE CHALLENGES

- ANNUAL VACCINE EFFICACY AVERAGED 40% BETWEEN 2005-2015³
- 40,000 ANNUAL DEATHS IN THE U.S.⁴
- INFORMED GUESS AT WHICH FLU STRAINS WILL BE PREVALENT
- PRODUCTION TIME IN CHICKEN EGGS IS LONG AND CAN RESULT IN LESS EFFECTIVE VACCINES

NasoVAX – INTRANASAL INFLUENZA VACCINE

- BROAD PROTECTION AGAINST MISMATCHED INFLUENZA STRAINS
- RAPID PROTECTION IN DAYS NOT WEEKS
- MUCOSAL IMMUNITY AT SITE OF INFECTION
- CELL-BASED MANUFACTURING PROCESS IS FASTER AND RETAINS ANTIGENICITY



NasoVAX: PHASE 2 CLINICAL STUDY

TOP LINE DATA REPORTED

COHORT 1

20 VOLUNTEERS
1 IN DOSE
 1×10^9 VP
3:1 (VACCINE:PLACEBO)

COHORT 2

20 VOLUNTEERS
1 IN DOSE
 1×10^{10} VP
3:1 (VACCINE:PLACEBO)

COHORT 3

20 VOLUNTEERS
1 IN DOSE
 1×10^{11} VP
3:1 (VACCINE:PLACEBO)

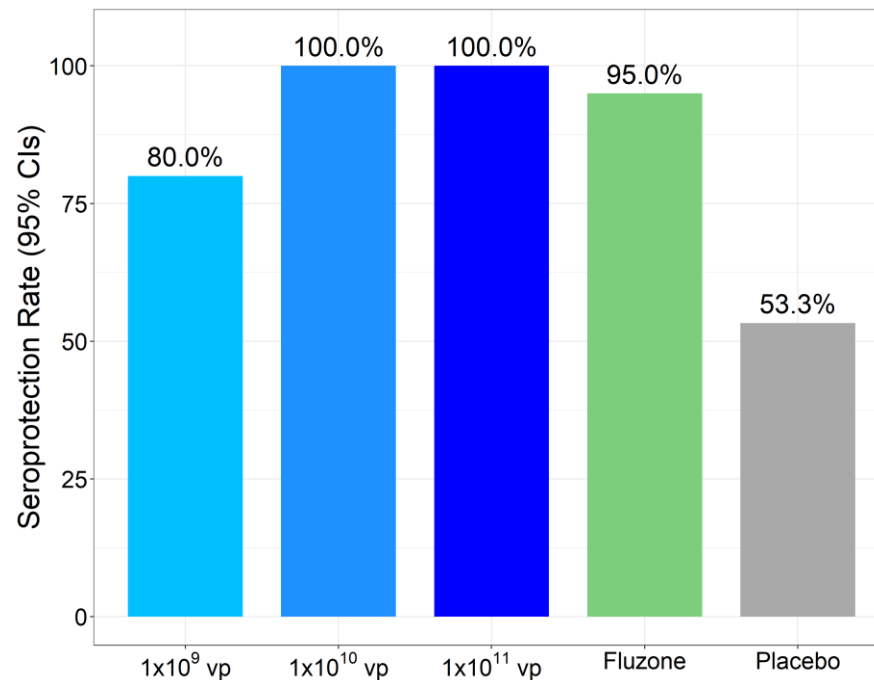
- MONOVALENT H1 STRAIN VACCINE
- FLUZONE[®] OPEN LABEL COMPARATOR
- HEALTHY VOLUNTEERS 18-49 YEARS OLD
- PRIMARY ENDPOINT – SAFETY AND IMMUNOGENICITY
- ADDITIONAL ENDPOINTS – ANTIBODIES AGAINST DIVERGENT STRAINS, CELLULAR, MUCOSAL AND DURATION OF IMMUNE RESPONSE

WIN – VACCINE IS SAFE AND ELICITS AN IMMUNE RESPONSE AGAINST THE VACCINATED STRAIN

HOMERUN – IMMUNE RESPONSE AGAINST MISMATCHED STRAINS

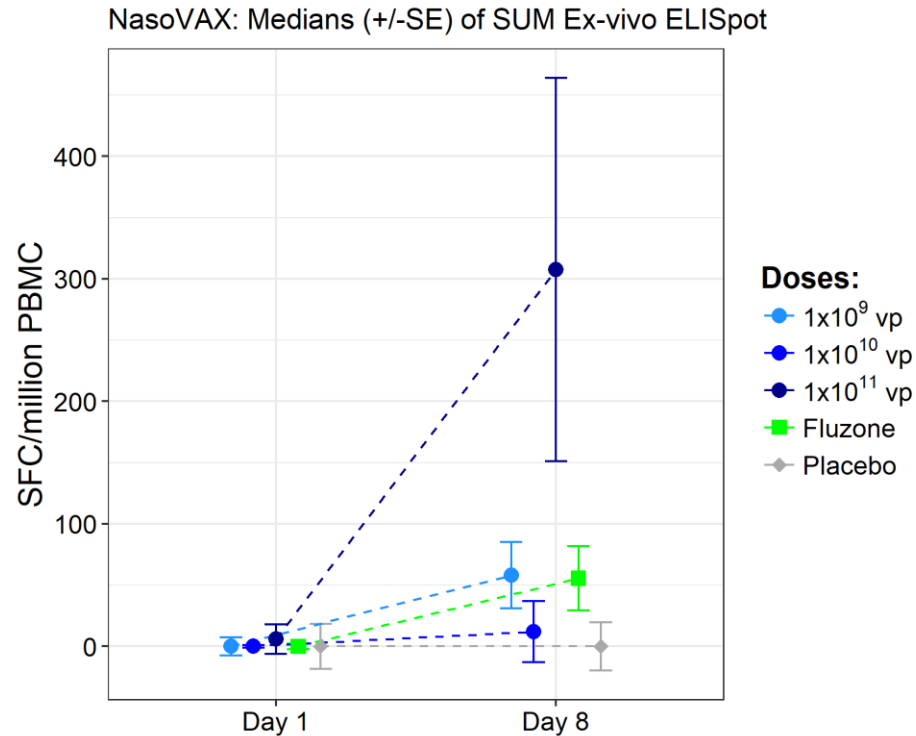
ADDITIONAL INFORMATION – DOSING, IMMUNE BIOMARKERS, KINETICS OF IMMUNE RESPONSE

NasoVAX: HEMAGGLUTININ INHIBITION ASSAY SEROPROTECTION RATES (A/CALIFORNIA)



- 100% SEROPROTECTION AT TWO DOSE LEVELS
 - SEROPROTECTION INDICATES SUFFICIENT ANTIBODIES TO PREVENT FLU INFECTION
- NO PRE-SCREENING FOR HIGH LEVELS OF A/CALIFORNIA OR AD5 ANTIBODIES
- DOSE DEPENDENT RESPONSE
- STRONG ANTIBODY RESPONSE NOT SEEN IN OTHER INTRANASALLY ADMINISTERED FLU VACCINES

NasoVAX: CELLULAR IMMUNITY – ELISPOT DATA



- STRONG T CELL RESPONSE AT THE HIGHEST DOSE
 - T CELLS ACT TO LESSEN DISEASE SYMPTOMS AND PREVENT DISEASE SPREADING
- EXPECTED TO BE IMPORTANT AGAINST DIVERGENT/DRIFTED FLU STRAINS



NasoVAX: DEVELOPMENT STRATEGY

PROCEED DOWN KNOWN FDA APPROVAL PROCESS WITH POTENTIAL FOR ACCELERATED DEVELOPMENT PATH

- **PHASE 2 QUADRIVALENT DOSE RANGING STUDY (150 SUBJECTS)**
 - IMMUNOGENICITY AGAINST 4 STRAINS
 - VERIFY APPROPRIATE DOSE
 - HEALTHY YOUNG ADULT AND ELDERLY SUBJECTS
 - NON-ANTIBODY IMMUNE RESPONSES
 - DURATION OF IMMUNE RESPONSES
- **PHASE 2 QUADRIVALENT DOSE CONFIRMATION STUDY (350 SUBJECTS)**
 - CONTINUATION OF DOSE RANGING STUDY AT CHOSEN DOSE
 - TIMING TO OVERLAP INFLUENZA SEASON TO LOOK AT PROTECTIVE EFFICACY

FUTURE GENERATION ANTHRAX VACCINES



ALTIMMUNE HAS TWO GOVERNMENT FUNDED ANTHRAX VACCINE PROGRAMS WITH CLINICAL POC DATA FOR SINGLE DOSE VERSION 3Q18

CURRENT VACCINES

- **BIOTHRAX® (ANTHRAX VACCINE ADSORBED)** ONLY ANTHRAX VACCINE WITH FDA APPROVAL
 - \$287 MILLION IN SALES IN 2017⁷
 - PROTECTION REQUIRES 6 MONTHS AND 3 INJECTIONS⁸
- **NUTHRAX = BIOTHRAX + CPG ADJUVANT**
 - LIKELY ONLY TWO DOSES OVER EITHER TWO WEEK OR ONE MONTH⁹

ALTIMMUNE VACCINES

- **SPARVAX-L** – \$15 MILLION NIAID CONTRACT
- **NASOSHIELD** – \$127 MILLION BARDA CONTRACT

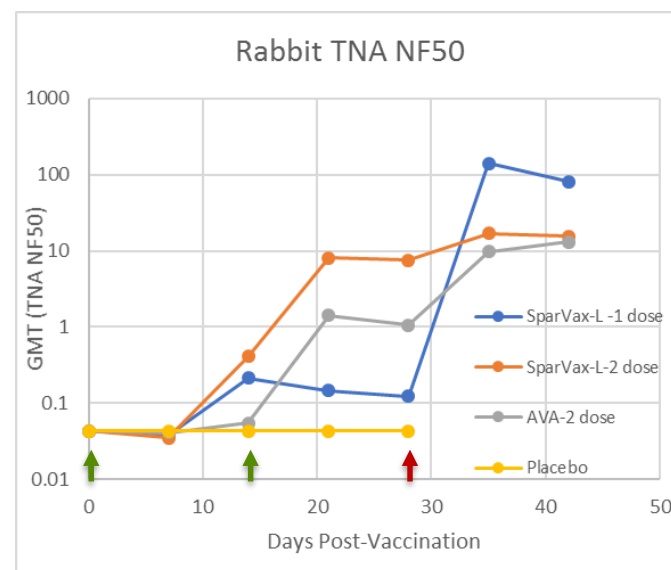
⁷ Emergent BioSolutions Inc. website; ⁸BioThrax package insert, ⁹Vaccine 34(18):2096-2105

SPARVAX-L: A PHASE 2 ANTHRAX VACCINE

TWO-DOSE ANTHRAX VACCINE WITH ROOM TEMPERATURE STABILITY AND SUPERIOR IMMUNE RESPONSE

- 2 COMPLETED PHASE 2 STUDIES
- NON-INFERIOR PROTECTION VS BIOTHRAX IN ANIMAL MODEL (2 DOSE REGIMENS)
- GREATER PROTECTIVE ANTIBODY RESPONSE TO VACCINE
- STABLE AT ROOM TEMPERATURE
 - 6+ YEARS AT 2-8°C
 - 2+ YEARS AT ROOM TEMPERATURE
- HIGHLY PURIFIED PRODUCT VS BACTERIAL LYSATE

Vaccine	Doses	Survival
SparVax-L	1	67%
SparVax-L	2	100%
AVA	2	96%
Placebo	2	0%



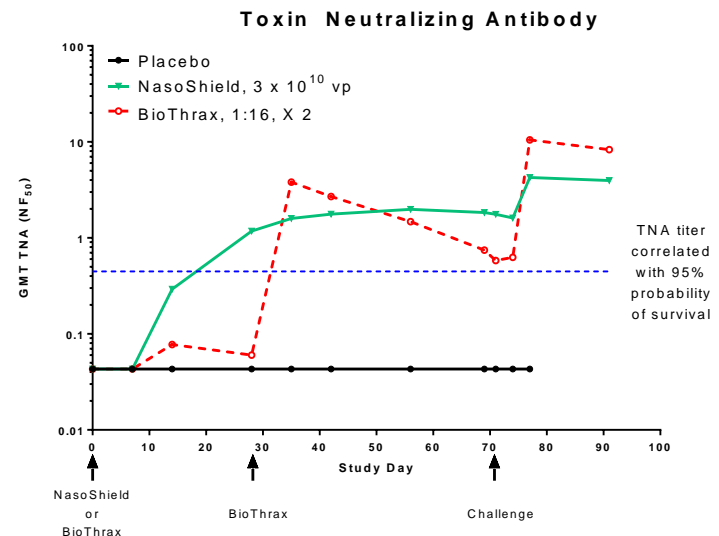
NASOSHIELD: NEXT GENERATION ANTHRAX VACCINE



SINGLE DOSE VACCINE WITH STABLE IMMUNE RESPONSE THAT PROTECTS IN HALF THE TIME

- SINGLE, INTRANASAL DOSE WITH NON-INFERIOR PROTECTION VS BIOTHRAX IN ANIMAL MODEL
- PROTECTIVE IMMUNITY IN HALF THE TIME
- STABLE AND LONGER LASTING IMMUNE RESPONSE
- HIGHLY STABLE AT REFRIGERATED AND ROOM TEMPERATURES
 - 2+ YEARS AT 2-8°C
 - 2+ YEARS AT ROOM TEMPERATURE

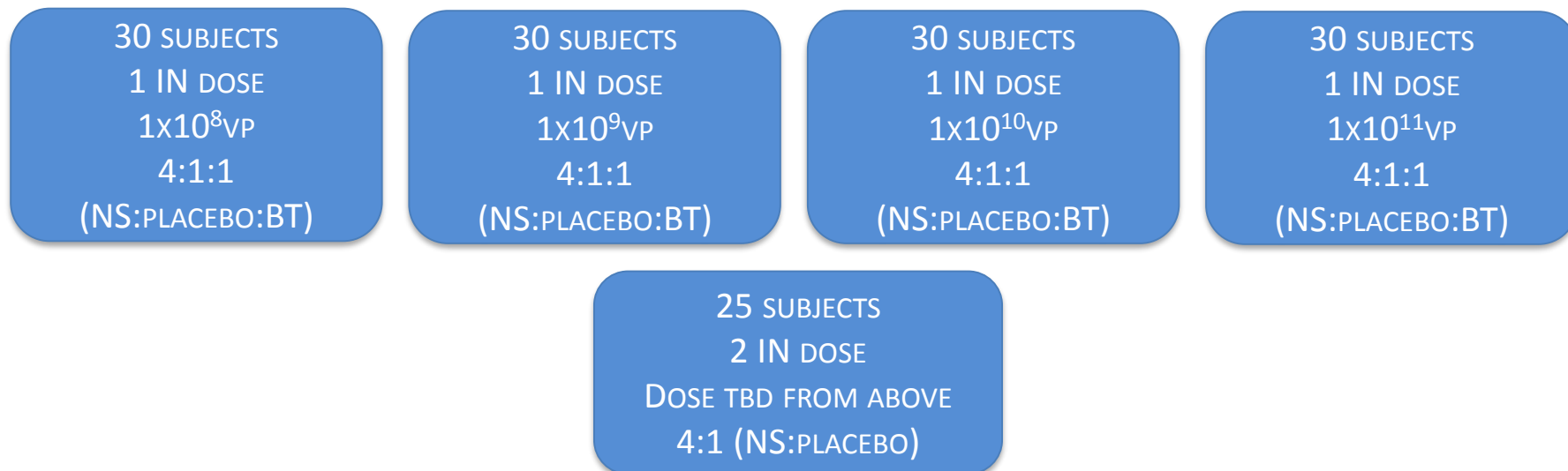
Vaccine	Doses	Survival
NasoShield	1	100%
NasoShield	2	100%
AVA	2	97%
Placebo	2	0%





NASOSHIELD: PHASE 1 CLINICAL STUDY

PHASE 1 STUDY OPEN FOR ENROLLMENT WITH DATA 3Q 2018

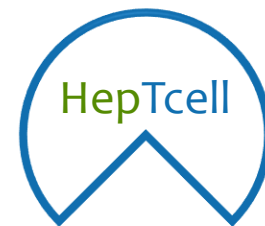


- HEALTHY VOLUNTEERS
- PRIMARY ENDPOINT – SAFETY AND IMMUNOGENICITY

WIN – NASOSHIELD IS SAFE AND IMMUNOGENIC

HOMERUN – CREATES POC TO BECOME CDC VACCINE OF CHOICE FOR ANTHRAX

ADDITIONAL INFORMATION – DOSE AND SCHEDULE



HEPTCELL: PHASE 1 CLINICAL STUDY

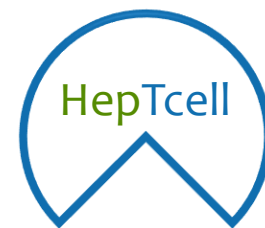
INITIAL DATA RECENTLY REPORTED

15 PATIENTS (2:1)
LOW DOSE (150 µg)
PLACEBO

30 PATIENTS (2:2:1:1)
LOW DOSE WITH IC31
HIGH DOSE (500 µg)
PLACEBO
IC31 ALONE

15 PATIENTS (2:1)
HIGH DOSE WITH IC31
IC31 ALONE

- OTHERWISE HEALTHY HBeAg NEGATIVE CHRONIC HBV PATIENTS
- ALL SUBJECTS ON TENOFOVIR OR ENTECAVIR WITH HBV DNA SUPPRESSED
- DOSING (INJECTION) AT DAYS 1, 29, AND 57
- PRIMARY ENDPOINT – SAFETY AND TOLERABILITY
- SECONDARY ENDPOINT – T CELL RESPONSE AS MEASURED BY ELISpot
- EXPLORATORY ENDPOINT – QUANTITATIVE HBsAg



HEPTCELL: THERAPY FOR CHRONIC HEPATITIS B

DATA OVERVIEW

- GOOD SAFETY, SLIGHTLY INCREASED REACTOGENICITY WITH HIGH DOSE + IC31
- CULTURED ELISPOT DATA DIFFICULT TO INTERPRET, WITH LARGE VARIATIONS IN INDIVIDUAL SUBJECT DATA OVER TIME, STRONG SIGNAL IN PLACEBO GROUP WITH NO APPRECIABLE DIFFERENCE BETWEEN TREATED SUBJECTS AND PLACEBO CONTROLS

NEAR TERM PLANS

- CONTINUE PHASE 1 FOLLOW UP AS PER PROTOCOL
- PERFORM ADDITIONAL IMMUNOGENICITY ANALYSES ON CLINICAL SAMPLES

FINANCIAL SUMMARY

**\$12.3 MILLION OF CASH, PLUS BARDA AND NIAID CONTRACT REVENUE AND TAX REFUND,
EXPECTED TO BE SUFFICIENT TO FUND OPERATIONS INTO 2019**

- 2017 REVENUE \$10.7M
- CASH/CASH EQUIV. \$12.3M AS OF 12/31/17
- COMMON SHARES OUTSTANDING 22.3M AS OF 3/31/18

MILESTONES

CURRENT & PROJECTED CASH EXPECTED TO BE SUFFICIENT TO FUND OPERATIONS INTO 2019

- 3Q 2018 • NASOVAX PHASE 2 ADDITIONAL IMMUNOGENICITY DATA
 - NASOSHIELD PHASE 1 SAFETY AND IMMUNOGENICITY DATA FROM SINGLE DOSE COHORTS

- 4Q 2018 • NASOVAX QUADRIVALENT PHASE 2 STUDY MANUFACTURING
 - HEPTCELL PHASE 1 ADDITIONAL IMMUNOGENICITY AND HBsAg DATA

STRONG EXECUTIVE MANAGEMENT TEAM

BILL ENRIGHT

PRESIDENT AND CHIEF EXECUTIVE OFFICER



ELIZABETH A. CZEREPAK

CHIEF FINANCIAL OFFICER AND EXECUTIVE VICE PRESIDENT
OF CORPORATE DEVELOPMENT



SCOT ROBERTS, PH.D.

CHIEF SCIENTIFIC OFFICER



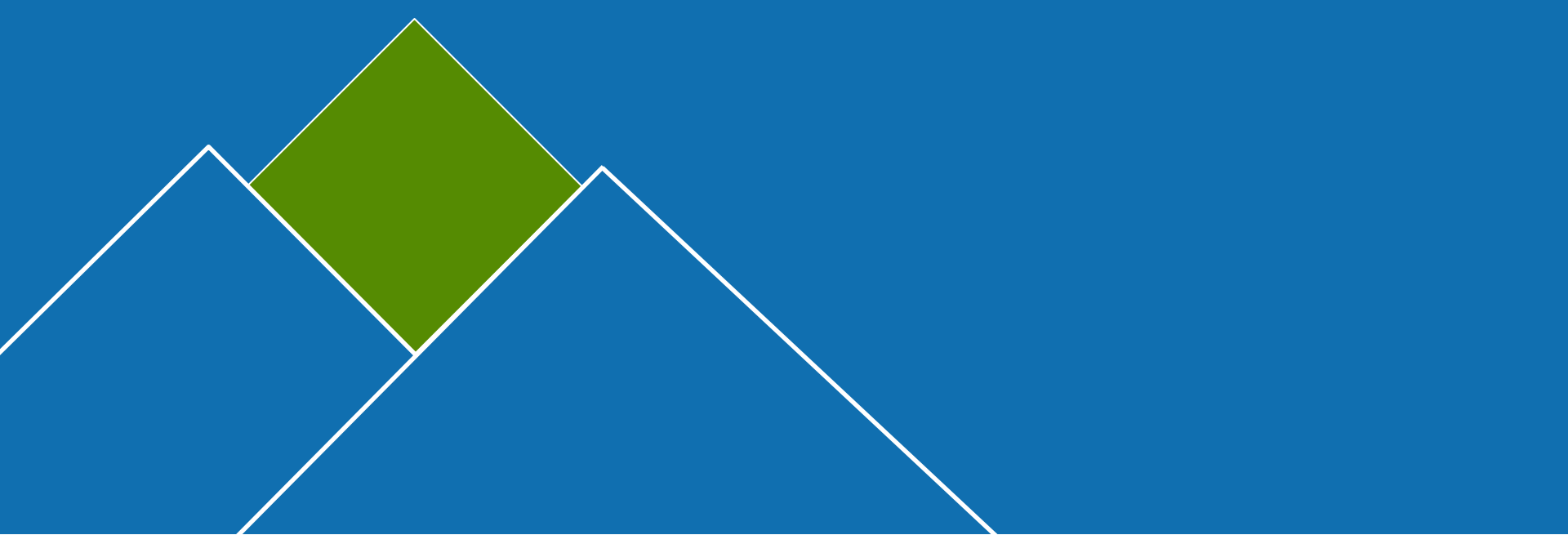
SYBIL TASKER, M.D., MPH, FACP, FIDSA

CHIEF MEDICAL OFFICER



ALTIMMUNE INVESTMENT HIGHLIGHTS

PRODUCTS	<ul style="list-style-type: none">• POSITIVE DATA IN TWO PHASE 2 PROGRAMS• POC DATA PENDING ON SINGLE DOSE ANTHRAX VACCINE
ADDITIONAL OPPORTUNITIES	<ul style="list-style-type: none">• A STRONG COMPETITIVE POSITION IN THE ANTHRAX VACCINES MARKET – \$300 MILLION ANNUAL MARKET
FINANCIAL DETAILS	<ul style="list-style-type: none">• \$12.3M OF CASH AT THE END OF 4Q17, WITH CONTRACTS REVENUES AND TAX REFUND SUFFICIENT TO GET INTO 2019



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