

# BIO CEO & Investor Conference February 10, 2020



## FORWARD-LOOKING STATEMENTS

#### **Safe-Harbor Statement**

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 product or drug candidates, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. In addition, when or if used in this presentation, the words "may," "could," "should," "anticipate," "believe," "estimate," "expect," "intend," "plan," "predict" and similar expressions and their variants, as they relate to Altimmune, 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: our lack of financial resources and access to capital; 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. 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 Company's annual reports on Form 10-K and quarterly reports on Form 10-Q filed with the SEC, which are available 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.

## **INVESTMENT HIGHLIGHTS**



Developing next generation peptide therapeutics for liver disease and oncology



Near-term value-driving catalysts in multiple therapeutic programs

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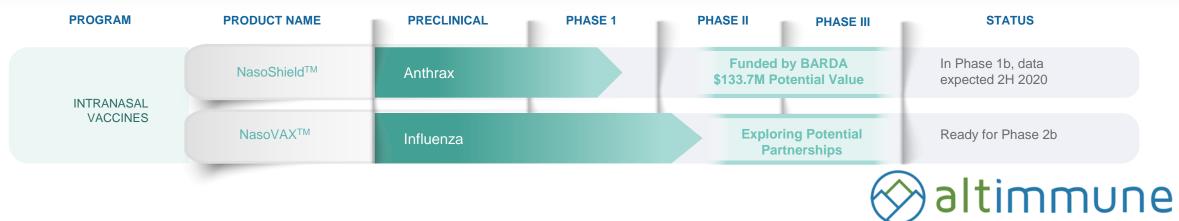
**\$39M cash and investments** on hand to support programs and sustain operations through key milestones



## **DEVELOPMENT PIPELINE**

PROGRAM	PRODUCT NAME	PRECLINICAL PHASE 1	PHASE II	PHASE III	STATUS
	ALT-801	NASH			Advancing into Phase 1 development in 2020
LIVER DISEA	SES HepTcell™	Chronic Hepatitis B			Advancing into Phase 2 development in 2020
CONJUGA IMMUNOSTIMUL FOR CANO	ANT ALI-702	Solid Tumors			IND and Phase 1 trial targeted for 2021

#### Programs developed with external funding



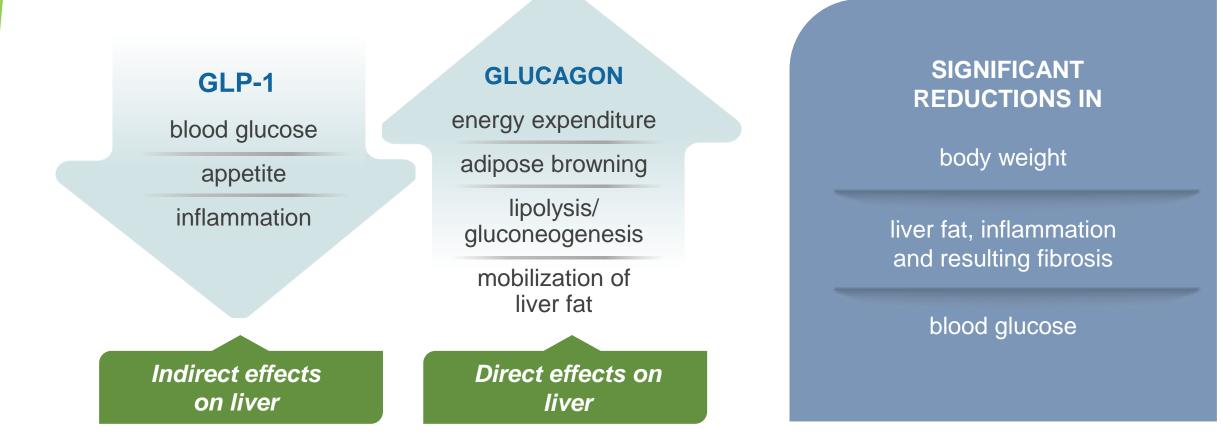
#### NASH AND NAFLD HEPATIC MANIFESTATIONS OF OBESITY AND METABOLIC SYNDROME

- NAFLD is present in up to 90% of obese patients, and ~20% of NAFLD patients progress to NASH
- Up to 40% of NASH patients develop NAFLD recurrence one year after liver transplant—the underlying metabolic disease is still present
- If the patient loses >10% of their body weight, there is NASH resolution 90% of the time
- The treatment of obesity is the cornerstone of treating NASH and the principal morbidities of NASH



## ALT-801: GLP-1/GLUCAGON RECEPTOR DUAL AGONIST

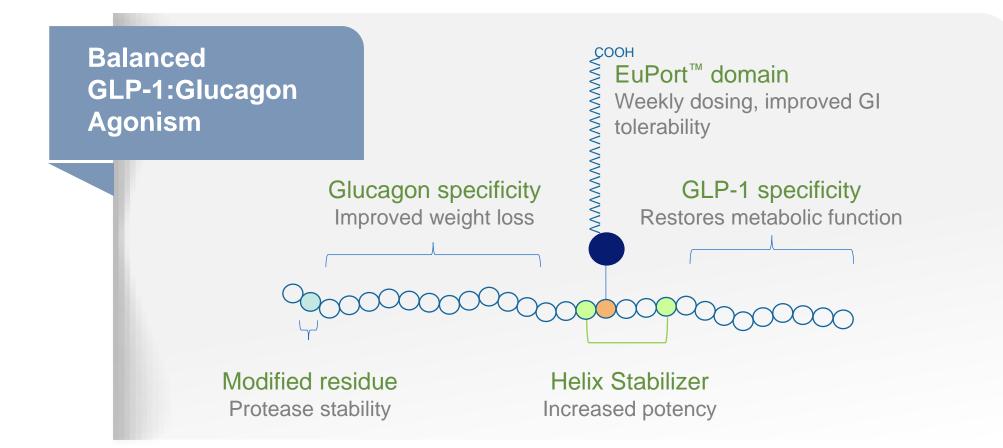
OPTIMIZED FOR NASH AND WEIGHT LOSS





## ALT-801: RATIONALLY DESIGNED AND HIGHLY DIFFERENTIATED

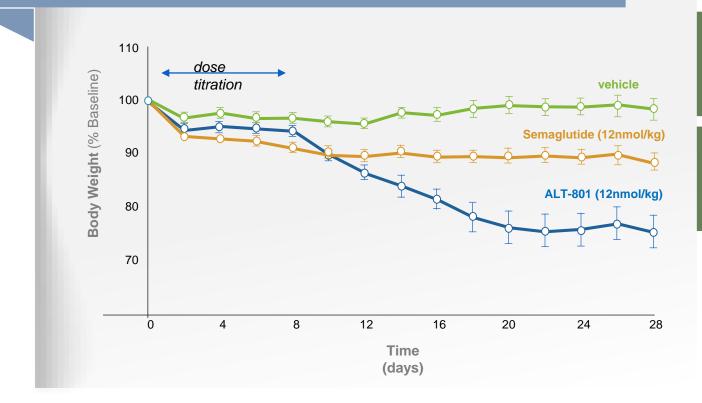
PROPRIETARY EuPort™ DOMAIN PROVIDES PROLONGED HALF-LIFE AND REDUCED PEAK CONCENTRATION





#### ALT-801 25% REDUCTION IN BODY WEIGHT TO CHOW-FED LEAN NORMAL RANGE

#### Mouse DIO Model After 4 Weeks of Treatment

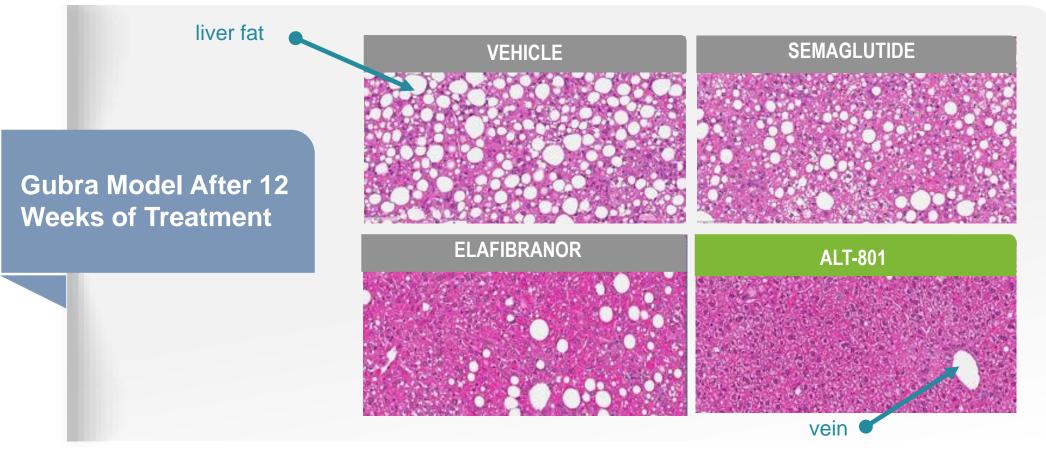


## More than **2x** the weight loss of **semaglutide**

# Body weight decreased to **lean normal range**

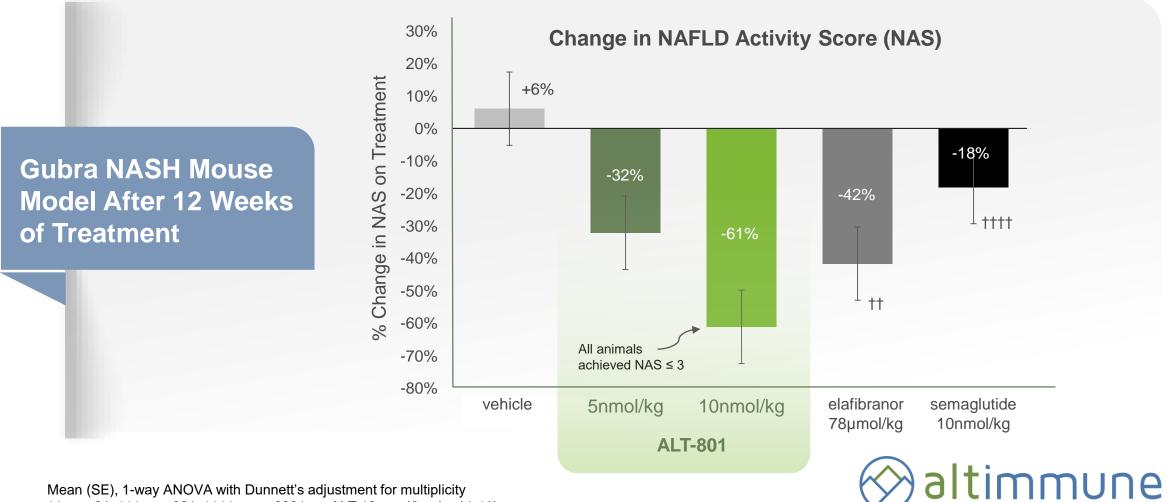


#### ALT-801 REDUCTION IN LIVER FAT TO CHOW-FED LEAN NORMAL



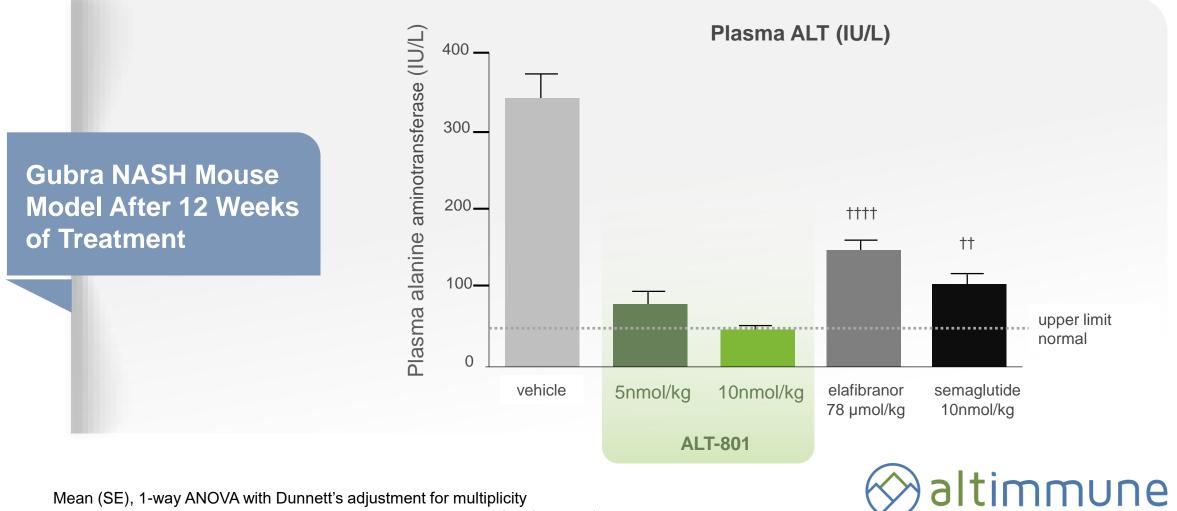


#### **ALT-801** GREATER REDUCTION IN NAFLD ACTIVITY SCORE (NAS)



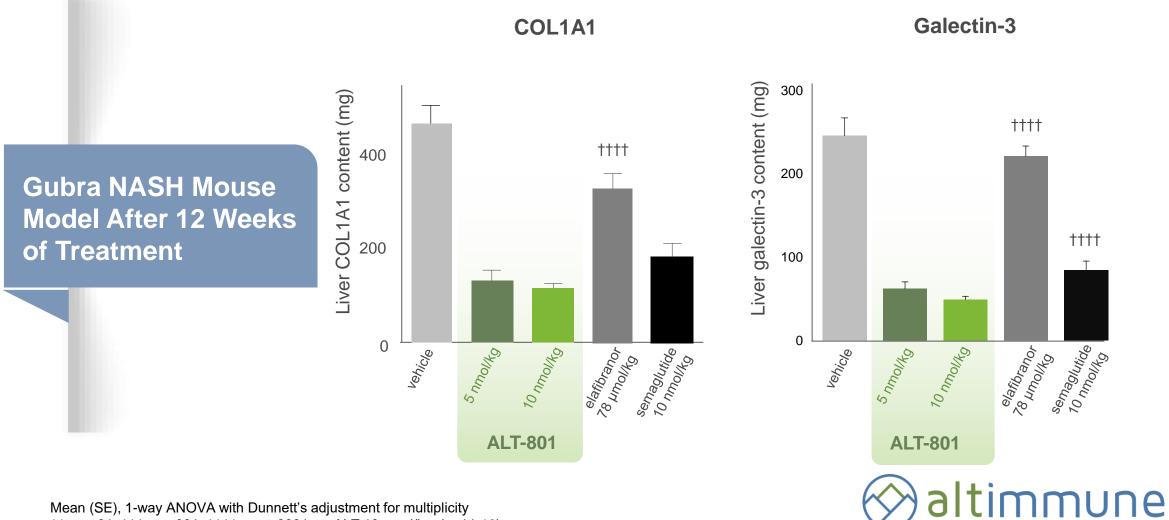
Mean (SE), 1-way ANOVA with Dunnett's adjustment for multiplicity tt p < .01, ttt p < .001, tttt, p < .0001 vs. ALT 10 nmol/kg (n=11-12)

#### **ALT-801** PLASMA ALT NORMALIZED



Mean (SE), 1-way ANOVA with Dunnett's adjustment for multiplicity tt p < .01, ttt p < .001, tttt, p < .0001 vs. ALT-801 10 nmol/kg (n=11-12)

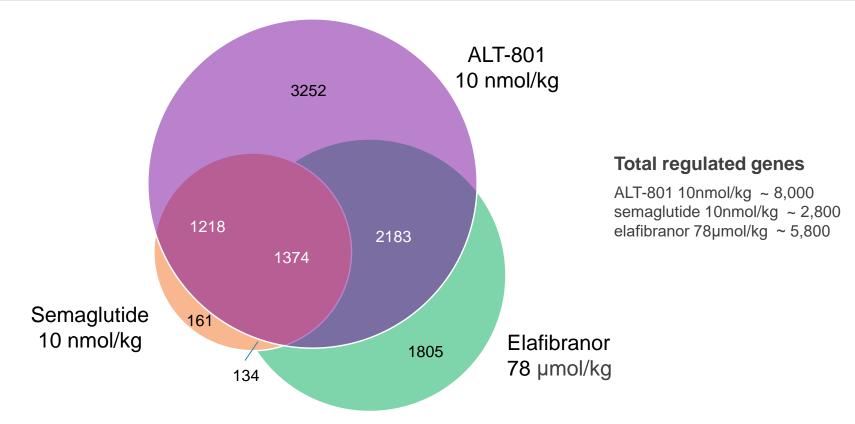
#### ALT-801 **GREATER EFFECTS ON FIBROSIS**



Mean (SE), 1-way ANOVA with Dunnett's adjustment for multiplicity tt p < .01, ttt p < .001, tttt, p < .0001 vs. ALT 10 nmol/kg (n=11-12)

## ALT-801: PLEIOTROPIC EFFECTS

DIFFERENTIALLY REGULATES MORE PATHWAYS IN NASH PATHOGENESIS



Visualization of the number of genes regulated by each compound. Values inside circles indicate the number of genes differentially expressed versus the vehicle group that are compound specific or shared between treatments.

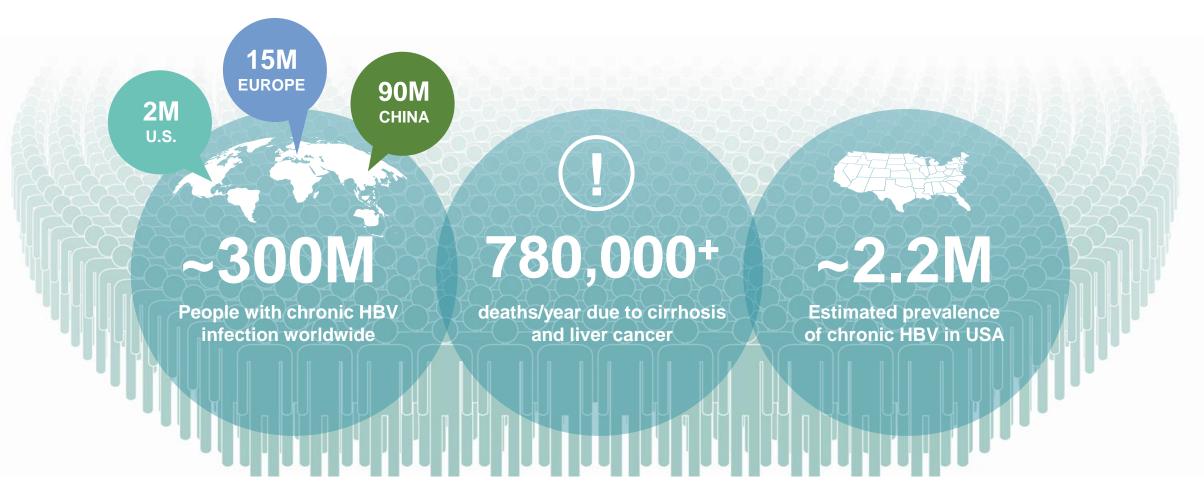


#### ALT-801 SUMMARY

- ALT-801 preclinical results showed superior reductions in nearly all measured NASH parameters compared to semaglutide or elafibranor, returning many parameters to lean normal range:
  - Body and liver weight
  - NAS and ALT
  - Collagen (COL1A1 and galectin-3) content
  - Liver fat, cholesterol and triglycerides
- ALT-801 improved metabolic function and exhibited pleiotropic effects in preclinical testing across multiple pathways involved in NASH
- ALT-801 resulted in more profound suppression of genes associated with steatosis, inflammation and stellate cell fibrosis by RNA sequencing compared to elafibranor



#### HepTcell: T CELL STIMULANT THERAPEUTIC FOR CHRONIC HEPATITIS B SIGNIFICANT OPPORTUNITY TO IMPROVE CURRENT HBV CURE RATES





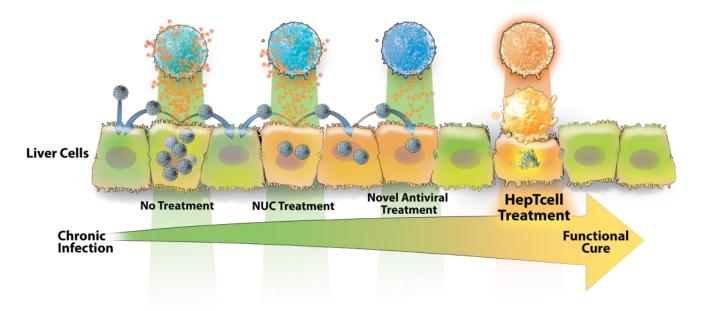
#### CURRENTLY APPROVED HBV THERAPEUTICS DO NOT LEAD TO A CURE IMMUNE ACTIVATION WILL BE REQUIRED FOR SIGNIFICANT IMPACT

Current antivirals prevent disease progression but **rarely clear chronic infection** 

Breaking T cell immune tolerance is key to functional cure

Newer direct-acting antivirals **unlikely to result in immune reactivation alone** 

HepTcell is designed to "wake up" dormant T-cells to eliminate infection

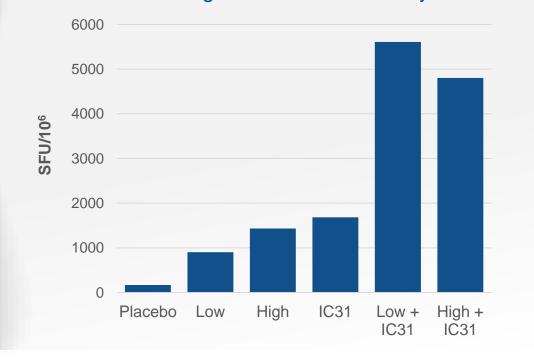




## HepTcell: PHASE 1 SAFETY AND IMMUNOGENICITY STUDY

#### Anti-HBV T-cell Response After 3 Injections

#### IFNγ ELISpot Median Change from Baseline to Day 85



HepTcell well tolerated, with no liver flares or autoimmune events

HepTcell breaks immune tolerance in chronic hepatitis B patients

Strong T cell response in combination with IC31<sup>™</sup> adjuvant



# NasoShield: FUNDED THROUGH A DEVELOPMENT CONTRACT WITH BARDA

#### Phase 1b initiated, data expected in H2 2020



#### Received \$3.7M BARDA funding to initiate Phase 1b

#### \$133.7M total contract value through Phase 2

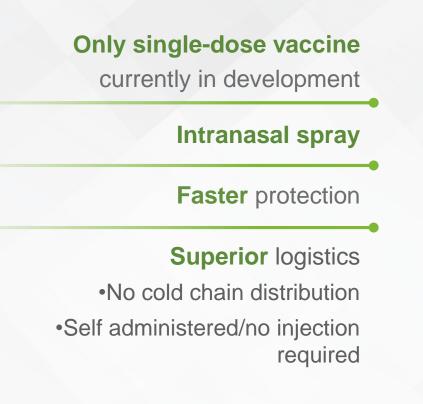
Stockpiling of vaccine may occur prior to licensure<sup>1</sup>

 Nuthrax<sup>®</sup> initial stockpiling valued at \$261M with a \$1.5 billion total potential contract value



<sup>1</sup> https://globalbiodefense.com/2019/08/01/barda-exercises-first-option-intransition-from-biothrax-to-av7909-anthrax-vaccine/

#### DIFFERENTIATED



## NasoShield Differentiated Anthrax Vaccine

#### COMPETITION

Biothrax<sup>®</sup> - Only approved vaccine

- 3 dose regimen
- Requires an adjuvant
- Subcutaneous injections

NuThrax<sup>®</sup> (AV7909) – Phase 3

- 2 dose regimen
- Requires 2 adjuvants
- Intramuscular injections

## MULTIPLE NEAR-TERM CLINICAL MILESTONES

PRODUCT NAME	DESCRIPTION	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021
NTHRAX VACCINE								
NasoShield™	Phase 1b: 8 Week Study	First Patient Dosed	Phase Resu		Potential BARDA Option Exercise			
CHRONIC HBV								
HepTcell™	Phase 2: 24 Week Study		First Patient Dosed					Initial Data Readout
NASH								
ALT-801	Phase 1a: SAD/ MAD 6 Week Study			First Patient Dosed	6 Week	Data		
ALT-801	Phase 1b: 12 Week Study				First Pat Dosed	12 Wook	Data	

## STRONG EXECUTIVE MANAGEMENT TEAM



Vipin K. Garg, PhD President & CEO



Will Brown, CPA, MBA Chief Financial Officer



Scott Harris, MD Chief Medical Officer



Scot Roberts, PhD Chief Scientific Officer



Bertrand Georges, PhD Chief Technology Officer



**José Ochoa, JD** Chief Business Officer





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