

Institute of Medicine
Prepared Forum

26 – 27 MARCH 2015

Oral Vectored Vaccines Administered by Room Temperature Stable Tablet

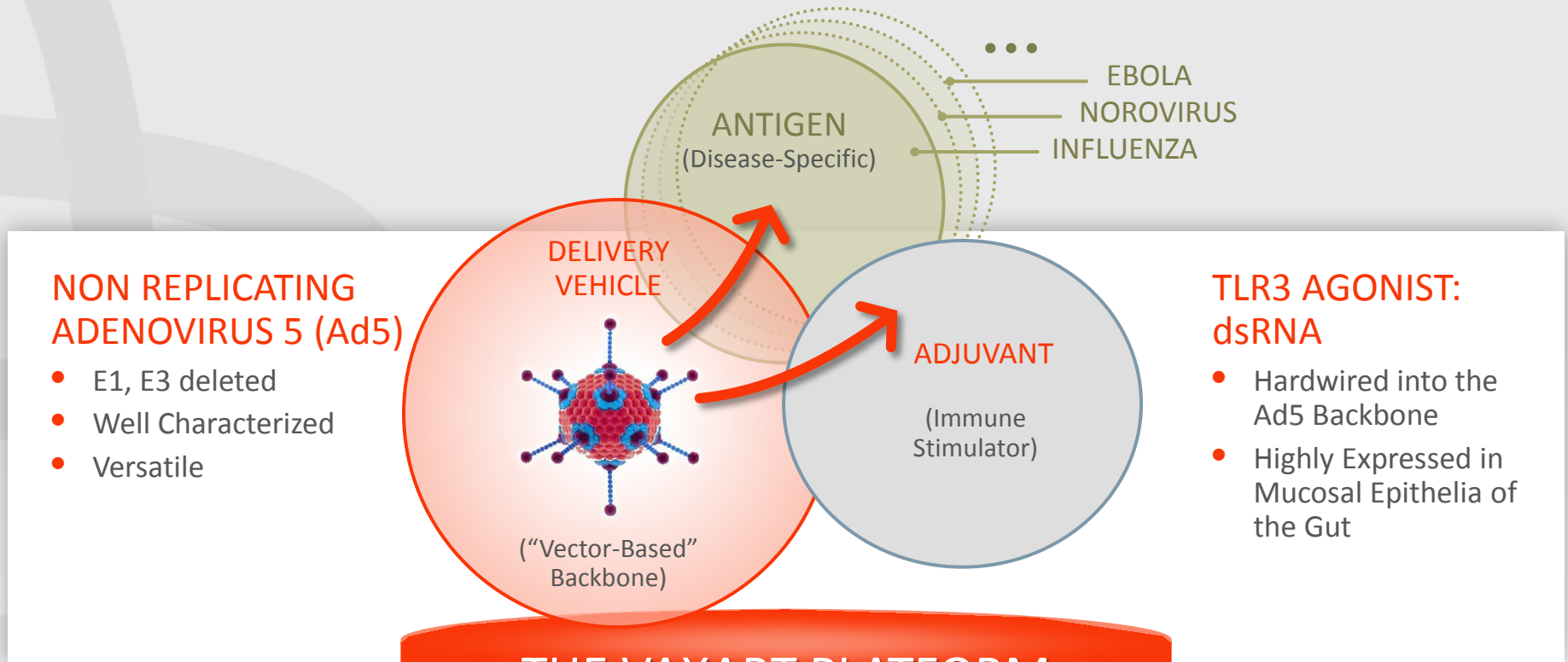
Wouter Latour, MD
Chief Executive Officer



VAXART

UNLOCKING THE FULL POTENTIAL OF ORAL VACCINES

Oral Non-Replicating Ad5 Co-Delivers Antigen and “Intestinal Adjuvant”



THE VAXART PLATFORM

VECTOR ADJUVANT COMBINATION

**Modular,
Standardized
Approach**

**Adjuvant and Antigen
are always co-delivered**

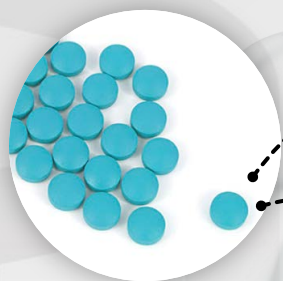
**Minimal Systemic
Exposure to Adjuvant**

**Suitable for
Delivery of Any
Recombinant Antigen**

Tablet Delivers Active Ingredient to Small Intestine – Antigen and Adjuvant Are Co-Expressed

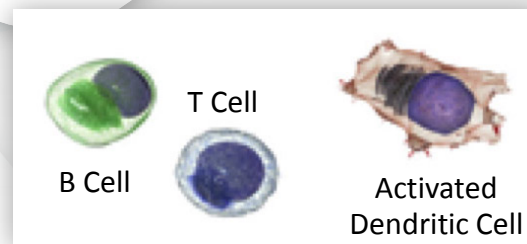
1

Enteric-Coated Tablet Protects Against Stomach Acid and Delivers Vaccine to Small Intestine



2

Non-Replicating Adenovirus 5 (Ad5) Viral Particle Delivers Antigen and Adjuvant Genes (the “Payload”) to Mucosal Epithelium for Expression



3

TLR3 Signal Activates Immune Cascade, Targeting Vaccine Antigen

Advantages of Oral Ad5 Vected Platform

Advantages that are Common Across Vected Vaccines

- Versatility
 - Suitable for delivery of virtually any Protein Antigen
 - Flu, HPV, Hep B, industry pipeline
 - Ebola, Marburg, CHIK, etc.
- Speed, Manufacturability
 - Rapid Construction
 - High Yield Process
 - Consistent across all Vaccines
- Safety
 - Recombinant protein
 - No need to work with pathogen

Advantages that are Unique to Vaxart Oral Ad5 Platform

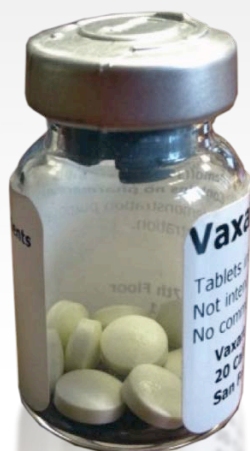
- Vaxart Vaccines directly target Immune System of the Gut
 - Largest compartment
- Evades anti-vector issues
 - Responses are independent of pre-existing anti-Ad5 status
 - No/minimal anti-Ad5 responses
- TLR3 adjuvant activates broad and robust Immune Responses to Vaccine Antigen
 - Systemic Antibodies, T-Cells
 - Mucosal Antibodies

Room Temperature Stable Tablet Improves Acceptance and Eliminates Logistical Bottlenecks

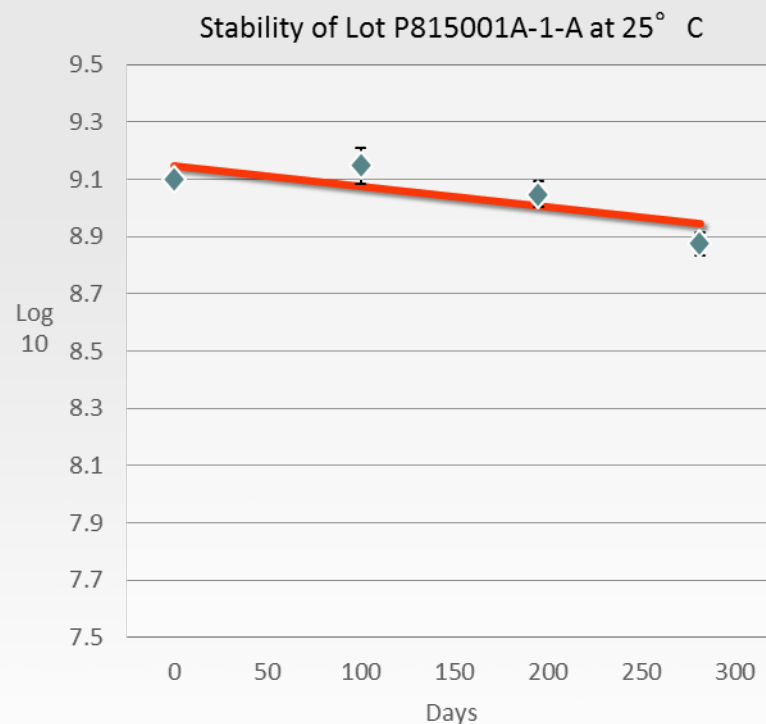


Game Changer in Locations without Infrastructure

- No Needle
 - Patient Acceptance
 - Ease of Administration
 - No Needle Stick, Biohazard
 - Cultural Advantages
- No Cold Chain
 - Ease of Distribution
 - Logistics, Cost



VAXART TABLET VACCINE



Stable at 25° C for up to 1 Year

- Stable Refrigerated (5° C) for >> 1 Year

H1N1 Phase I Placebo-Controlled Studies

DELIVERY SYSTEM

Coated Tablets



Purpose:

- Safety and Immunogenicity
- Dose Ranging

STUDY DESIGN

Randomized, Double Blind, Placebo Controlled

THREE DOSE LEVELS

SUBJECTS

Placebo, 1e9, 1e10

36 (3 x 12)

Placebo, 1e11 (Active Phase Complete)

24 (2 x 12)

TOTAL

60

Vaxart Ebola Vaccine Program, Timelines

Preclinical Data in 2012

- Collaboration with USAMRIID
- 100% Survival against Challenge in Mice

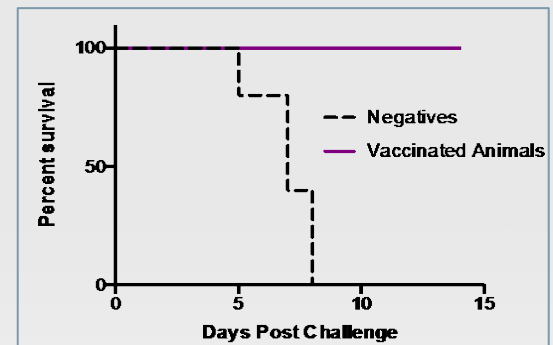
Funding Request Submitted to fund NHP Studies

- Limited clinical data

August 2014: USAMRIID/Vaxart Re-activated Program

- Room Temperature Stable Tablets
- Vaxart manufactured vaccine for NHP studies and Phase I
- PIND Meetings in 4Q 2014
- Resubmitted funding proposal

SURVIVAL OF EBOLA (Z) TREATED MICE



Decision Factors, Constraints, Opportunities

Privately Held

- Development Stage
- No Revenues, dependent on capital

Constraints

- Pressure to deliver on Milestones that drive Economic Value to help raise next financing
- Opportunity Cost

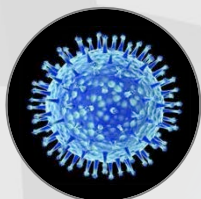
Positive Forces

- Strong desire to work on meaningful targets
- Clear Development Path
- Government funding, partnership

Vaxart Programs – Building on Platform Advantages

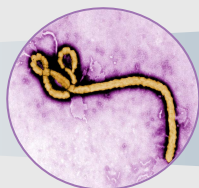
TABLET VACCINE OFFERS KEY ADVANTAGES

Clinical Programs in 2015



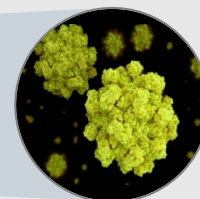
SEASONAL FLU

- Tablets
- Speed
- Safety/Tolerability
- Manufacturing



EBOLA ¹

- Infection Through Mucosal Surfaces
- Room Temperature Stable Tablet Is Key for Distribution to Africa
- Opportunity for Accelerated Approval



NOROVIRUS

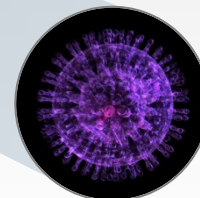
- 50% of All Foodborne Intestinal Viral Infections
- Mucosal Immunity Is Critical for Protection

Preclinical



RSV

- 177,000 Hospitalizations and 14,000 Deaths Among Elderly
- Mucosal Component
- Annual Vaccination
- Synergy with Flu in Timing



HERPES 2 - THERAPEUTIC

- 15 – 20% of Adults Are Infected
- T-Cells Are Essential
- Tablet Is Key Competitive Advantage

1) Subject to Government funding