VAXART

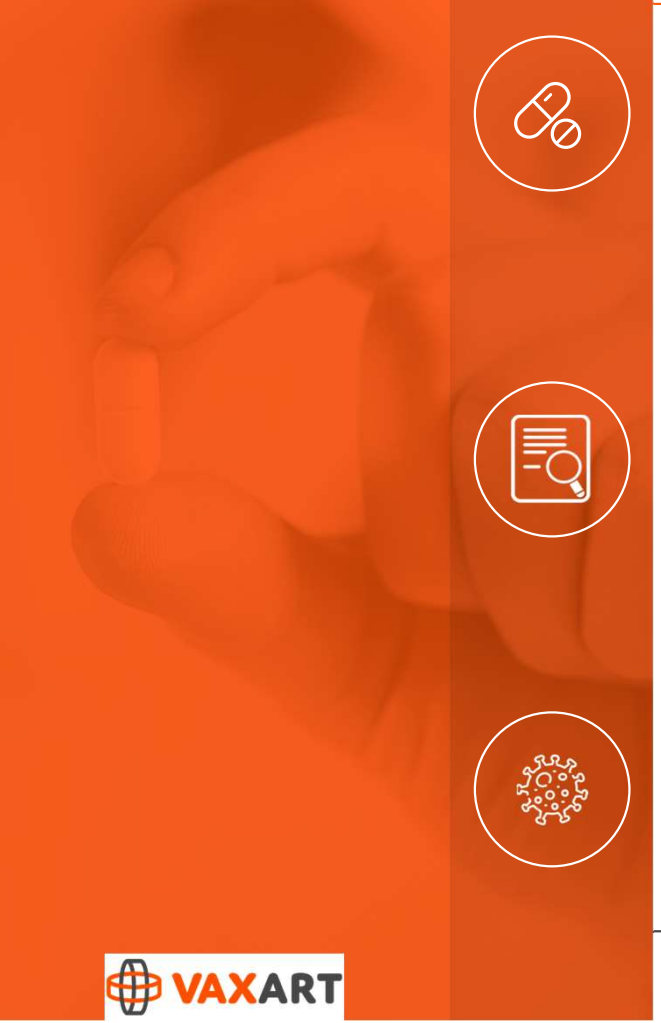
INVESTOR PRESENTATION

November 2023

FORWARD-LOOKING STATEMENTS

This presentation contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this press release regarding Vaxart's strategy, prospects, plans and objectives, results from preclinical and clinical trials, commercialization agreements and licenses, beliefs and expectations of management are forward-looking statements. These forward-looking statements may be accompanied by such words as "should," "believe," "could," "potential," "will," "expected," "plan" and other words and terms of similar meaning. Examples of such statements include, but are not limited to, statements relating to Vaxart's ability to develop (including enrolling a sufficient number of subjects and manufacturing sufficient quantities of its product candidates) and commercialize its COVID-19 vaccine candidate and preclinical or clinical results and trial data (including plans with respect to the COVID-19 vaccine product candidates); expectations regarding the timing and nature of future announcements including, those related to clinical trials and results of preclinical studies; Vaxart's expectations with respect to the important advantages it believes its oral vaccine platform can offer over injectable alternatives, particularly for coronaviruses; the potential applicability of results seen in our preclinical trials to those that may be seen in human studies or clinical trials; the expected role of mucosal immunity in blocking transmission of COVID-19; and Vaxart's expectations with respect to the effectiveness of its products or product candidates, including Vaxart's potential role in mitigating the impact of COVID-19 globally. Vaxart may not actually achieve the plans, carry out the intentions or meet the expectations or projections disclosed in the forward-looking statements and you should not place undue reliance on these forward-looking statements. Actual results or events could differ materially from the plans, intentions, expectations and projections disclosed in the forward-looking statements. Various important factors could cause actual results or events to differ materially from the forward-looking statements that Vaxart makes, including uncertainties inherent in research and development, including the ability to meet anticipated clinical endpoints, commencement and/or completion dates for clinical trials or preclinical studies, regulatory submission dates, regulatory approval dates and/or launch dates, as well as the possibility of unfavorable new clinical data and further analyses of existing clinical data; the risk that clinical trial and preclinical study data are subject to differing interpretations and assessments by regulatory authorities; whether regulatory authorities will be satisfied with the design of and results from the clinical studies; decisions by regulatory authorities impacting labeling, manufacturing processes, and safety that could affect the availability or commercial potential of any product candidate, including the possibility that Vaxart's product candidates may not be approved by the FDA or non-U.S. regulatory authorities; that, even if approved by the FDA or non-U.S. regulatory authorities, Vaxart's product candidates may not achieve broad market acceptance; that a Vaxart collaborator may not attain development and commercial milestones; that Vaxart or its partners may experience manufacturing issues and delays due to events within, or outside of, Vaxart's or its partners' control, including the recent outbreak of COVID-19; difficulties in production, particularly in scaling up initial production, including difficulties with production costs and yields, quality control, including stability of the product candidate and quality assurance testing, shortages of qualified personnel or key raw materials, and compliance with strictly enforced federal, state, and foreign regulations; that Vaxart may not be able to obtain, maintain and enforce necessary patent and other intellectual property protection; that Vaxart's capital resources may be inadequate; Vaxart's ability to obtain sufficient capital to fund its operations on terms acceptable to Vaxart, if at all; the impact of government healthcare proposals and policies; competitive factors; and other risks described in the "Risk Factors" sections of Vaxart's Quarterly and Annual Reports filed with the SEC. Vaxart does not assume any obligation to update any forward-looking statements, except as required by law.

EXECUTIVE SUMMARY



- Oral tablet vaccine platform with profound transformative potential
- Clinical proof-of-concept demonstrated in two challenge studies, against respiratory and GI viruses
- Data suggests oral tablet vaccines may offer several important advantages over injectables
- Norovirus challenge data suggests potentially very compelling real-world profile for bivalent vaccine candidate
- Norovirus is a multibillion-dollar commercial opportunity: a significant unmet need with no approved vaccine
- Vaxart's pipeline targets other large opportunities, such as universal flu and pan-coronavirus

VAXART

VAXART'S MISSION

Improve global public health by developing a transformative oral tablet vaccine platform

The potential impact is revolutionary, scalable, and could lead to better global public health

Vaxart's current main focus is on its norovirus vaccine candidate, while also advancing other programs that can exploit its platform's advantages

ORAL VACCINE PLATFORM WITH TRANSFORMATIONAL POTENTIAL

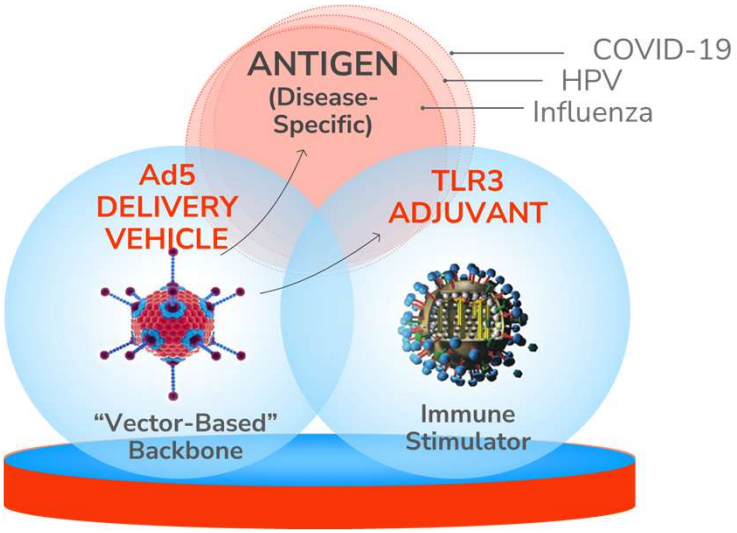
ORALLY DELIVERED TABLET WITH SEVERAL POTENTIAL ADVANTAGES OVER INJECTABLES

- The only oral vaccine shown to be as protective as an injectable against a respiratory pandemic virus in a human clinical trial[1]
- By triggering mucosal and systemic immunity Vaxart's platform could offer several advantages over injectables:
  - Cross-reactivity & broader immune response
  - Reduction in transmission
  - Longer duration of protection
  - Better tolerability
- All of this delivered in an oral tablet:
  - Fast, easy, painless administration

1. Liebowitz, et al, *Lancet ID*, 2020

PLATFORM EXPRESSES ANTIGEN AND TLR3 ADJUVANT DELIVERED IN AD5 VECTOR

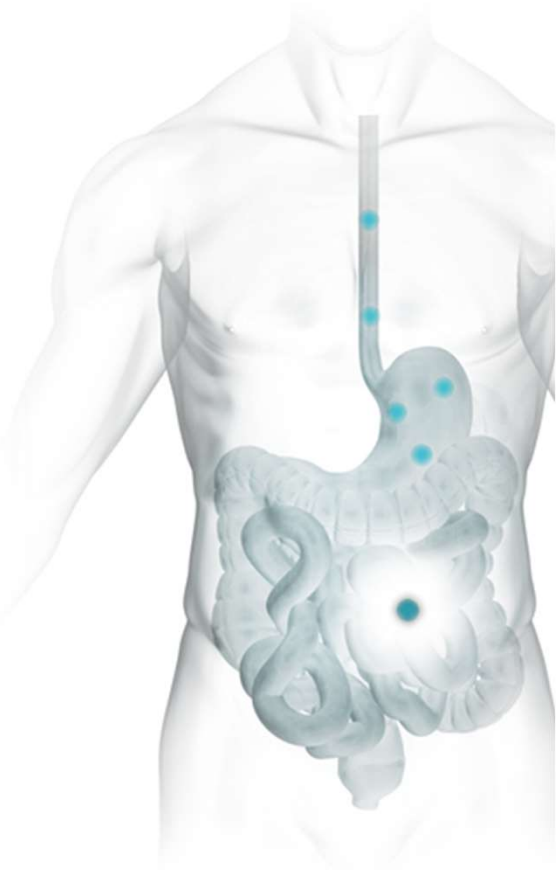
Proprietary Oral Vaccine Platform: VAAST™



Creates a very broad immune response not just serum antibodies

*VAAST™: Vector-Adjuvant-Antigen Standardized Technology

Room-temperature (25ºC) stable enteric-coated tablets



POTENTIALLY AS PROTECTIVE AS LEADING INJECTABLE AGAINST A RESPIRATORY VIRUS

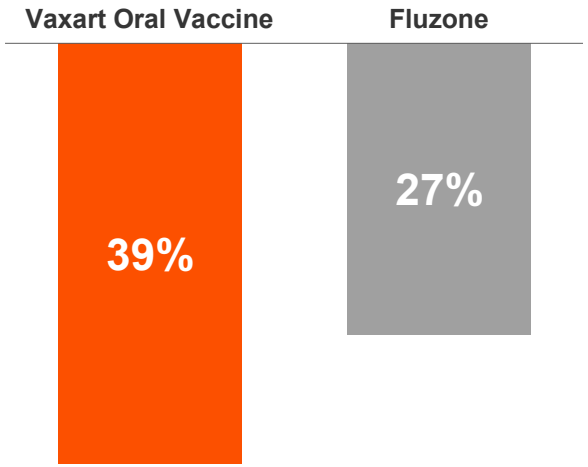
CLINICAL TRIAL FUNDED BY U.S. GOVERNMENT'S BARDA* DEMONSTRATED SIGNIFICANT PROTECTION AGAINST ILLNESS AND INFECTION

Phase II clinical trial demonstrated:

- Protection with Vaxart's oral tablet flu vaccine against illness and infection similar to that of Fluzone, but numerically favorable[1]
- 80% chance of improved protection against infection compared to the market-leading Sanofi injectable flu vaccine in a BARDA* analysis

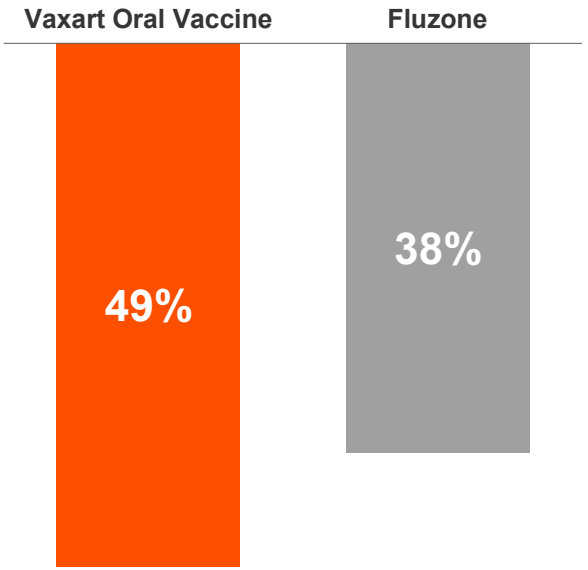
Protection Against Illness

Reduction in Illness Rate vs. Placebo



Protection Against Infection

Reduction in Infection Rate vs. Placebo



Note: Infection defined as detectable viral shedding on any day after the first 36 hours from challenge.

* BARDA (The Biomedical Advanced Research and Development Authority) is a U.S. Department of Health and Human Services office responsible for the procurement and development of medical countermeasures

Source Flitter, B.A. et al Drop the Needle; A Temperature Stable Oral Tablet Vaccine Is Protective against Respiratory Viral Pathogens. Vaccines 2022, 10, 593. https://doi.org/ 10.3390/vaccines10040593,

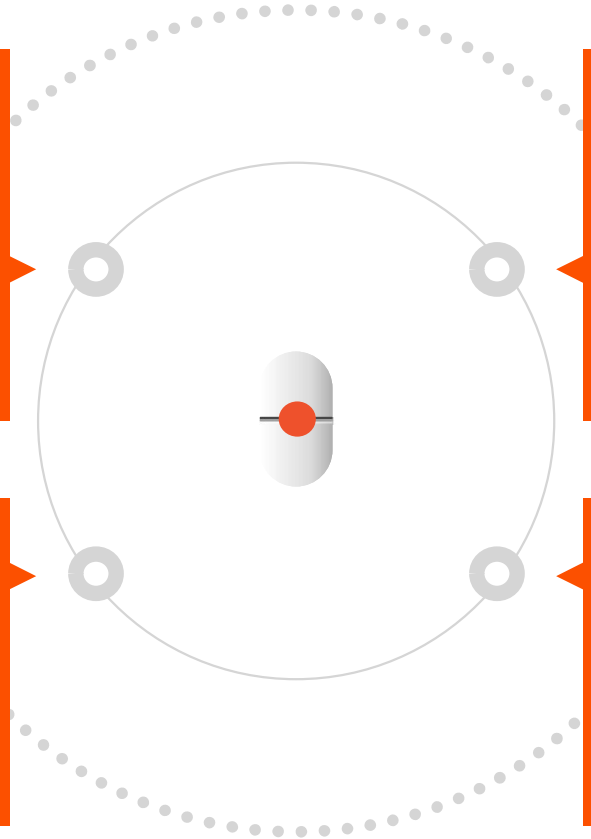
DATA SUGGESTS THAT BY TRIGGERING MUCOSAL IMMUNITY, VAXART'S ORAL VACCINES MAY OFFER SEVERAL ADVANTAGES OVER INJECTABLES

Cross-reactivity & Broad Immune Responses

- Broad immune responses in preclinical & clinical COVID and Influenza studies
- Cross-reactivity in COVID and norovirus clinical trials

Long Duration of Protection and Immune Responses

- Long-lasting protection demonstrated in Influenza human vaccine study
- Long-lasting antibody responses in clinical Norovirus and COVID trials



Reduction in Transmission

- Reduction in viral transmission in preclinical COVID study
- Reduction in shedding (infection) in influenza clinical trial

Benign Tolerability

- Benign tolerability profile observed across 19 clinical trials against 7 different viruses, evaluating 800+ subjects

CROSS-REACTIVITY: BROAD BREADTH OF PROTECTION

CLINICAL AND PRECLINICAL DATA DEMONSTRATE BROAD CROSS-REACTIVITY IN TWO COVID-19 CLINICAL TRIALS

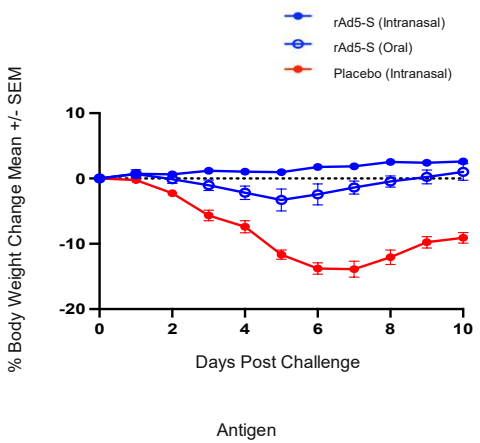
Cross-protection by Wuhan vaccine against Delta variant

Mucosal IgA responses *highly cross reactive against all tested coronaviruses*

Mucosal IgA responses are cross-reactive to *variants AND other coronaviruses*

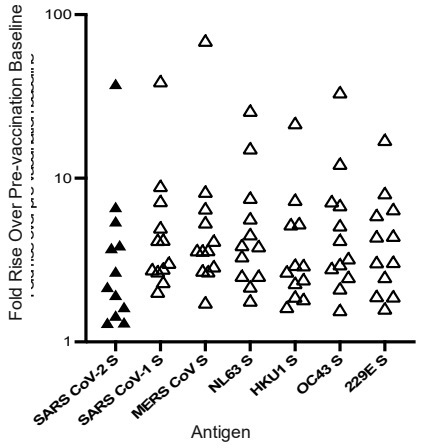
COVID Preclinical

Challenge: Delta Virus



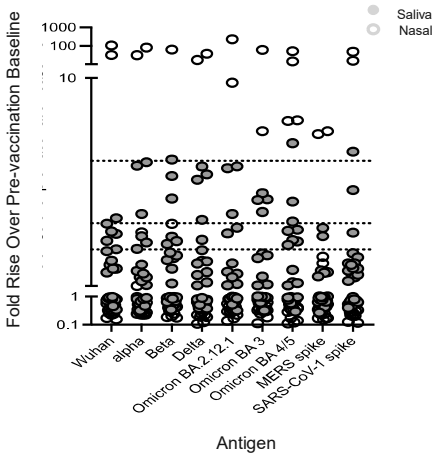
COVID Ph I

Cross Reactivity



COVID Ph II

Cross Reactivity



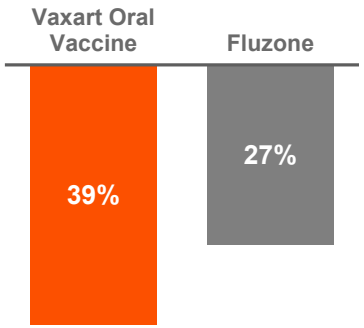
LONG DURATION OF IMMUNE RESPONSES

DURABLE RESPONSES ACROSS MULTIPLE PROGRAMS AND CLINICAL TRIALS

Robust protection at least 90–120 days post vaccination

Influenza Ph II

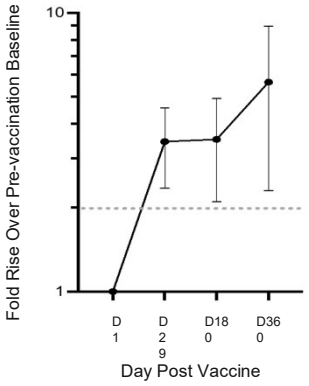
Reduction in illness rate vs. placebo



Sustained antibody responses to 360 days

COVID-19 Ph I

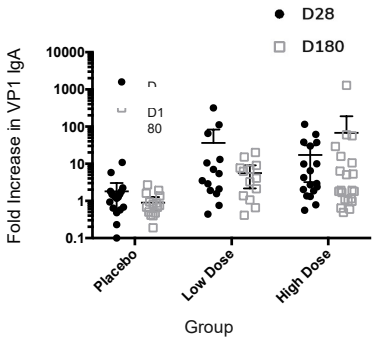
Antibody responses



Durable fecal antibody responses to 180 days

Norovirus Ph I

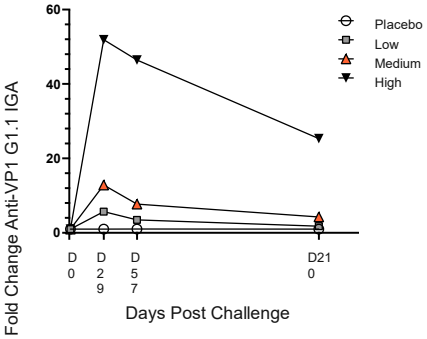
Fecal IgA Response



Sustained IgA responses in *200 days post vaccination*

Norovirus Ph I (Elderly)

Nasal IgA Response Fold Change

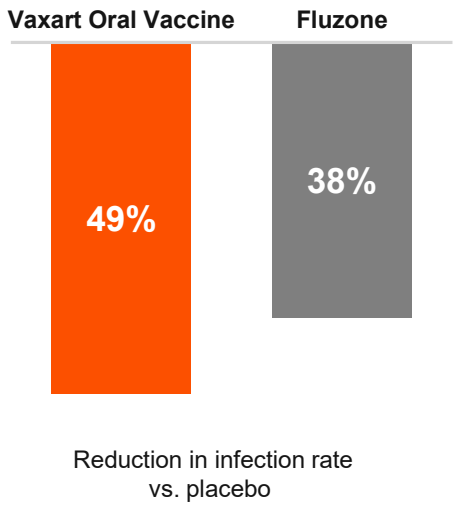


Source Flitter, B.A. et al Drop the Needle; A Temperature Stable Oral Tablet Vaccine Is Protective against Respiratory Viral Pathogens. Vaccines 2022, 10, 593. https://doi.org/ 10.3390/vaccines10040593,

Platform validated: clinical proof-of-concept in two human challenge studies showing protection against a respiratory and a GI virus

Reduction in viral shedding (infection rate) compared to Sanofi's injectable Fluzone

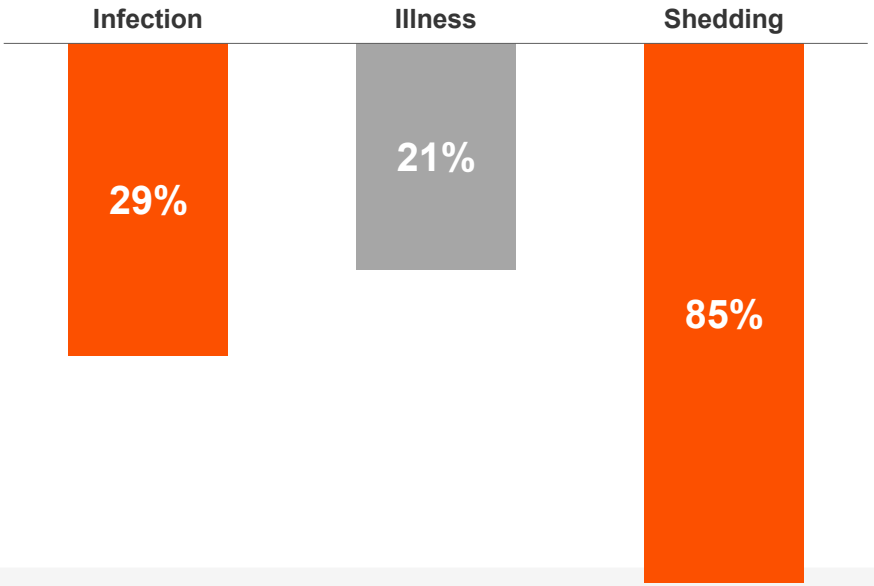
Influenza ph II



Reduction in infection rate vs. placebo

Reduction in infection, illness and viral shedding

Norovirus GI.1 Challenge Study



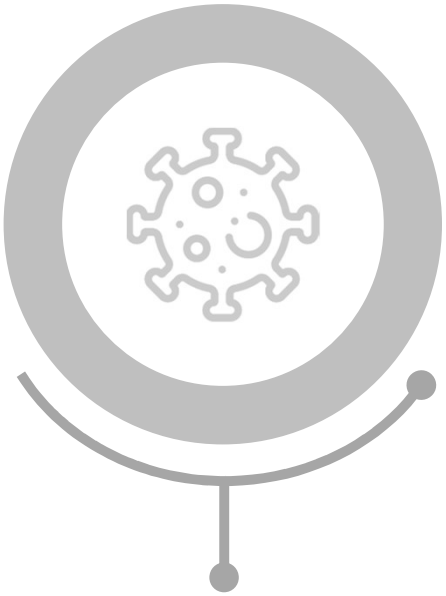
Source Flitter, B.A. et al Drop the Needle; A Temperature Stable Oral Tablet Vaccine Is Protective against Respiratory Viral Pathogens. Vaccines 2022, 10, 593. https://doi.org/ 10.3390/vaccines10040593,; VXA-NVV-201

BENIGN SAFETY AND TOLERABILITY DATA

ACROSS HUNDREDS OF SUBJECTS IN 15 CLINICAL TRIALS AGAINST 7 VIRUSES

15 Clinical Trials

500+ Subjects



7 Viruses

No vaccine-related serious adverse events

POTENTIAL ADVANTAGES OF ORAL PILL DELIVERY

PAINLESS, FAST AND EASY TO DISTRIBUTE, ROOM-TEMPERATURE STABLE

An oral tablet vaccine could vaccinate more people faster

INJECTABLE VACCINE

Make appointment | Travel to vaccination site | Wait in line | Get vaccinated | Travel home

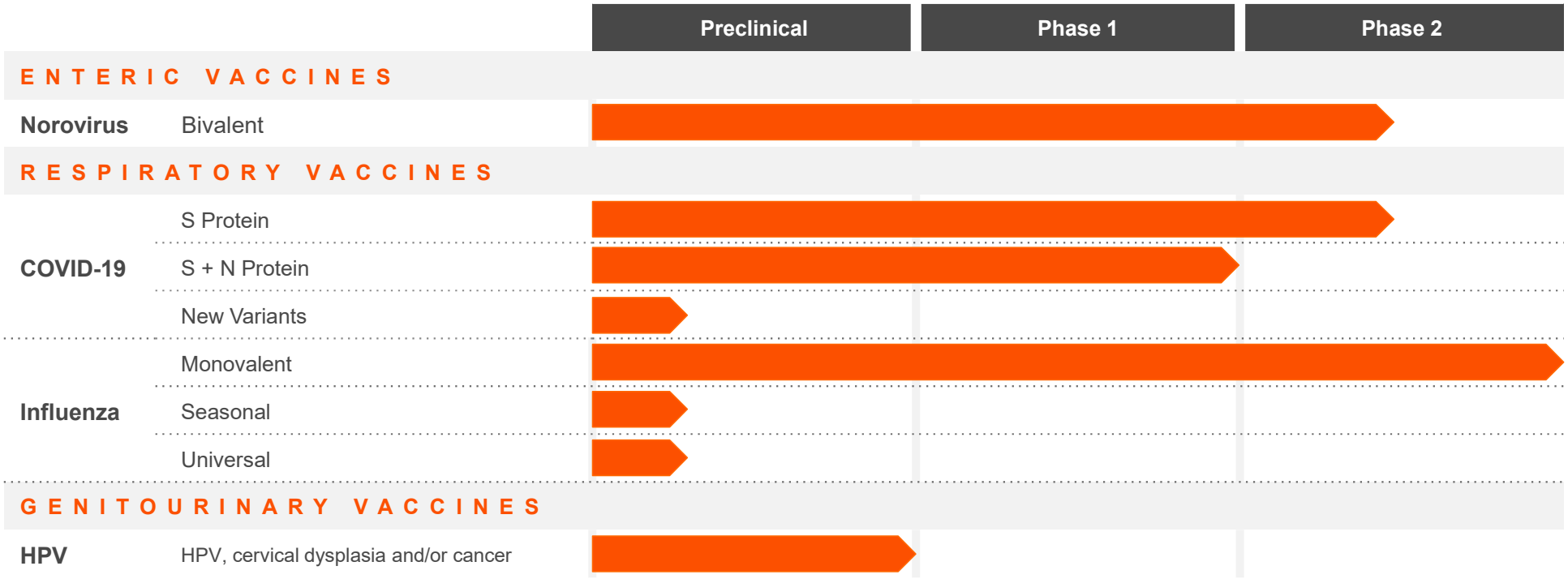
VS

ORAL VACCINE

Order pill | Pill is shipped | Take pill

Clinical pipeline

Trials Conducted To Date Or In Progress:



VAXART PROGRAMS

1. **Influenza**
2. **Norovirus**
3. **Pan-Betacoronavirus**

Highlights:

- Demonstrated to be at least as protective as an approved injectable vaccine in a phase 2 challenge trial
- Very different mechanism of action: mucosal rather than serum antibodies
- Reduces shedding
- Favorable safety data

HUMAN INFLUENZA CHALLENGE STUDY DESIGN: CHALLENGE AFTER 90 DAYS

- A single dose administration of one of the following:
  - Arm 1: VXA-A1.1 oral vaccine + placebo IM injection (n=60+extra)
  - Arm 2: QIV (Fluzone) injection + oral placebo tablet (n=60+extra)
  - Arm 3: Placebo IM injection + oral placebo tablet (n=30+extra)
- Subjects with baseline HAI titers <10
- Challenge after day 90 (up to 120 days)
  - A wild-type influenza A/Ca/2009/pH1N1 strain was administered to subjects in all treatment groups
- Primary endpoint
  - Number and % of subjects protected against infection and illness following influenza (A/CA/2009/pH1N1) challenge. VXA-A1.1 compared to placebo and QIV (Fluzone).

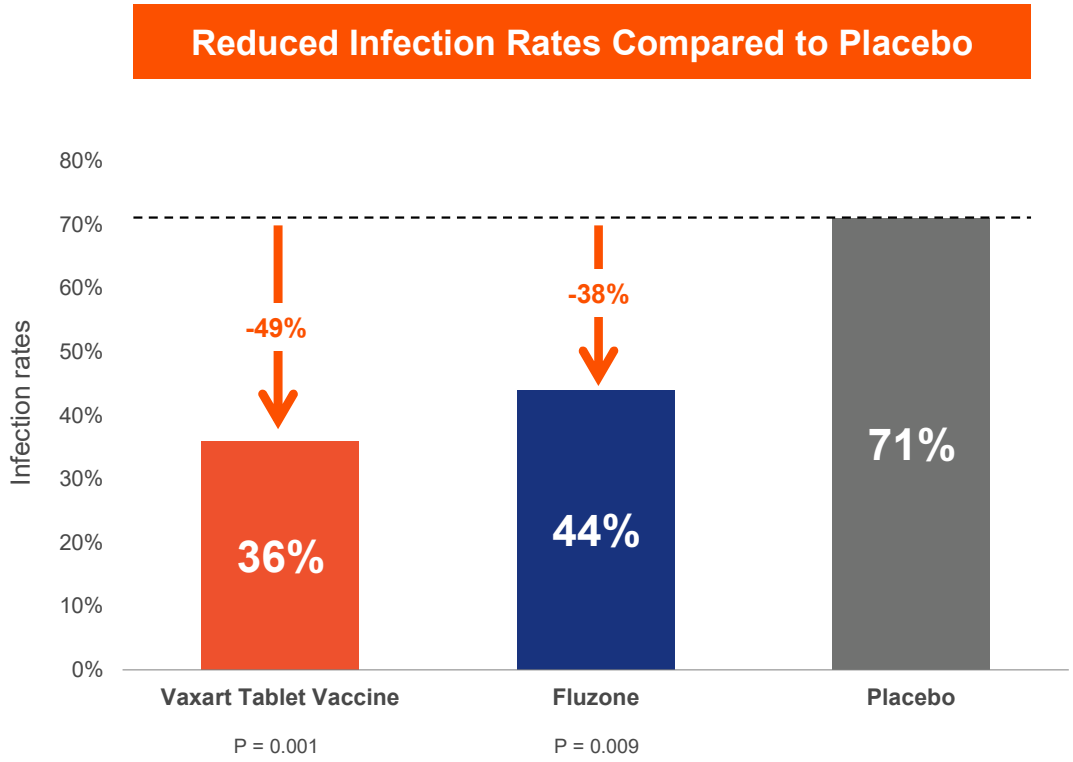
Source: Liebowitz, et al, *Lancet ID*, 2020

VAXART ORAL VACCINE REDUCED SHEDDING (INFECTION RATE)

TRENDING SUPERIOR TO FLUZONE

Oral vaccine candidate protected against influenza infection as well as market leading injected vaccine after influenza challenge. 80% chance of improved protection.

- Infection was measured by influenza virus shedding in subjects
- Shedding reductions are believed to typically translate to lower transmission



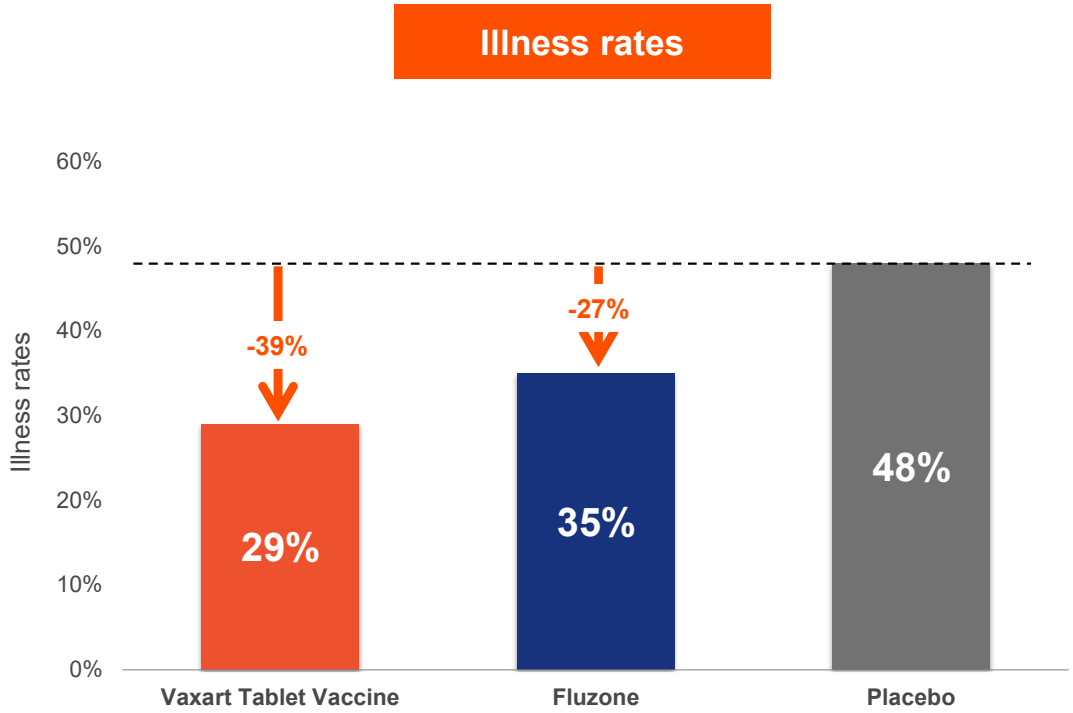
Note: Infection defined as detectable viral shedding on any day after the first 36 hours from challenge.

VAXART

Source Flitter, B.A. et al Drop the Needle; A Temperature Stable Oral Tablet Vaccine Is Protective against Respiratory Viral Pathogens. Vaccines 2022, 10, 593. https://doi.org/ 10.3390/vaccines10040593,; VXA-NVV-201

VAXART ORAL VACCINE REDUCED ILLNESS

Oral vaccine candidate protected against influenza illness as well as market leading injected vaccine after influenza challenge



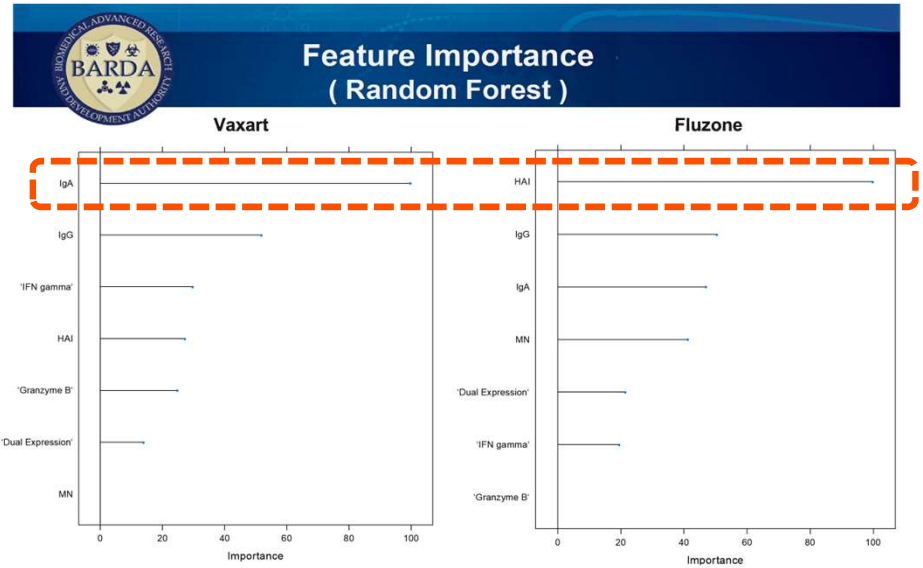
Source: Liebowitz, et al, *Lancet ID*, 2020

CORRELATE OF PROTECTION FOR ORAL VACCINE VERY DIFFERENT THAN FOR INJECTABLE

Vaxart's oral vaccine generated less than one tenth the serum neutralizing antibodies of the injectable, yet it protected as well

	Number of individuals tested	GMT (95% CI)		GMFR (95% CI)	Number of individuals who had a response (%; 95% CI)*
		Before vaccination	30 days after vaccination		
Neutralising antibody					
VXA-A1.1	69	10·2 (8·2–12·6)	58·6 (40·2–85·5)	5·8 (4·2–8·0)	39 (57%; 44·0–68·4)
IIV	70	11·8 (9·1–15·4)	1838 (1203–2810)	155·4 (108·7–222·2)	69 (99%; 92·3–100)
Placebo	35	12·0 (8·2–17·6)	12·4 (8·4–18·4)	1·06 (0·9–1·3)	1 (3%; 0·1–14·9)

BARDA's Random Forest Analysis: IgA ASC most important immunological feature for protection against shedding for the oral vaccine, while HAI most important feature for protection against shedding for the injectable vaccine



These results indicate a clear difference in the importance of the measured immune correlates between the two vaccines

ASPR

Source: Liebowitz, et al, *Lancet ID*, 2020

VAXART PROGRAMS

1. **Influenza**
2. **Norovirus**
3. **Pan-Betacoronavirus**

Highlights:

- $10bn+ annual U.S. economic burden
- Significant unmet need
- In studies, vaccine triggered immune response similar to natural infection
- Durable immune responses to 200 days
- Reponses in elderly similar to younger adults
- No interference for bivalent vaccine

NOROVIRUS: $10 BILLION+ ECONOMIC BURDEN PRESENTS SIGNIFICANT THREAT TO CHILDREN AND SENIORS

$10.6 billion
U.S. economic burden

21,000,000
illnesses/year caused by norovirus in the U.S.

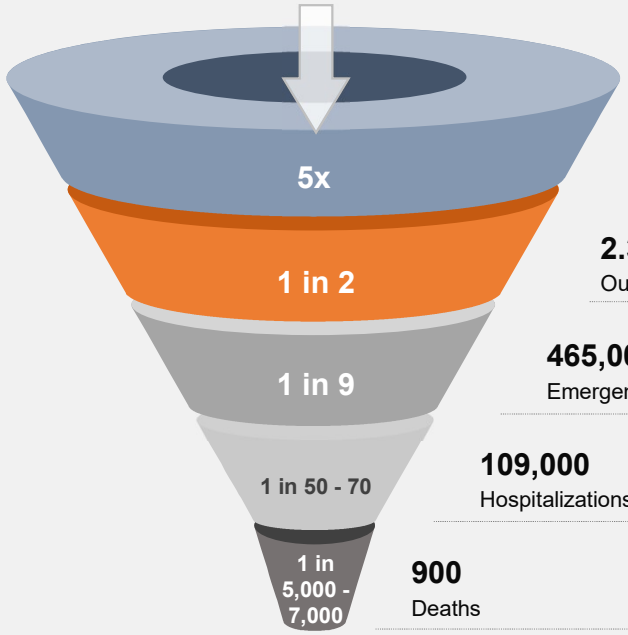
15%
of children under 5 catch norovirus annually

7.5%
of age 65+ get sick, most hospitalizations in this group

3,000,000
sets of parents need to take time from work to care for these children

Economic burden of disease concentrated in these two groups

Estimated Lifetime Risk of Norovirus

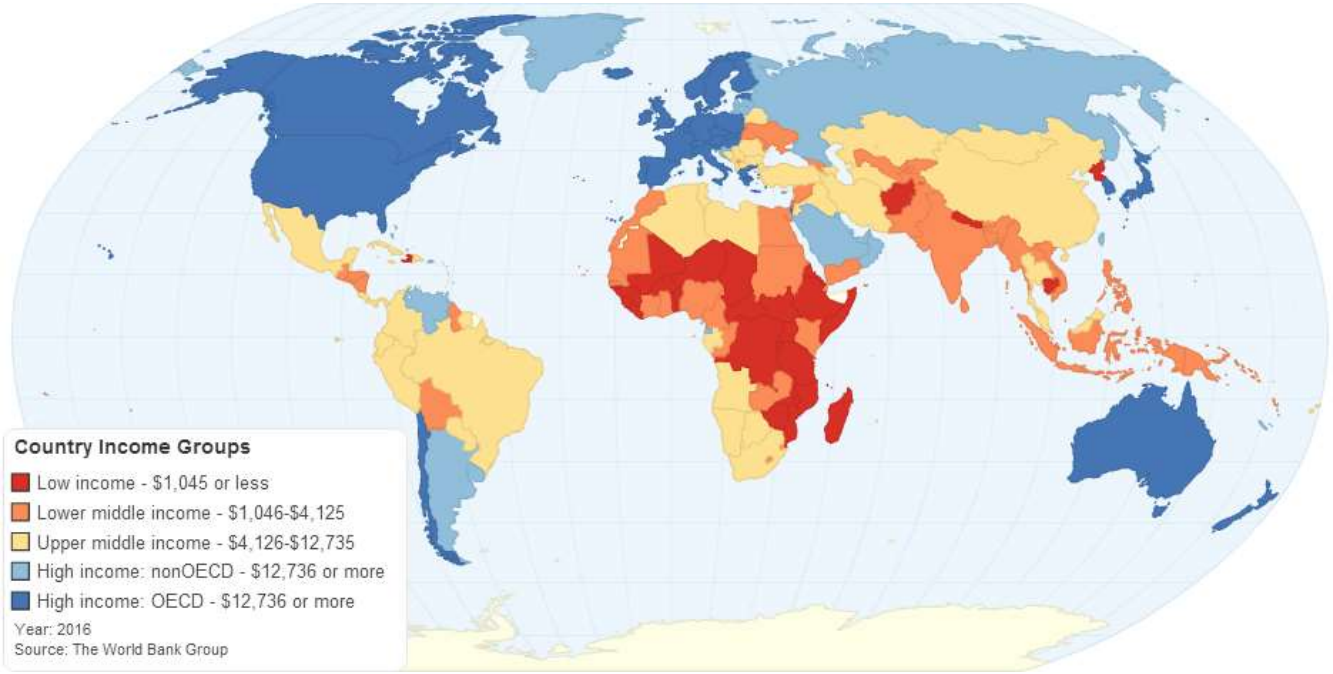


Source: CDC website (https://www.cdc.gov/norovirus/burden.html)

Source: Incidence of Norovirus and Other Viral Pathogens That Cause Acute Gastroenteritis (AGE) among Kaiser Permanente Member Populations in the United States, 2012–2013, Grytdal et al, PLOS 1, 2016

GLOBAL NOROVIRUS IMPACT $60 BILLION[1] (2016)

Burden of Disease in High Income Countries: $34+ Billion



High Income Countries

- U.S., Europe, Japan, others
- 1.2 billion population

Target Population for Vaccination

- Older adults (65+)
- Very young (6m-4)

1. Global Economic Burden of Norovirus, Bartsch S et al., PLOS ONE 2016

VAXART NOROVIRUS VACCINE OFFERS IMPORTANT POTENTIAL ADVANTAGES: ORAL DELIVERY, MUCOSAL IMMUNITY

Development / competitive status

- GI and GII genotypes cause majority of NV-disease in the U.S.[1]
- Vaxart bivalent vaccine targets prevalent strain of each genotype
- Only Vaxart (oral tablet) and HilleVax (injectable) are in the clinic

Mucosal immunity may be important for protection against norovirus

- Correlates of protection from human challenge studies shown with rapid induction of mucosal IgA, serum IgA[2]
- Vaxart vaccine designed to activate mucosal immunity

Oral tablet vaccine

- Convenient room temperature-stable tablets are easier to distribute and administer than injectable vaccines

1. CDC Norovirus Illness: Key Facts 2. Atmar, et al, CVI, 2015. Ramani, et al, PlosPathogens 2016

NOROVIRUS INFECTION – WHAT HAPPENS?

Analysis - Mucosal	Day 0	Day 28	GMFR
Fecal IgA (ng VP1/100 ug total)	45.1	1544	34.2

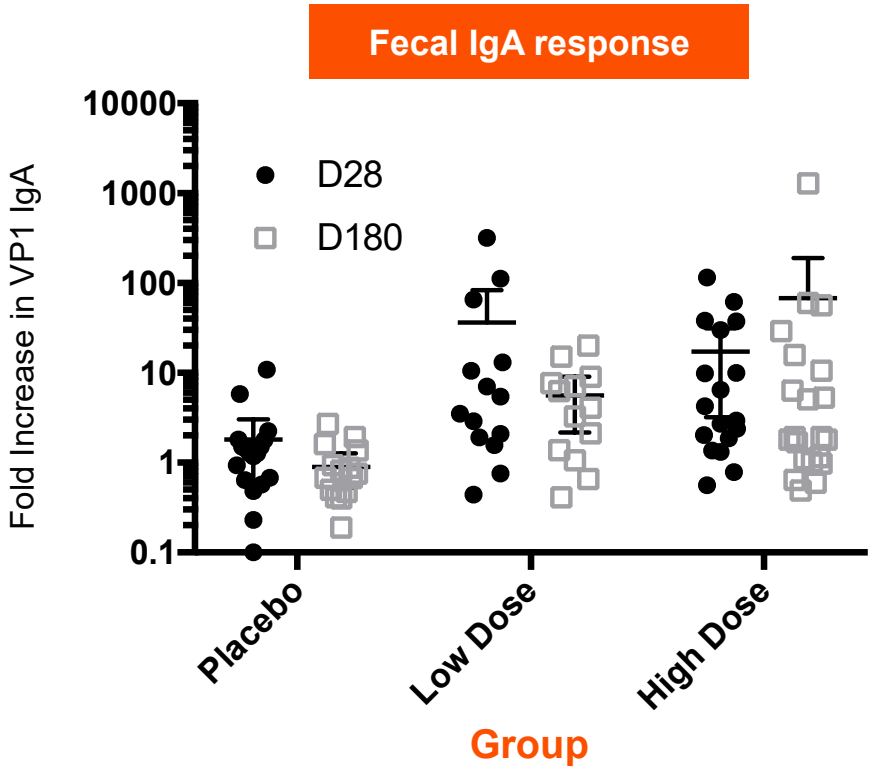
Analysis - Memory	Day 0	Day 7	GMFR	Day 14	GMFR
Memory IgA (%/5e5 PBMC)	0.2	0.8	7.2	2.5	15.7

- Ramani, et al, “Mucosal and Cellular Immune Responses to Norwalk Virus” JID 212:397, 2015
- Screened subjects so they are susceptible to infection and then removed uninfected subjects from the analysis. (Data below is from 21 infected out of 36)

MEMORY IMMUNE RESPONSES ON THE SAME ORDER OF MAGNITUDE AS NATURAL INFECTION

Source: Kim, et al, JCI Insight, 2018

FECAL IGA RESPONSES DURABLE TO 180 DAYS



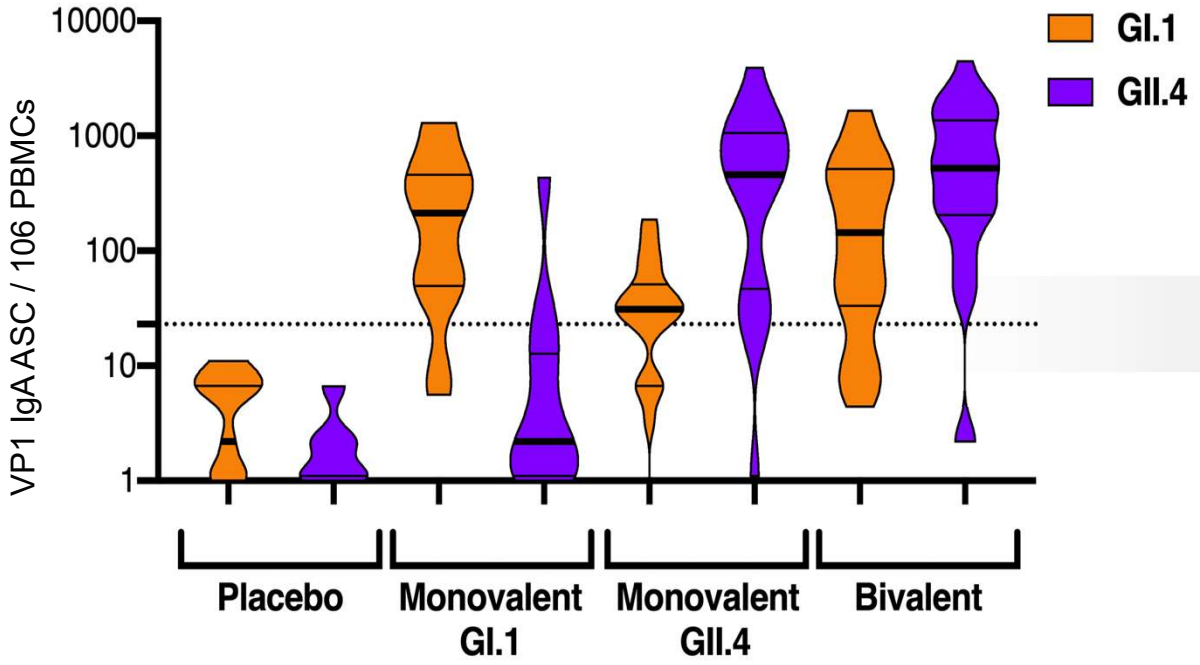
Fecal IgA measured by Marcela Pasetti, U Maryland, Baltimore

VAXART

Source: Kim, et al, JCI Insight, 2018

BIVALENT RESULTS: NO INTERFERENCE, STRONG ANTIGEN-SPECIFIC B CELL INDUCTION

ASC IgA responses day 8[1]



Both monovalent GI.1 and GII.4 constructs elicit strong IgA mucosal response

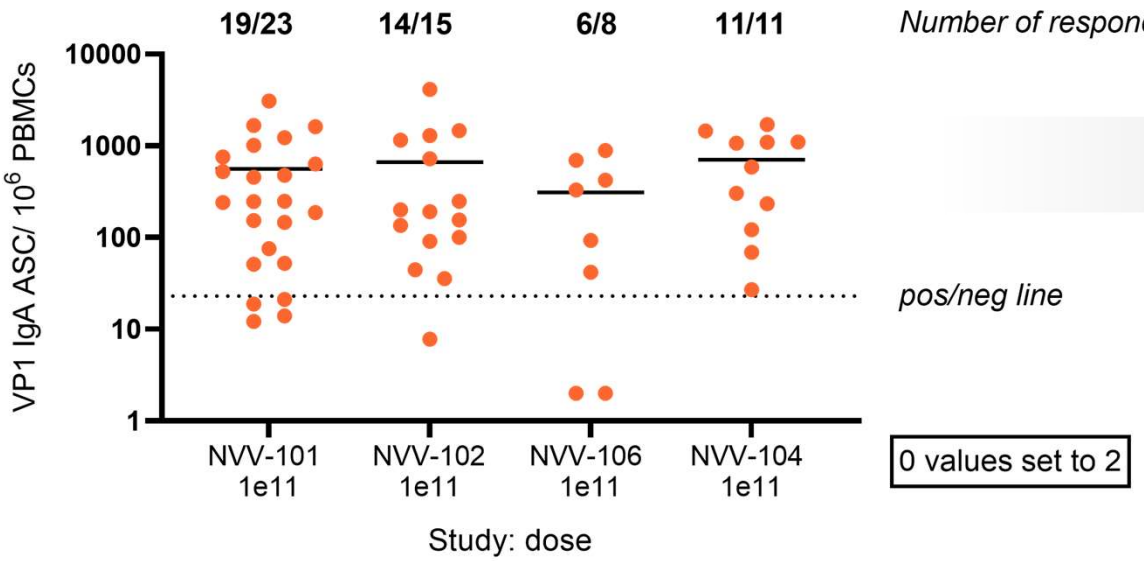
Bivalent response elicits strong antigen-specific B cell induction with no cross-interference

1. Data on file with Vaxart

ELDERLY SUBJECTS HAVE SIMILAR RESPONSE TO YOUNGER ADULTS

VXA NVV-104 IMMUNOGENICITY – ASC IGA VP1 BY ELISPOT - COMPARISON

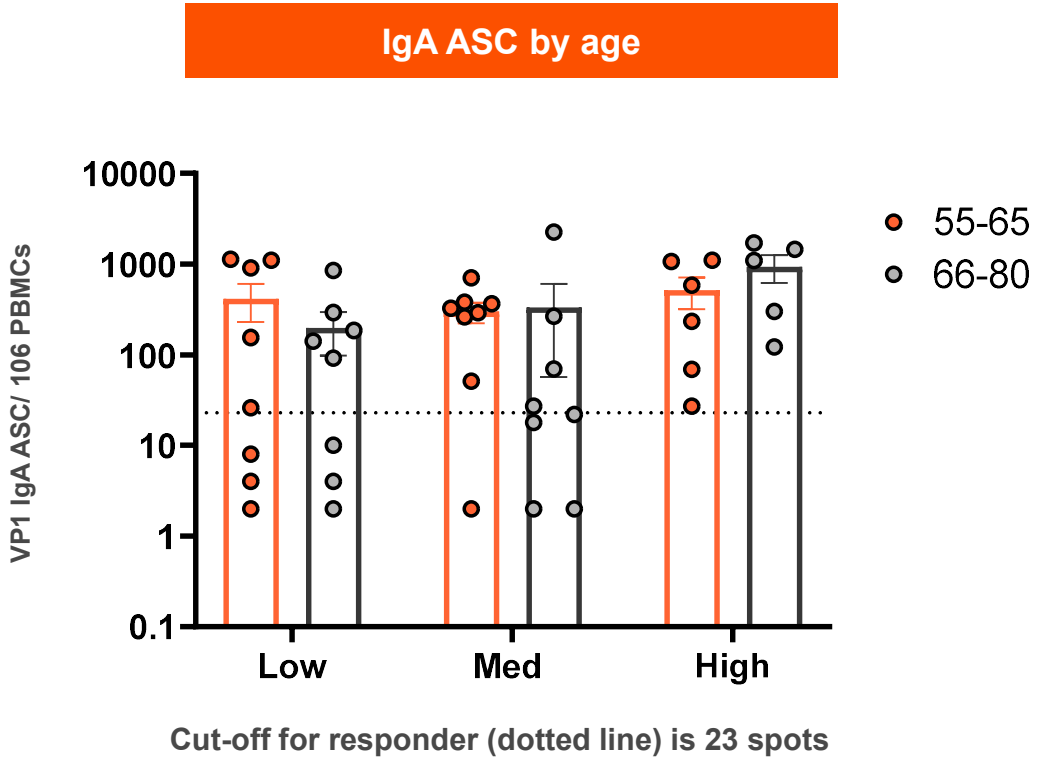
Comparison between studies IgA ASC day 7



High Dose (11 subjects, VXA-NVV-104) included in comparison. Responder level (pos/neg) is 23 spots.

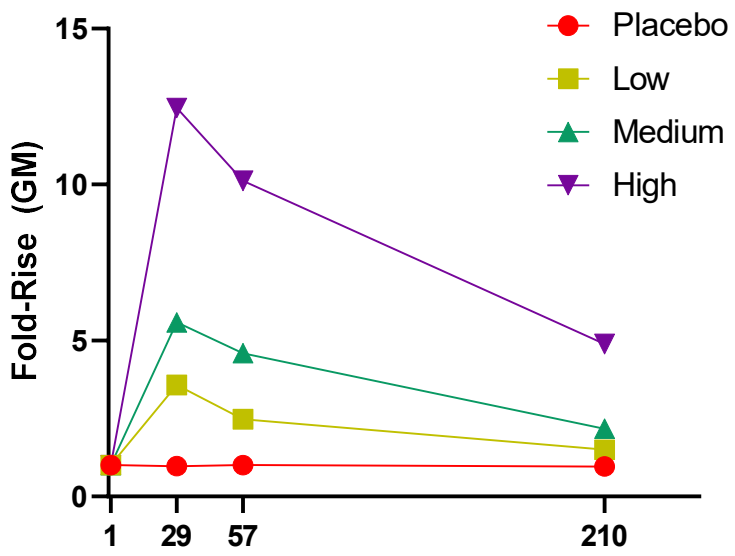
Not typical for vaccines to have similar responses in young and elderly subjects

NO DIFFERENCE BETWEEN OLDER AND YOUNGER SUBJECTS IN ASC
VXA NVV-104 IMMUNOGENICITY – ASC IGA VP1 BY ELISPOT – DOSE ANALYSIS

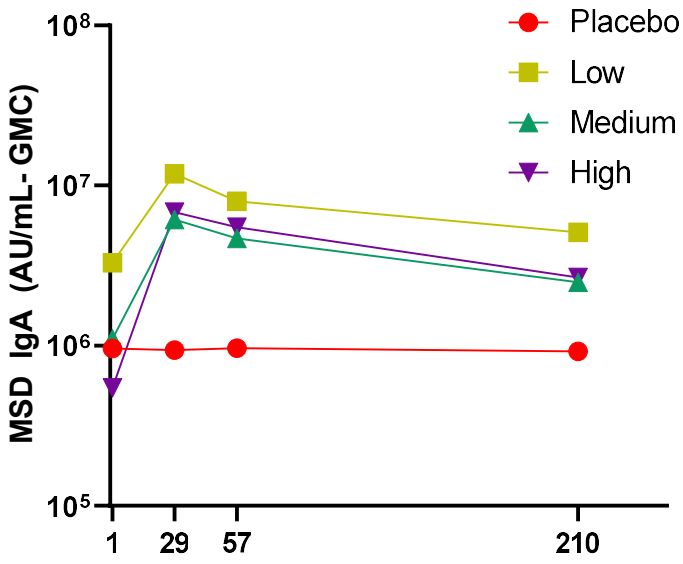


SUSTAINED IGA ANTIBODY RESPONSES AFTER 200 DAYS

MSD-IgA-AU/mL - Fold

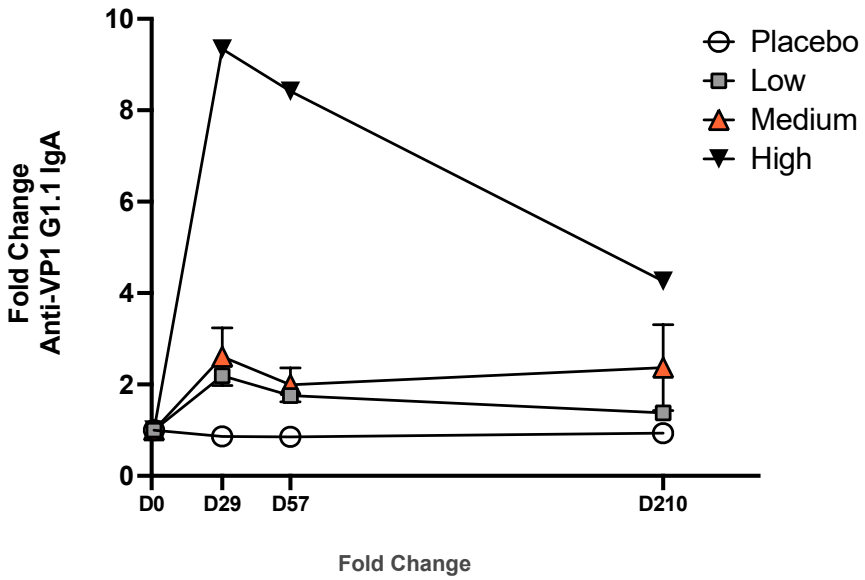


MSD-IgA-AU/mL

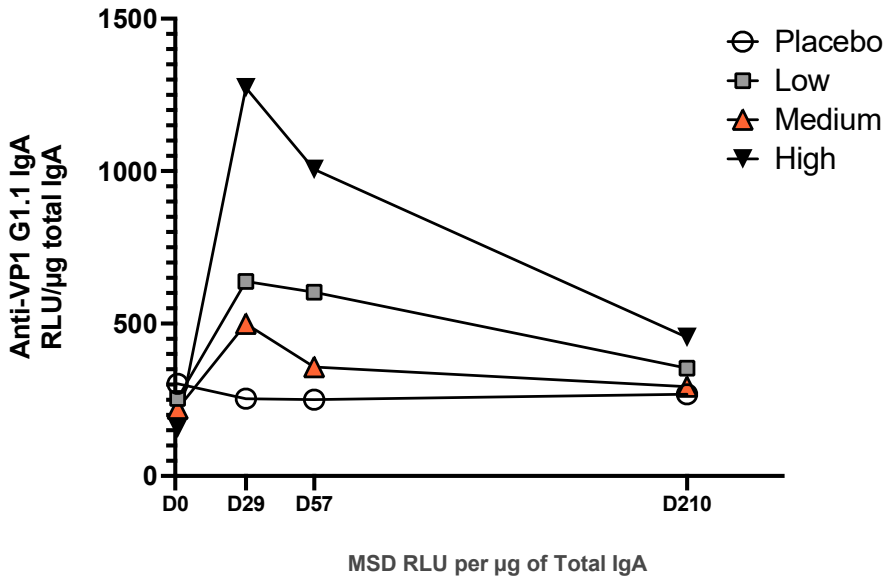


SUSTAINED NASAL MUCOSAL RESPONSES AFTER 200 DAYS

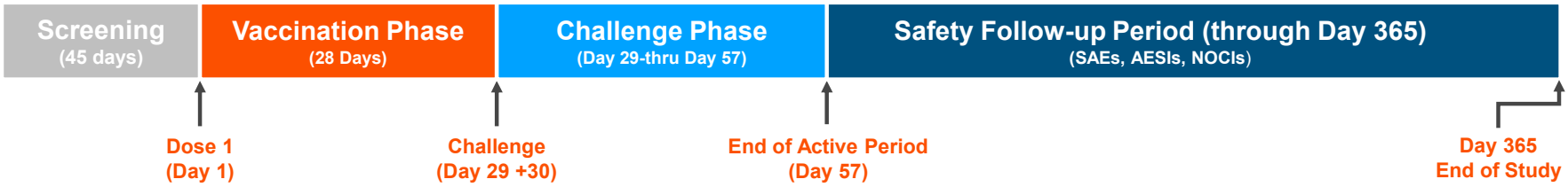
Nasal IgA G1.1



Nasal IgA G1.1



Protocol VXA-NVV-201 study design



Product/Test Agent	# of Subjects
VXA-G1.1-NN oral vaccine tablets [$1x10^{11}$ IU]	85
Placebo identical to NVV	85
Challenge Norwalk Virus Strain [Lot 001-09NV and Sublot 2 ($1x10^{6}$ GC)]	140

Objectives and Endpoints

Primary Objectives

- Safety
- Efficacy and Immunogenicity

Primary Endpoints

- Rate of norovirus infection
- Rate of clinical norovirus AGE
- Immunogenicity as measured by:
  - IgA ASC at Day 8
  - HBGA, IgG, and IgA at Day 28

Additional Pre-specified Endpoint

- Reduction in viral shedding

Vaxart's norovirus vaccines have consistently been safe and very well tolerated in clinical trials

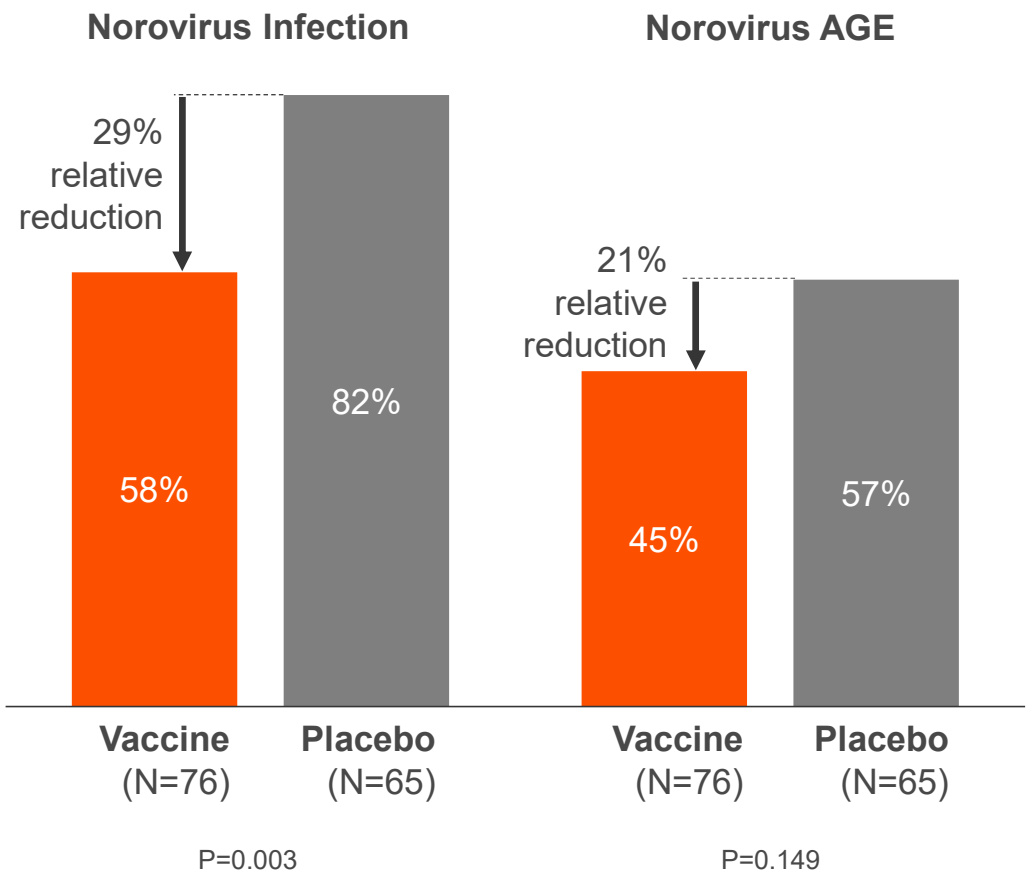
VXA-NVV-201 Topline Safety:

- No vaccine-related Serious Adverse Events (SAEs)
- No vaccine-related solicited Grade-3 Adverse Events (AEs)
- Benign safety and tolerability data profile consistent with safety of the platform in previous studies

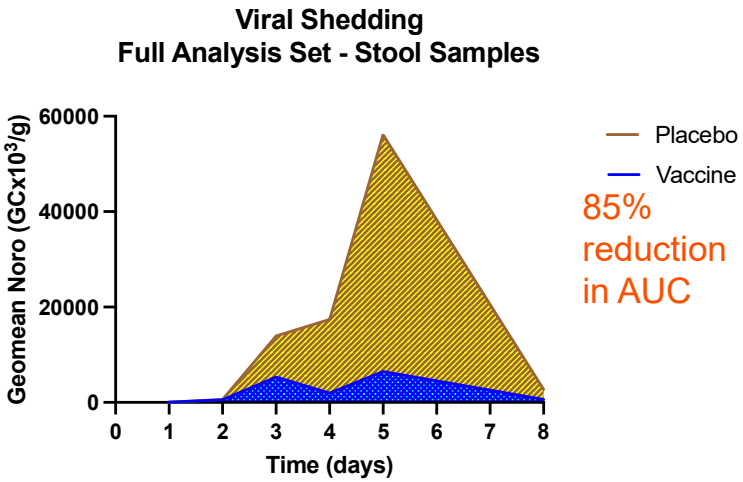
		Solicited AEs (all norovirus clinical studies)			
		Subj with ≥ 1 Solicited AE	Grade 1	Grade 2	Grade 3
Vaccine	N=460	228 (50%)	269 (58%)	98 (21%)	3 (1%)
Placebo	N=161	70 (43%)	77 (48%)	19 (12%)	2 (1%)

Protection against infection and illness

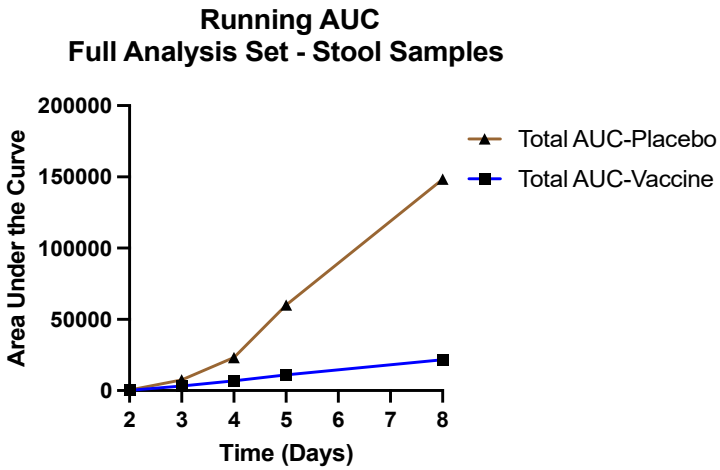
Full analysis (N=141)



Oral vaccination led to an 85% reduction in viral shedding



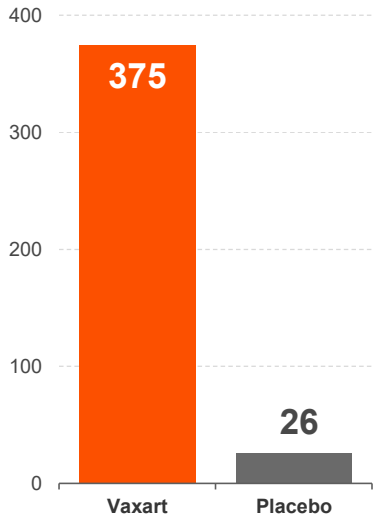
85% reduction in AUC



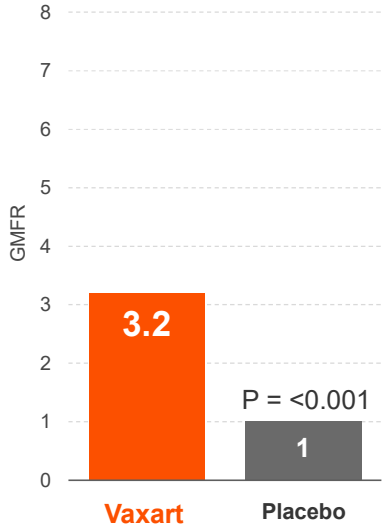
LOD is 256 copies per reaction or 1.52x10e5 copies per mL

Strong immunogenicity across all measured metrics

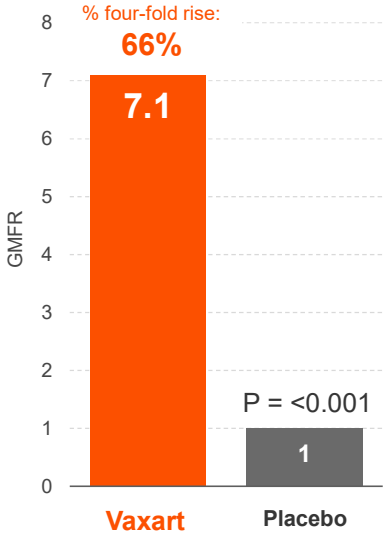
IgA ASC
(Day 8)



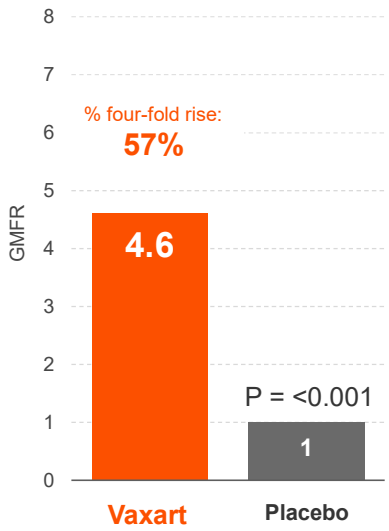
HBGA Blocking Antibodies
(Day 28)



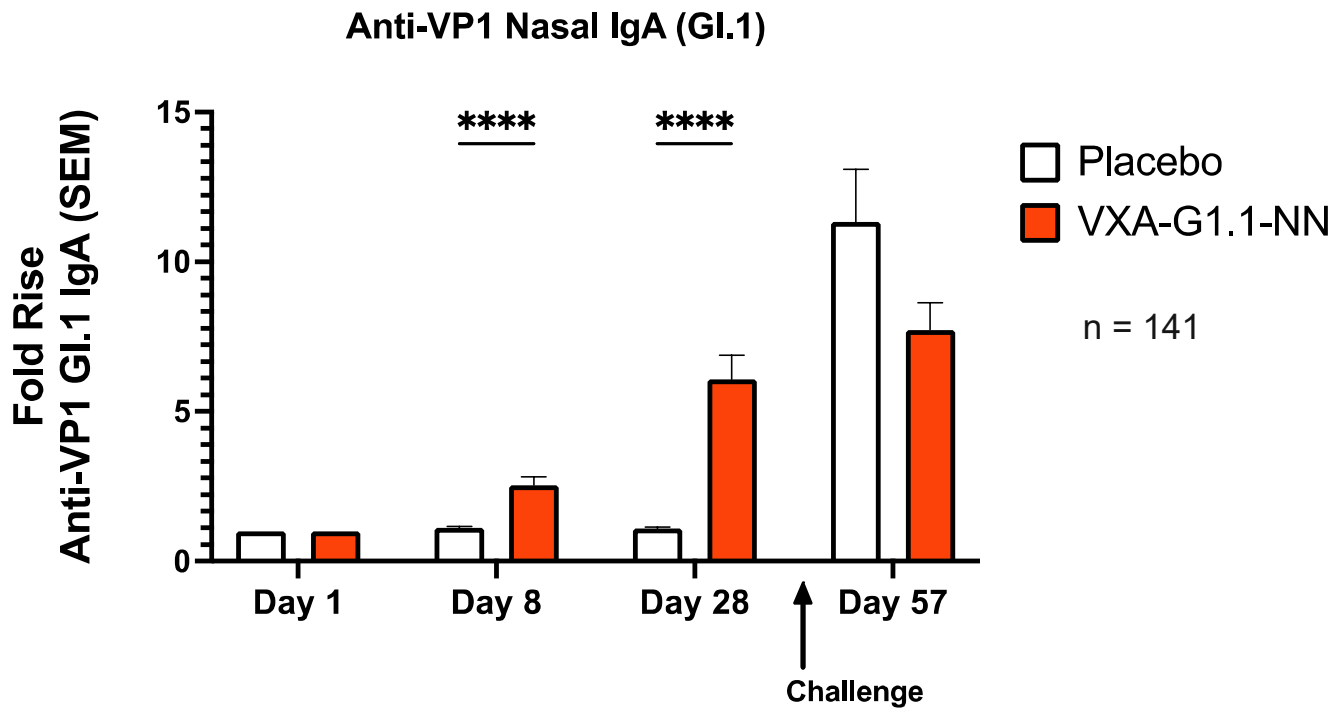
IgA Serum
(Day 28)



IgG Serum
(Day 28)



Potent mucosal immune responses after oral vaccination



VXA-NVV-201 Summary

- GI.1 vaccine was safe and well tolerated
  - No vaccine-related SAEs or grade 3 AEs
- Vaccine Norovirus Relative Risk Reduction in Infection (Full Analysis) was 29% (p=0.003)
- Vaccine efficacy for prevention of Noro-AGE (Full Analysis) was 21.4% (p =0.149)
- Vaccination led to an 85% reduction in shedding (AUC)
- Robust immune response to vaccine consistent with what we have seen in past studies
- Further analyses continuing

Vaxart's efficacy profile is favorable despite more aggressive challenge

	Injectible Vaccine[1] GII.4 Challenge	Vaxart Oral Tablet GI.1 Challenge
Application	Intramuscular injection	Oral tablet
Doses	2	1
Placebo Attack Rates		
• Norovirus infection	63%	82%
• Noro-AGE	33%	57%
Vaccine Protection		
• Reduction in infection	14%	29%
• Reduction in Noro-AGE	22%	21%
• Reduction in shedding	*(~30%?)*	85%

Cross-study comparison. Vaccines not studied head-to-head directly

VAXART

[1] Bernstein et. al, JID, 2015

We expect improved real-world protection from our bivalent vaccine candidate

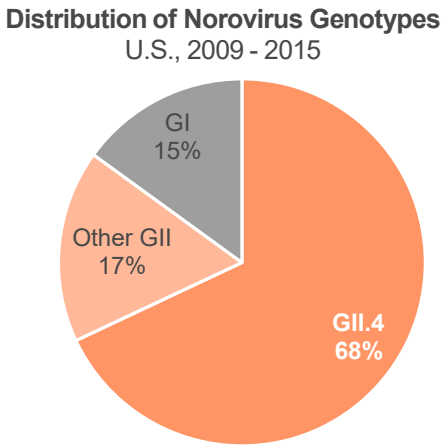
Real-world efficacy is 50-100% more than that seen in challenge studies

Virus	Vaccine	Challenge study	Field study
Flu	Fluzone	27%	49-66%
Norovirus	HIL-214	22%	34%
Typhoid	Vi-TT; Typbar-TCV	55%	82%
RSV	Multiple	10-60%	43-60%

Source: Clin Infect Dis, Volume 72, Issue 11, 1 June 2021, Pages 2035–2041, https://doi.org/10.1093/cid/ciaa1290

Multiple factors drive our expectations of better protection in the real-world

- Lower viral exposure in the real-world
- Higher prior exposure to G2.4
- G2.4 component more immunogenic than GI.1

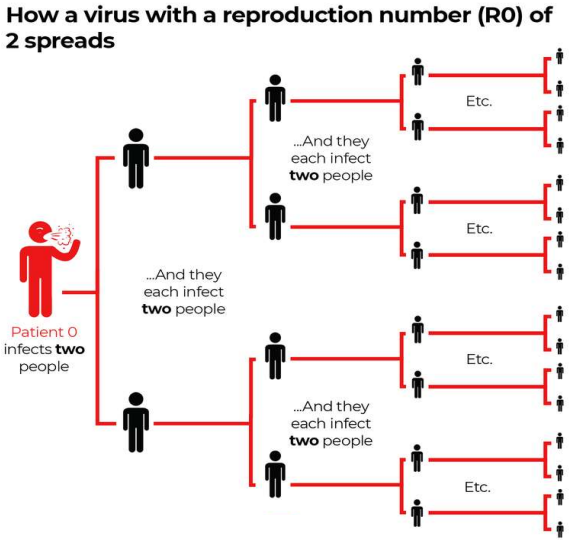


Source: Shah et al. CDC MMWR 2017

Reduction in shedding may be a differentiating feature of Vaxart's platform

Potential for reduction in transmission

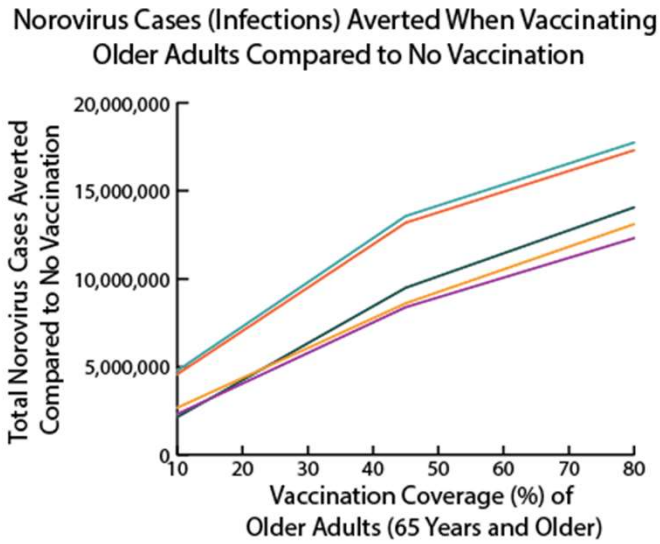
- Impact on shedding observed in two human trials in influenza and norovirus
- This impact may be superior to that of injectables[2]
- Preclinical study suggests oral vaccination blocks transmission, and does so better than an injectable[1]

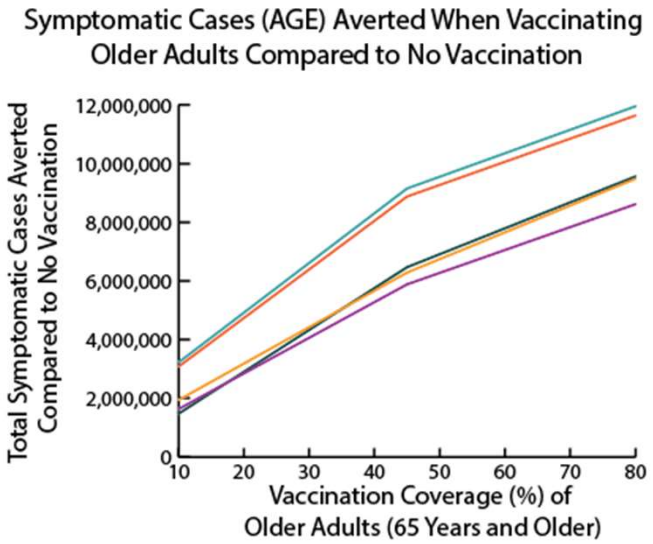


Curbing transmission could have significant clinical and economic benefits

1. Langel et al, *Sci Translational Med* , 2022; 2. Liebowitz, et al, Lancet ID, 2020 , Vaxart Norovirus 201 Study

Modeling suggests vaccine with large transmission impact would prevent 50%+ more norovirus cases than vaccine with modest transmission impact

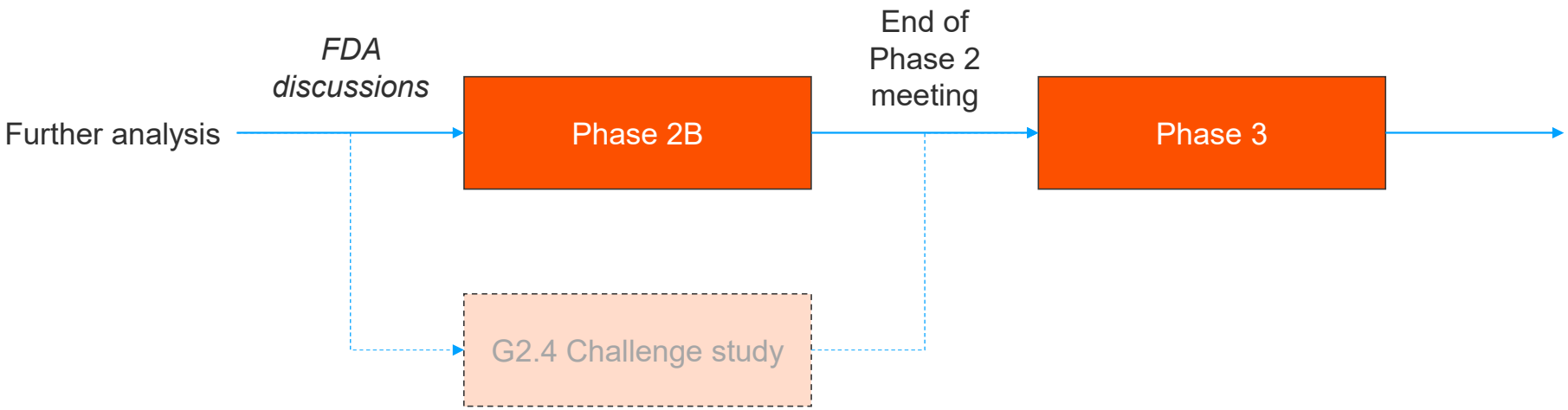




Reduction in:	Vaccine A	Vaccine B	Vaccine C	Vaccine D	Vaccine E
• Infection	**29%**	29%	**45%**	21%	20%
• Noro AGE	**21%**	21%	**32%**	34%	60%
• Transmission	**85%**	29%	**85%**	21%	20%

The impact on transmission has a much larger effect on norovirus cases in the community than the impact on Noro-AGE

Next steps for the norovirus program



VAXART PROGRAMS

1. **Influenza**
2. **Norovirus**
3. **Pan-Betacoronavirus**

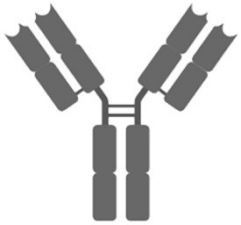
Highlights:

- Vaccines trigger robust mucosal responses
  - Cross-reactive
  - Durable responses – to 360 days
  - Reduces transmission
- Potential serum boosting of mRNA vaccines (S construct)
- Potentially superior T-cell responses (S&N construct)
- Benign tolerability data

IGA MUCOSAL RESPONSES HAVE GREATER CROSS-REACTIVITY VS. IGG SYSTEMIC RESPONSES

ANTIBODY CROSS-REACTIVITY: IGG VS. IGA

IgG



Characteristics:

- Major antibody isotype induced systemically
- Major isotype produced by mRNA vaccines
- Binding affinity is significantly reduced when challenged with variants
- Has shown poor cross-reactivity with respect to known variants[1,2]

IgA

Characteristics:

- Predominantly present in the mucosal tissues
- Efficiently produced through VAAST™ platform
- Minimal decrease in binding affinity when challenged with variants
- Shown to have greater cross-reactivity against both Sars-CoV-21 and Influenza[2] variants

Cross-reactive nature of our platform - mucosal IgA responses may lead to high variant coverage

Source: 1. Ejemel, et al, *Nature*, 2020 ; 2. Muramatsu, et al, *PLOS*, 2014.

COVID-19: VACCINE CONSTRUCTS

VAXART IS USING ITS EXPERIENCE TO DEVELOP PAN-BETACORONAVIRUS VACCINE

Trial Data Observed to Date:

VXA-CoV2-1 (Expresses S + N): Completed Phase I

- Highly immunogenic on eliciting T cells, to both S and N
- T-cell responses to the S appear much higher than those of injectable mRNA vaccines in Phase 1 study[1]
- Cross-reactive mucosal IgA
- Durable responses to 360 days
- Benign tolerability

VXA-CoV2-1.1-S (Expresses only S): Completed Phase IIa

- 72% had an immune response post vaccination
- Better serum responses than S+N
- Ability to boost mRNA vaccines
- Makes cross reactive mucosal IgA
- Benign tolerability

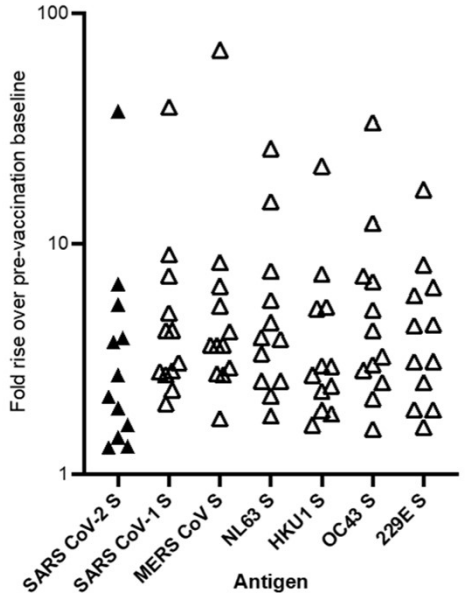
1. Data on file with Vaxart

CROSS-REACTIVE NASAL IGA RESPONSE TO ALL TESTED CORONAVIRUSES

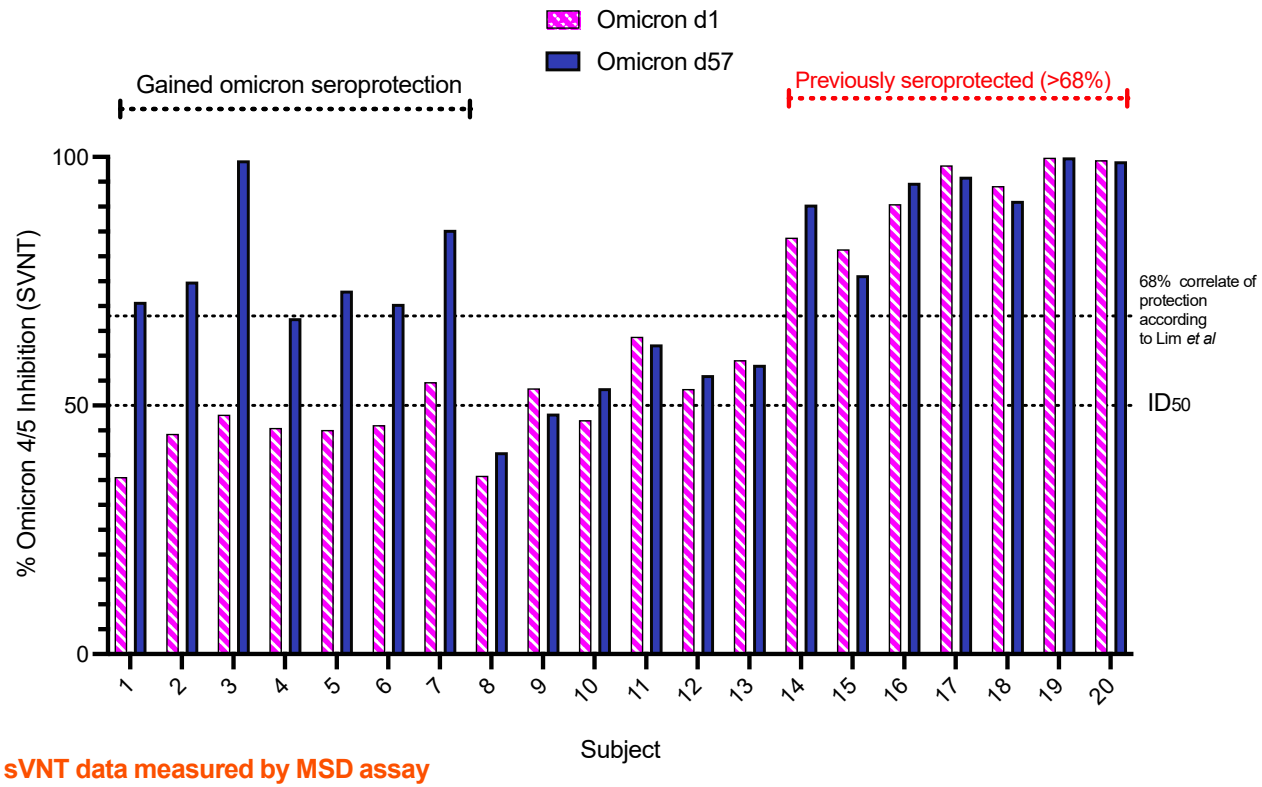
- The 46% of subjects that had increased IgA antibodies to SARS-CoV-2 S also had increased antibody responses to the S protein of other coronaviruses, including SARS-CoV-1, MERS, and endemic common cold viruses
- Beneficial for maintaining immunization protection against current and future COVID-19 variants (Delta, Omicron, etc.)

VXA-CoV2-1 (Expresses S + N)

IgA Cross-Reactivity to Other Coronaviruses



CROSS-REACTIVITY: VAXART'S ORAL WUHAN VACCINE INCREASED "SEROPROTECTION" AGAINST OMICRON 4/5



35% of subjects were "seroprotected" against Omicron 4/5 pre-vaccination, 70% post-oral vaccination

sVNT data measured by MSD assay

Groups 2a and 2b

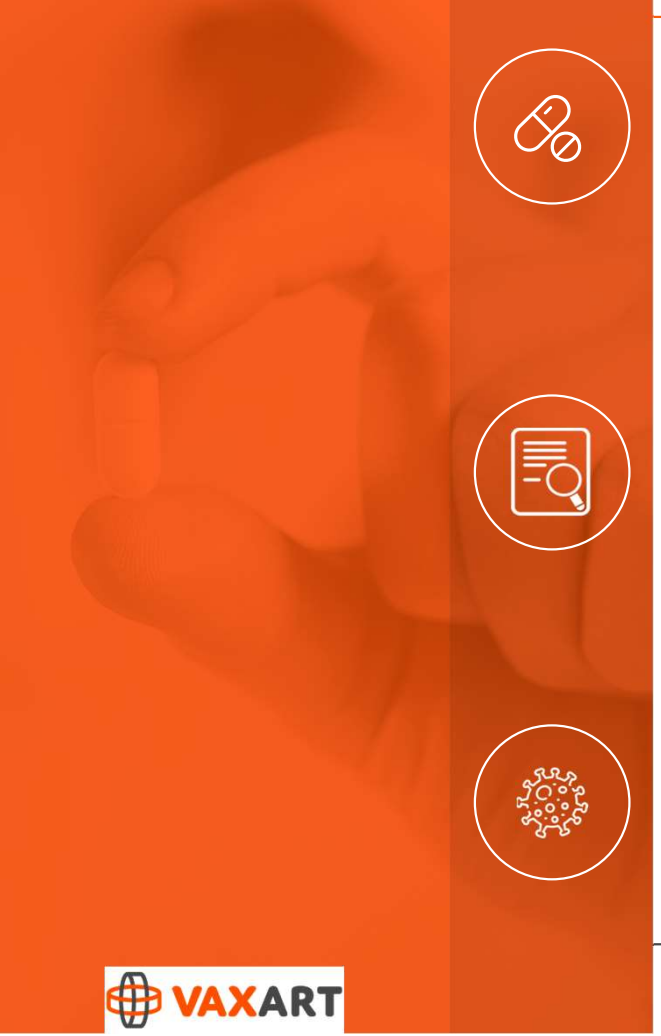
PAN-BETACORONAVIRUS: SUMMARY

VAXART'S EXPERIENCE WITH CORONAVIRUS VACCINES

- Vaccines trigger robust mucosal responses
- Cross-reactive
- Durable responses – to 360 days
- Reduces transmission
- Potential serum boosting of mRNA vaccines (S construct)
- Potentially superior T-cell responses (S&N construct)
- Benign tolerability data

1. Data on file with Vaxart

EXECUTIVE SUMMARY



- Oral tablet vaccine platform with profound transformative potential
- Clinical proof-of-concept demonstrated in two challenge studies, against respiratory and GI viruses
- Data suggests oral tablet vaccines may offer several important advantages over injectables
- Norovirus challenge data suggests potentially very compelling real-world profile for bivalent vaccine candidate
- Norovirus is a multibillion-dollar commercial opportunity: a significant unmet need with no approved vaccine
- Vaxart's pipeline targets other large opportunities, such as universal flu and pan-coronavirus

VAXART