


vaxxinity

41st Annual J.P. Morgan Healthcare Conference

January 2023

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This presentation contains forward-looking statements within the meaning of the federal securities laws. Forward-looking statements generally are accompanied by words such as “will,” “could,” “aim,” "expect," “continue,” “plan,” "target," “potential,” "milestone," "opportunities," and similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements include statements regarding our discovery, research and development activities, in particular our development plans for our product candidates and potential future candidates, including anticipated clinical development timelines, and the potential for such product candidates to be used to treat human disease. These statements are based on various assumptions, whether or not identified in this presentation, and on the current expectations of management. These forward-looking statements are provided for illustrative purposes only and are not intended to serve as, and must not be relied on as, a guarantee, an assurance, a prediction, or a definitive statement of fact or probability. Actual events and circumstances are difficult or impossible to predict and will differ from assumptions. These forward-looking statements are subject to a number of risks and uncertainties discussed in our Annual Report on Form 10-K for the year ended December 31, 2021 and Form 10-Q for the quarter ended September 30, 2022, which have been filed with the Securities and Exchange Commission (SEC) and are available on the SEC's website at www.sec.gov. Actual results could differ materially from the results implied by these forward-looking statements. There may be additional risks that we presently do not know, or that we currently believe are immaterial, that could also cause actual results to differ from those contained in the forward-looking statements. In addition, forward-looking statements reflect our views and expectations, plans, or forecasts as of the date of this presentation. While we may elect to update these forward-looking statements at some point in the future, we specifically disclaim any obligation to do so, except as required by law. These forward-looking statements should not be relied upon as representing our assessments of any date subsequent to the date of this presentation.

An expansively disruptive approach to chronic disease:

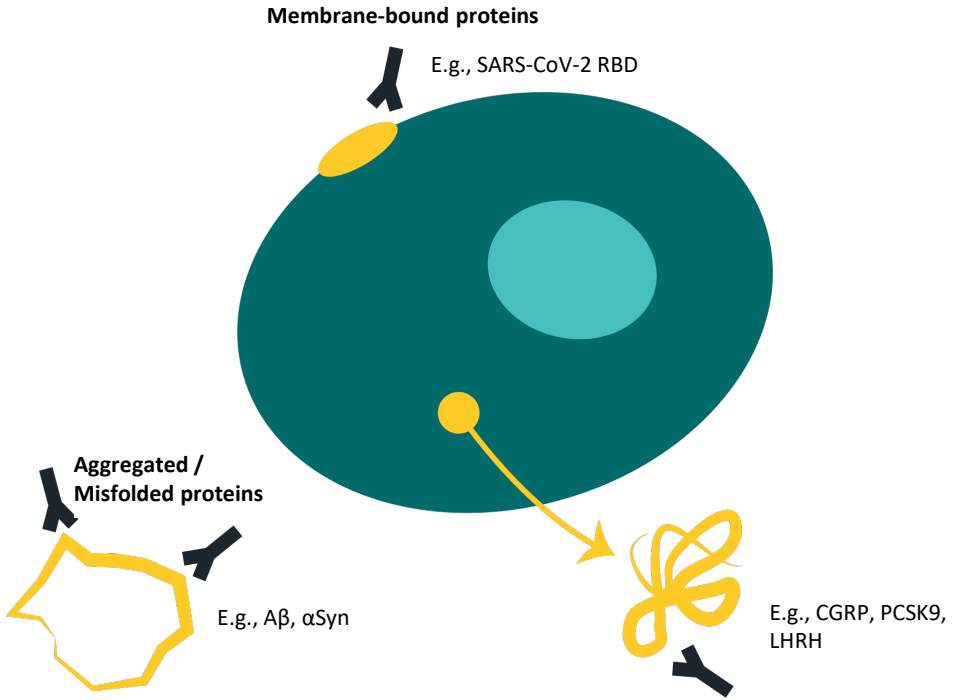
Efficiency of vaccines + Validation of mAbs in chronic disease = New class of therapeutics

Alzheimer's | Parkinson's | Migraine | Hypercholesterolemia | Others

VAXXINES are a potential new class of medicine for chronic diseases…

Opportunity: Any target accessible by a mAb is an opportunity for a VAXXINE to <u>leapfrog to first line</u>

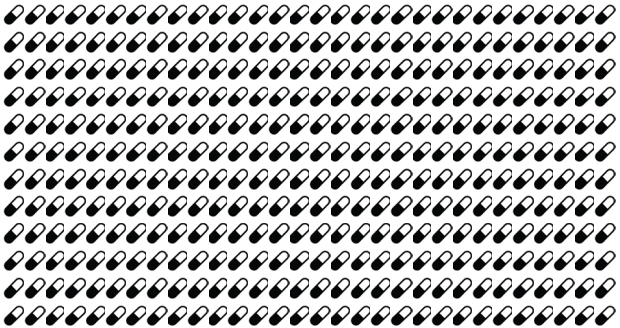
- High probability of success
- Rapid R&D timelines
- Expansive market potential



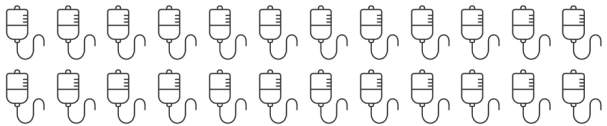
…that aim to be more convenient, cost-effective, and scalable…

More convenient dosing

Daily pill

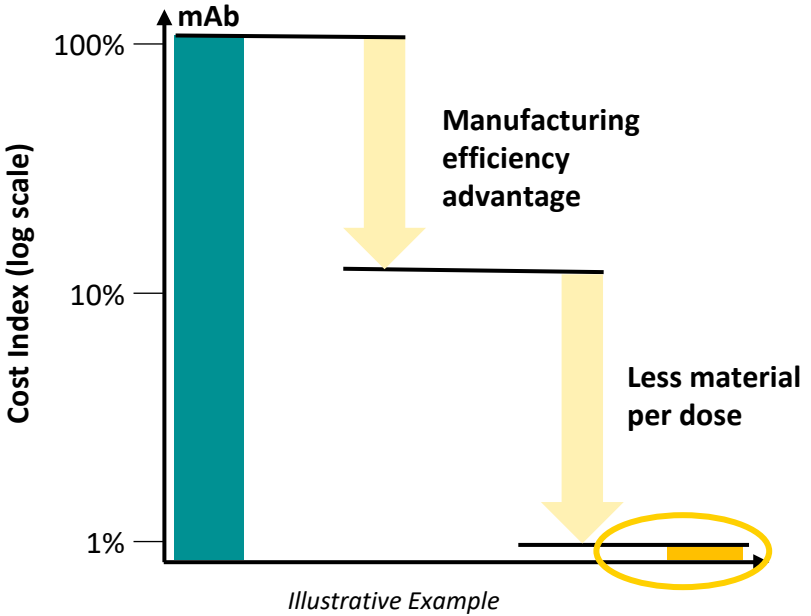


Bi-weekly infusion

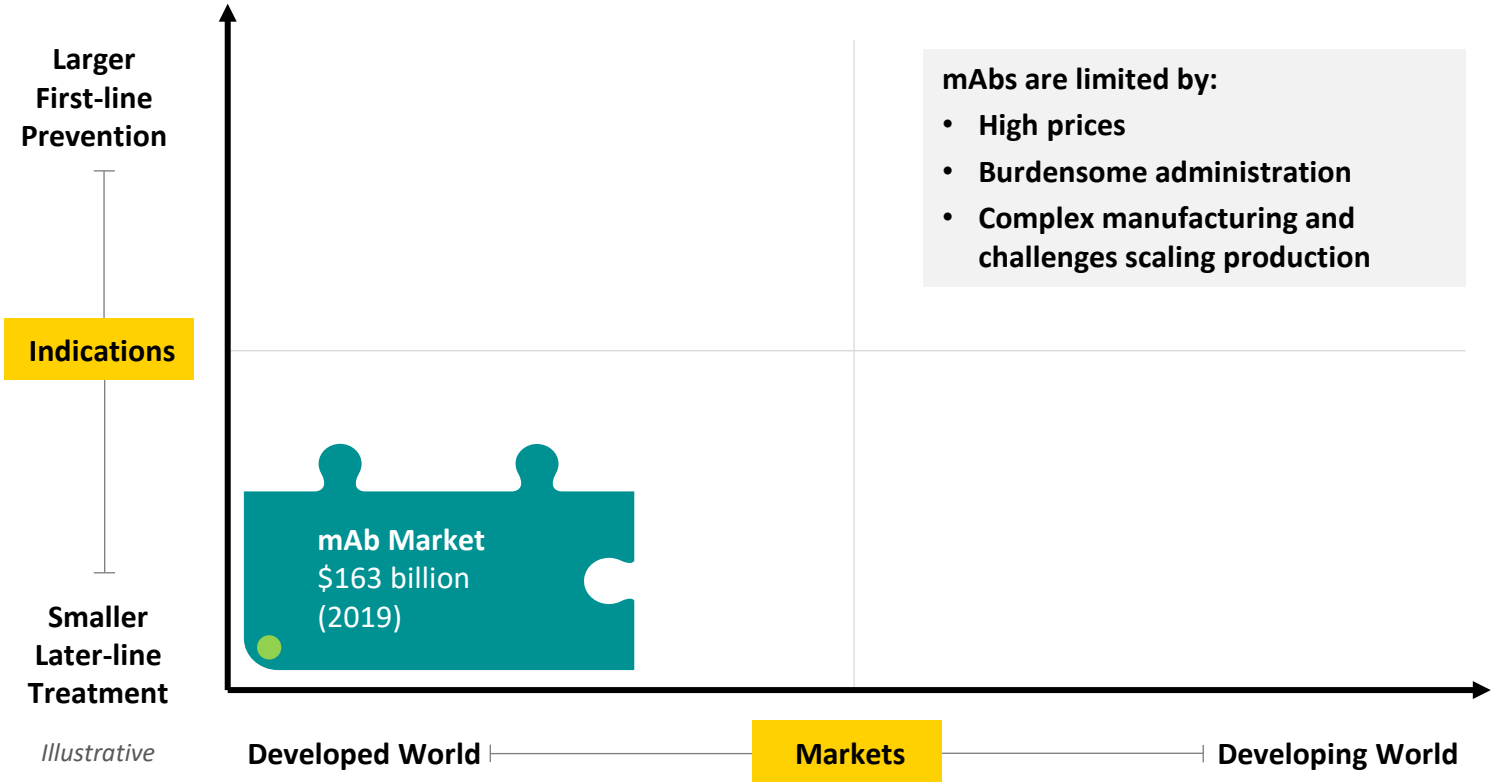


Quarterly IM

Less than 1% of COGS compared to mAb



…with profound social and economic implications



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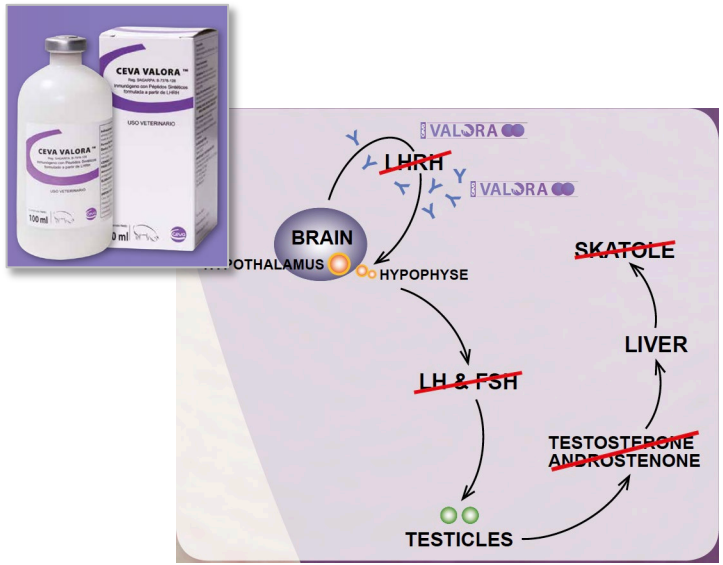
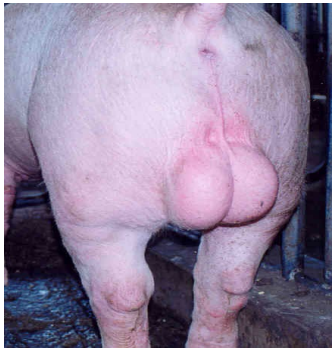
…with profound social and economic implications

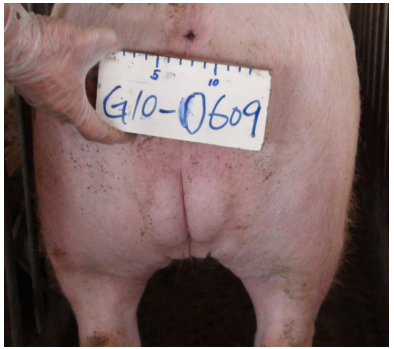
VAXXINE platform achieved first commercial validation in animal health with millions of doses commercialized…

Anti-LHRH vaccine for immunocastration



Control ***Treated***





Commercial Brochure, United Biomedical, Inc. field trials

…and has translated into a substantial portfolio of clinical data to date

4

investigative VAXXINE medicines in clinical trials

8

clinical trials conducted (ongoing and completed)

10

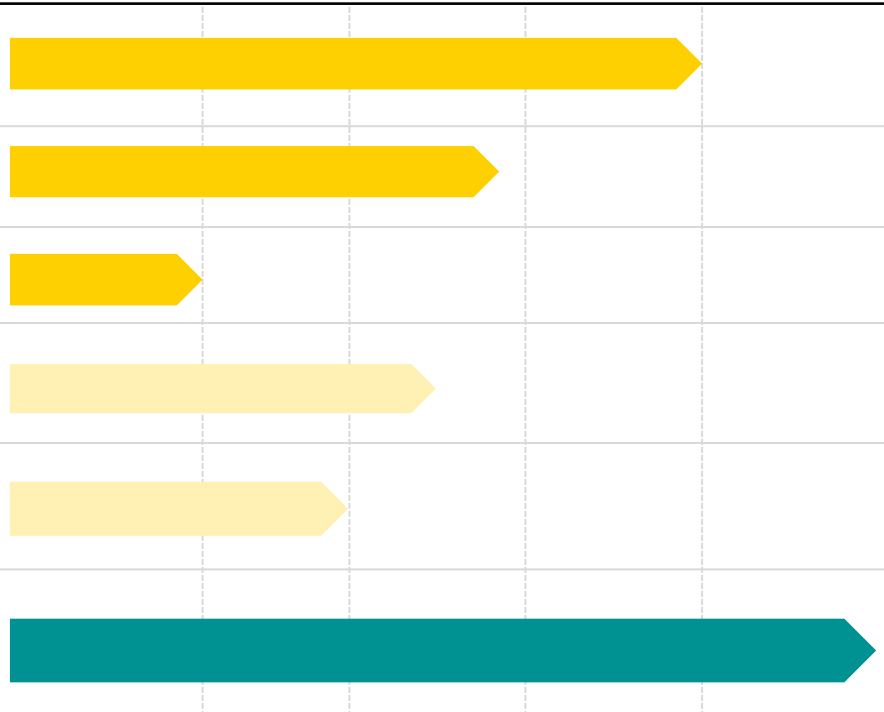
repeat doses administered in patients over up to 3 years

>4,250

participants dosed

Vaxxinity's pipeline spans multiple therapeutic areas and validated targets

	Vaxxine Program (Target)	Indications	Next Milestone
Neurodegeneration	UB-311 (Aβ)	*Alzheimer's*	Begin pivotal study with partner
	UB-312 (aSyn)	*Parkinson's, Lewy body dementia*	Phase 1 Part B end-of-study readout 2023
	Anti-tau	*Alzheimer's, tauopathies*	Lead identification
Next Wave Chronic	UB-313 (CGRP)	*Migraine*	Interim Phase 1 data 1H23
	VXX-401 (PCSK9)	*Hypercholesterol-emia*	Initiate FIH 1H23
Infectious Disease	UB-612 (SARS-CoV-2)	*Covid-19 prevention*	Complete BLA submissions with MHRA and TGA 1H23



Synthetic Peptide VAXXINE Platform for Chronic Diseases

Vaccines for chronic diseases: the challenges

Safety

Challenge: overcome immune tolerance while avoiding T cell cytotoxicity and autoimmunity

Response Rate

Challenge: overcome immune tolerance across populations

Immunogenicity

Challenge: produce efficient antibodies at therapeutic levels

Off-Target

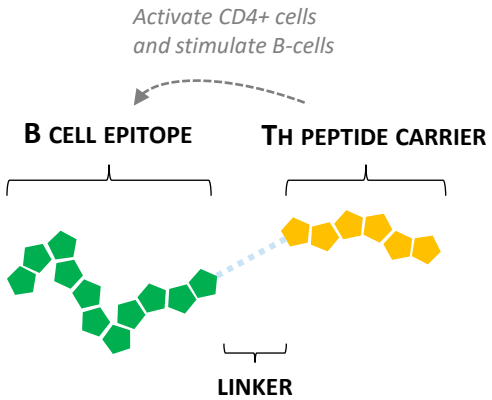
Challenge: induce only antibodies highly specific to the target

To avoid these challenges, the industry moved towards mAbs

Our synthetic peptide VAXXINE platform combines the power of mAbs with the convenience and accessibility of vaccines

Components
B cell epitopes
Th peptide carriers
Proprietary linker and formulation

The VAXXINE Platform

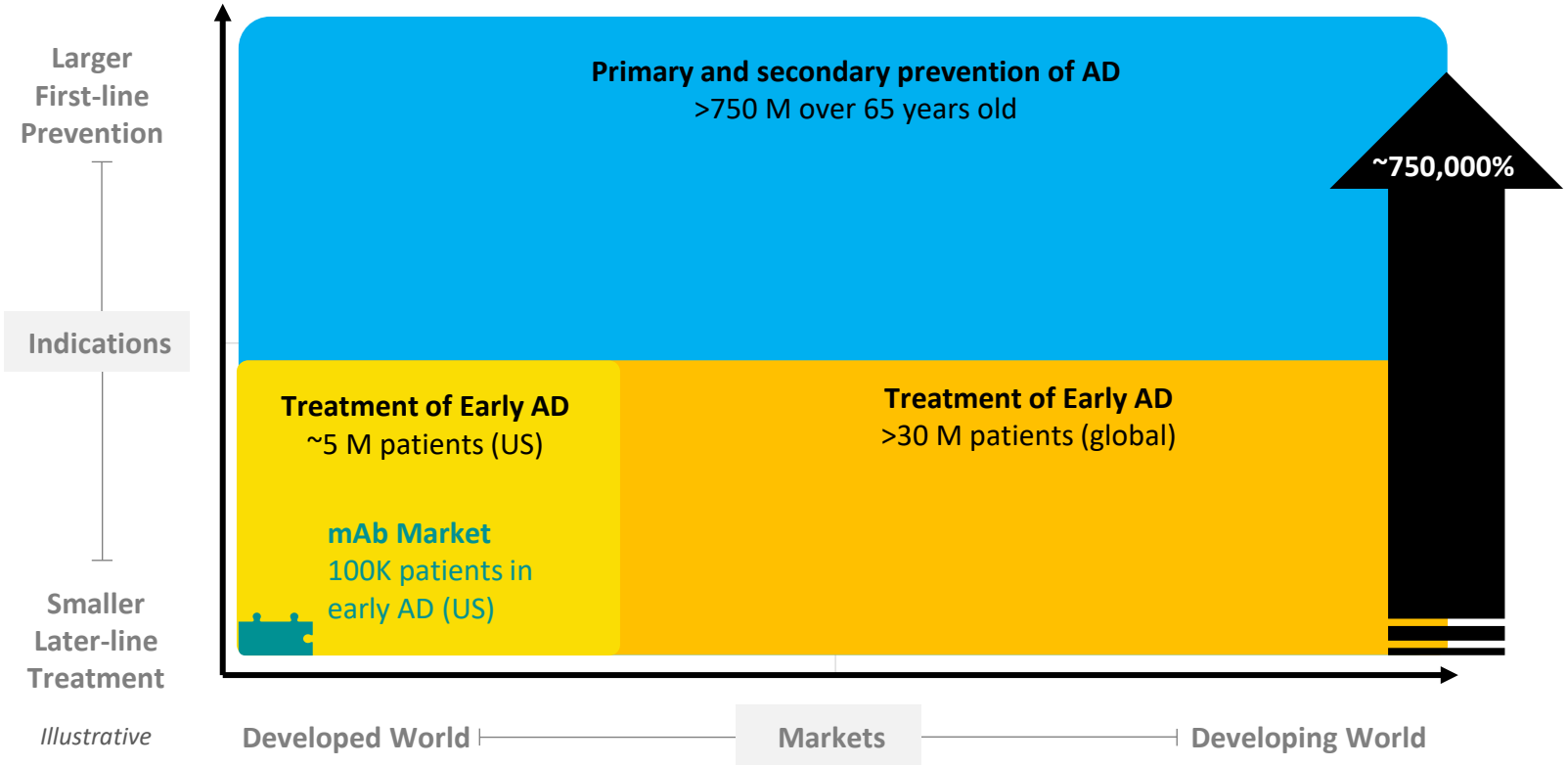


Advantages
Overcomes immune tolerance with high response rate and titers
Target-specific antibodies
Durable response
Synthetic, low-cost, scalable
Plug & Play, modular

UB-311 consistently elicits high quantities of potent antibodies that bind to the toxic Aβ aggregates

1. mAbs have **validated Aβ** as a target for Alzheimer's
2. In Ph1 and Ph2a trial, elicits **high quantities of antibodies** that **cross the BBB** and bind to **toxic Aβ oligomers**
3. Generally **safe and well tolerated** with no ARIA-E in Ph2a main study
4. Trends of **~50% slowing of cognitive decline** across key measures
5. **Pivotal-study-ready** with FDA alignment on protocol, population and endpoint

A more convenient and accessible Aβ vaccine has the potential to go earlier into prevention and significantly expand the addressable market



Market size estimates based on internal analyses and third-party research reports, including Alzheimer's Association Facts and Figures.

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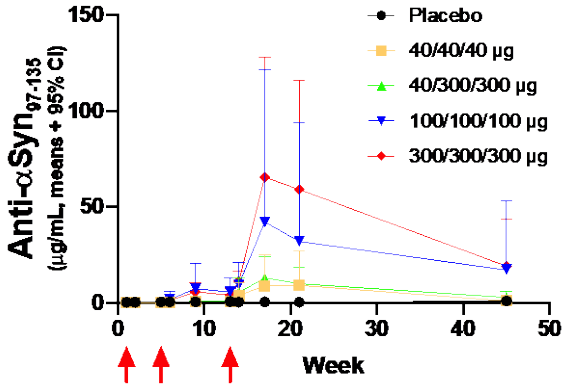
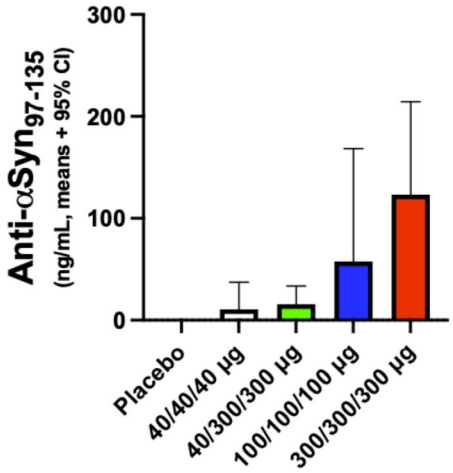
UB-312 consistently elicits antibodies that penetrate the BBB against the toxic species of αSyn

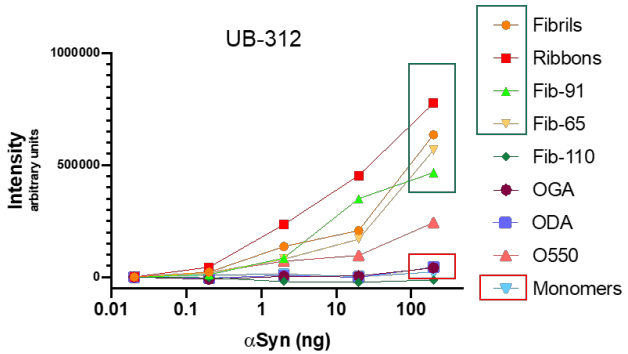
UB-312 elicits high levels of anti- αSyn antibodies



…that penetrate the BBB, detectable in CSF at ~0.2%



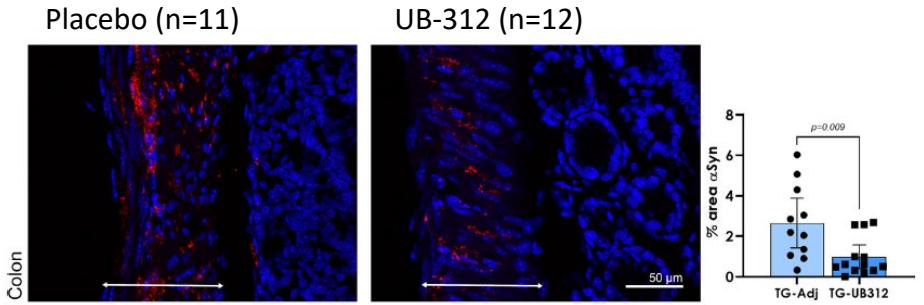
And preferentially target αSyn and avoid monomers



Guinea pig sera *in vitro* (Ron Melki's lab; Nimmo et al. 2020)

UB-312 preclinical data shows impact on pathology in both CNS and gut and improvement in motor symptoms

UB-312 significantly reduces pathology in gut in transgenic mice

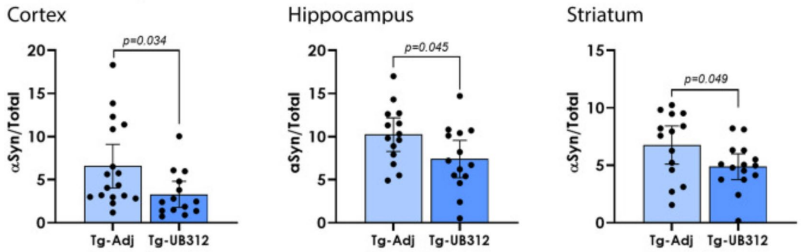


IHC in tg mouse colon (left); Quantification of αSyn (right)
Nimmo et al. 2022

Red = αSyn immunoreactivity; Blue = DAPI (nuclei)

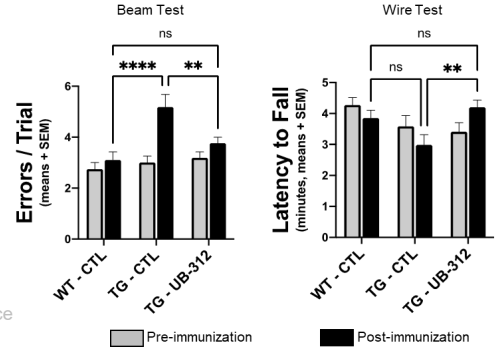
And αSyn pathology in CNS with improvement on behavior

UB-312 reduces αSyn brain pathology…



Transgenic mice *in vivo* (Nimmo et al. 2022)

…and improves motor symptoms



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UB-313 aims to be first choice for migraine sufferers to reclaim their lives

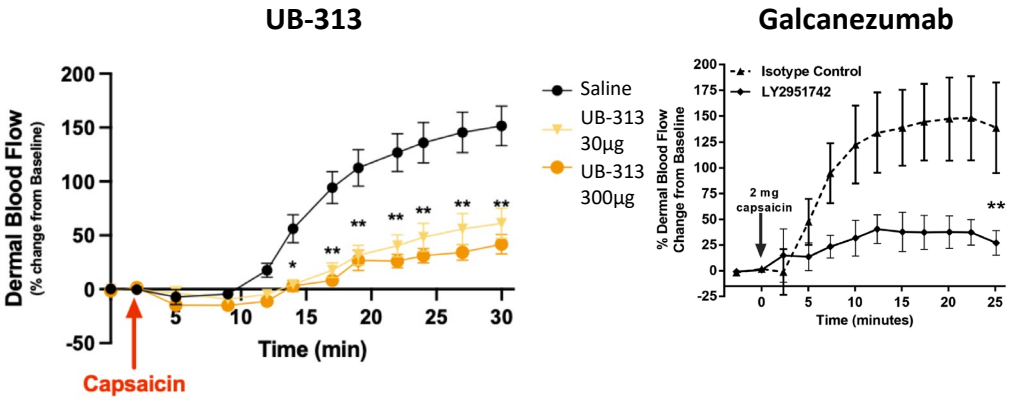
UB-313 Summary

- VAXXINE against CGRP ligand
- Target convenient 2-4X annual dosing
- Low COGS

Data through Preclinical POC

- **High antibody titers** across species
- **Binding potency** comparable to mAbs
- **Inhibits CGRP-induced cAMP** in human cells dose-dependently
- **Activity in translatable animal model** (dermal blood flow) comparable to mAbs

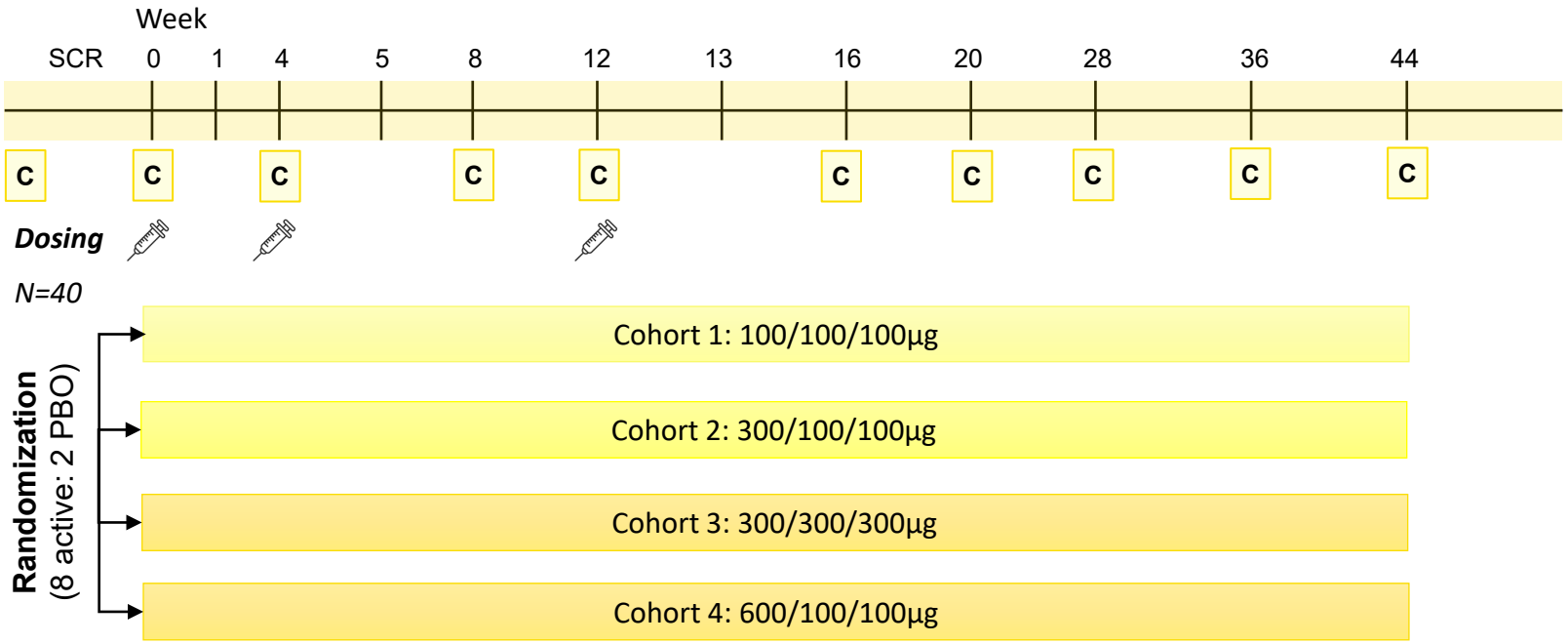
UB-313 animal proof-of-concept study



Rats (n = 6-8 / group) were immunized with the "rat version" of UB-313 and challenged with Capsaicin. Local dermal blood flow (DBF) was measured by Laser Doppler Imaging. *p < 0.05; **p < 0.01
Benschop et al. 2014. Development of a novel antibody to calcitonin gene-related peptide for the treatment of osteoarthritis-related pain. *Osteoarthritis and Cartilage 22, 578-585.*

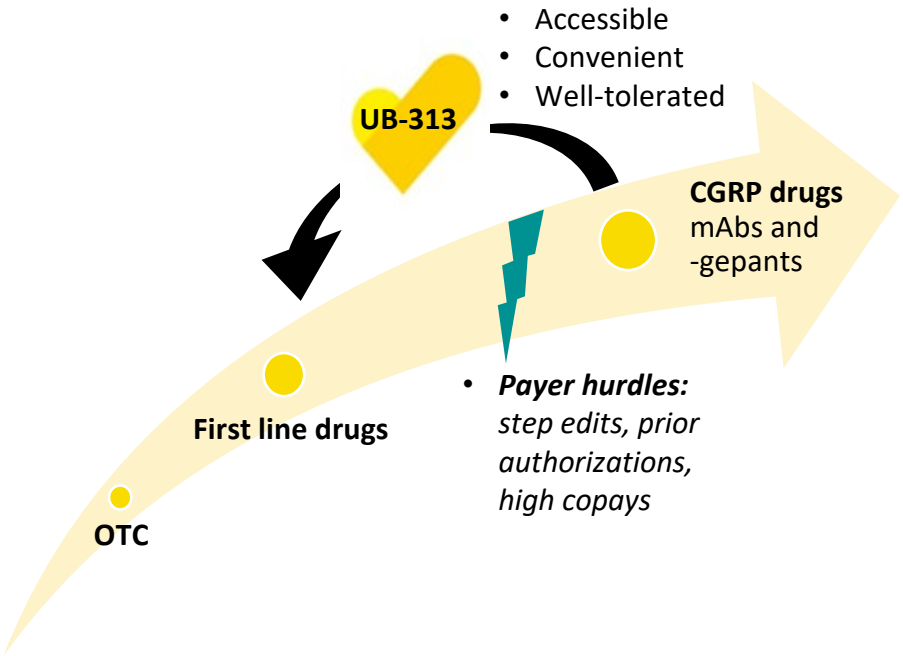
Status: Ph1 fully enrolled, topline data 1H23

UB-313 Phase 1 Trial to Assess Safety, Tolerability, Immunogenicity, and Capsaicin-Induced Dermal Blood Flow in Healthy Volunteers



Abbreviations: C = capsaicin challenge; PBO = placebo; SCR = Screening Period

Migraine remains a widespread debilitating disease with large unmet need, despite effective new CGRP treatments



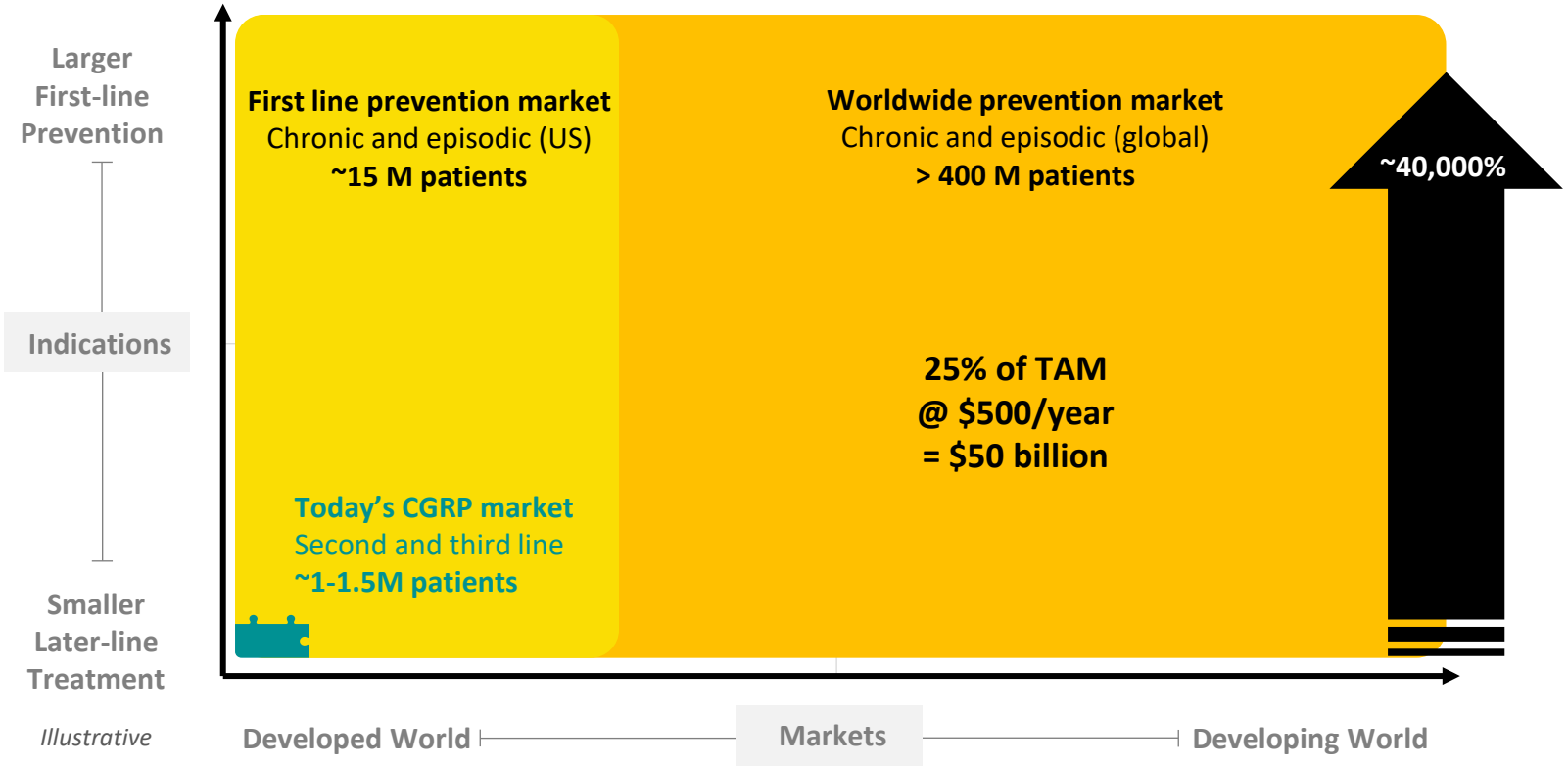
New class of CGRP drugs are well-tolerated and effective, but large unmet need remains:

- Accessibility without payer hurdles
- More convenient dosing schedule
- Better tolerability of first-line drugs

How could a CGRP vaccine address unmet need?

Prevention of migraine with CGRP therapies

Leapfrogging CGRP mAbs and orals to become a first-line therapy presents a blockbuster commercial opportunity



Market size estimates based on internal analyses and third-party research reports.

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VXX-401 aims to vaccinate the world against heart disease

VXX-401 Summary

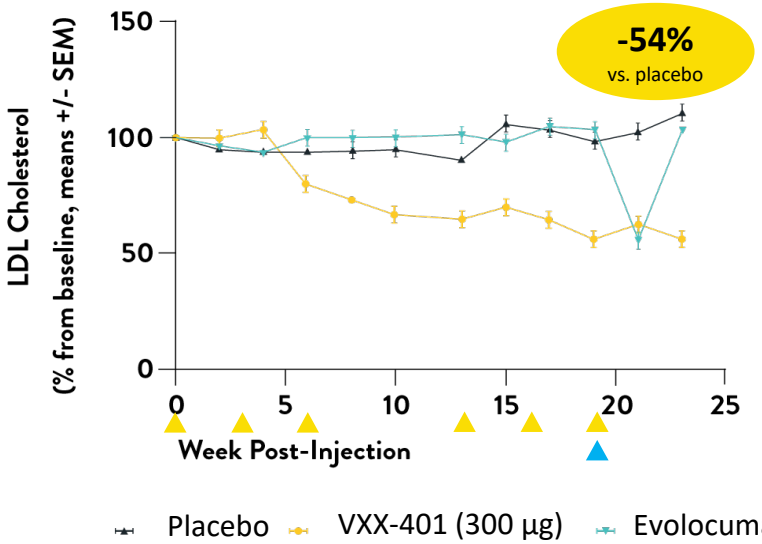
- VAXXINE against PCSK9
- Target convenient 2-4X annual dosing
- Low COGS enables accessibility as earlier line and on worldwide basis

Data through Preclinical POC

- **High antibody titers** and response rate
- **Decreases LDL cholesterol by up to 54% in non-human primates** vs. placebo

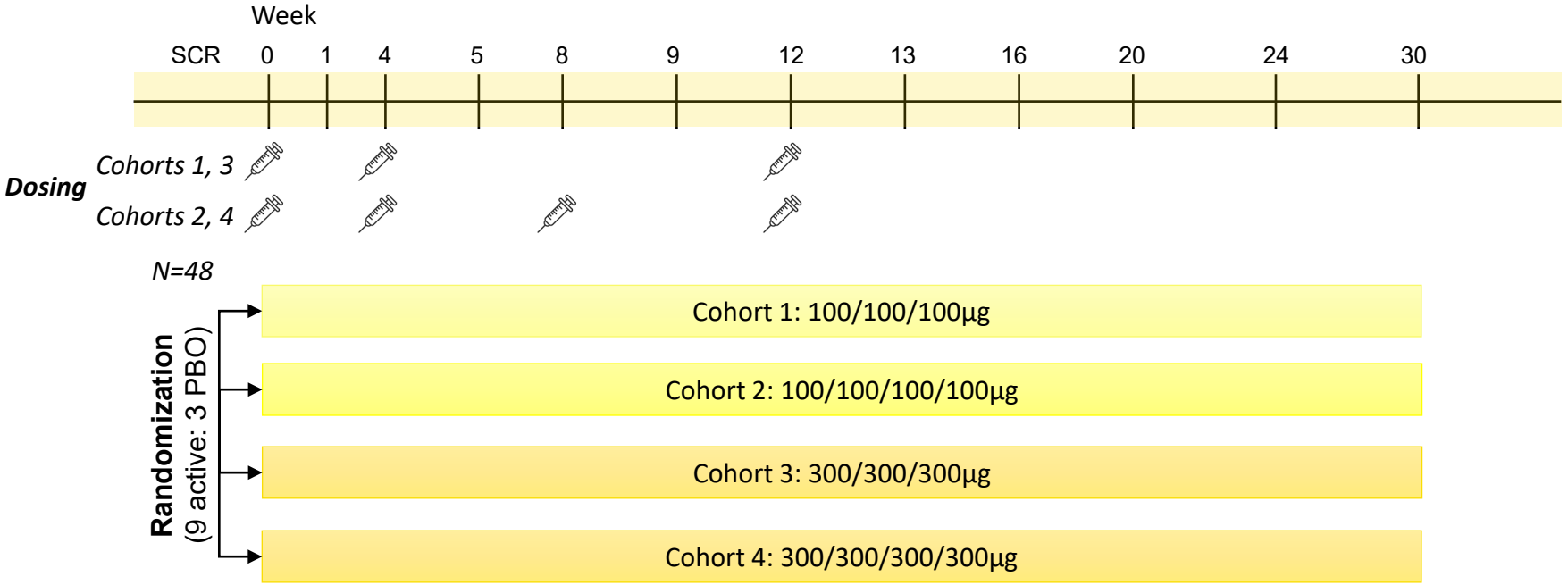
Status: Begin Ph1 in 1H23

VXX-401 Reduces LDL-c Comparable to Single Dose of Approved MAb



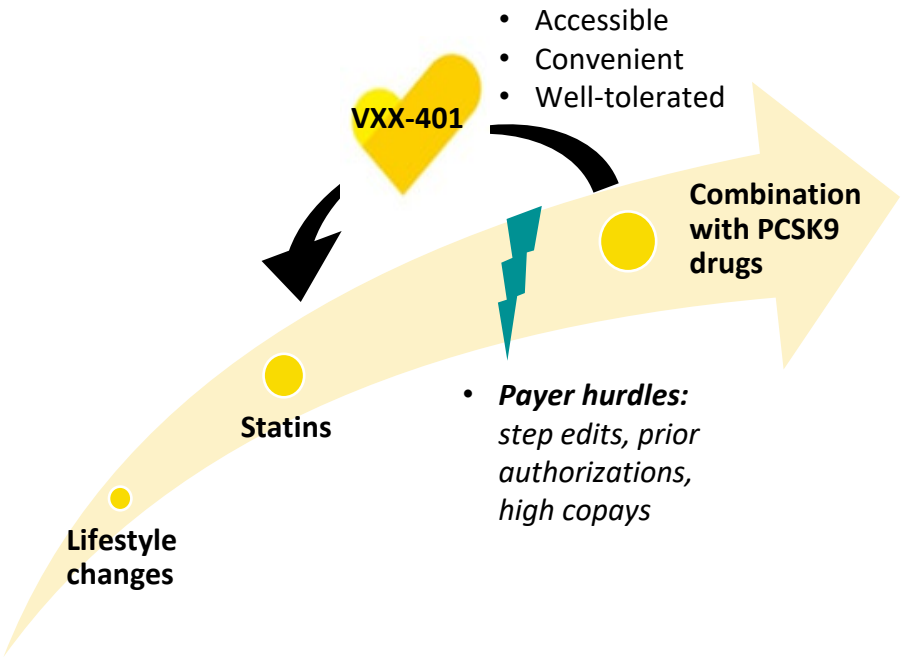
Placebo and VXX-401 groups received IM injections at weeks 0, 3, 6, 13, 16, 19. Evolocumab group received one 3 mg/kg SC injection at week 19.
N = 3 NHPs in VXX-401 group, 6 NHPs across 2 control groups
This was a non-optimized vaccine formulation using the same peptide immunogen as VXX-401.

VXX-401 Phase 1 Trial to Assess Safety, Tolerability, Immunogenicity and Pharmacodynamics in Subjects with Elevated LDL-C



Abbreviations: PBO = placebo; SCR = Screening Period

Cardiovascular disease remains the number one killer in the world, despite effective treatments to lower LDL cholesterol



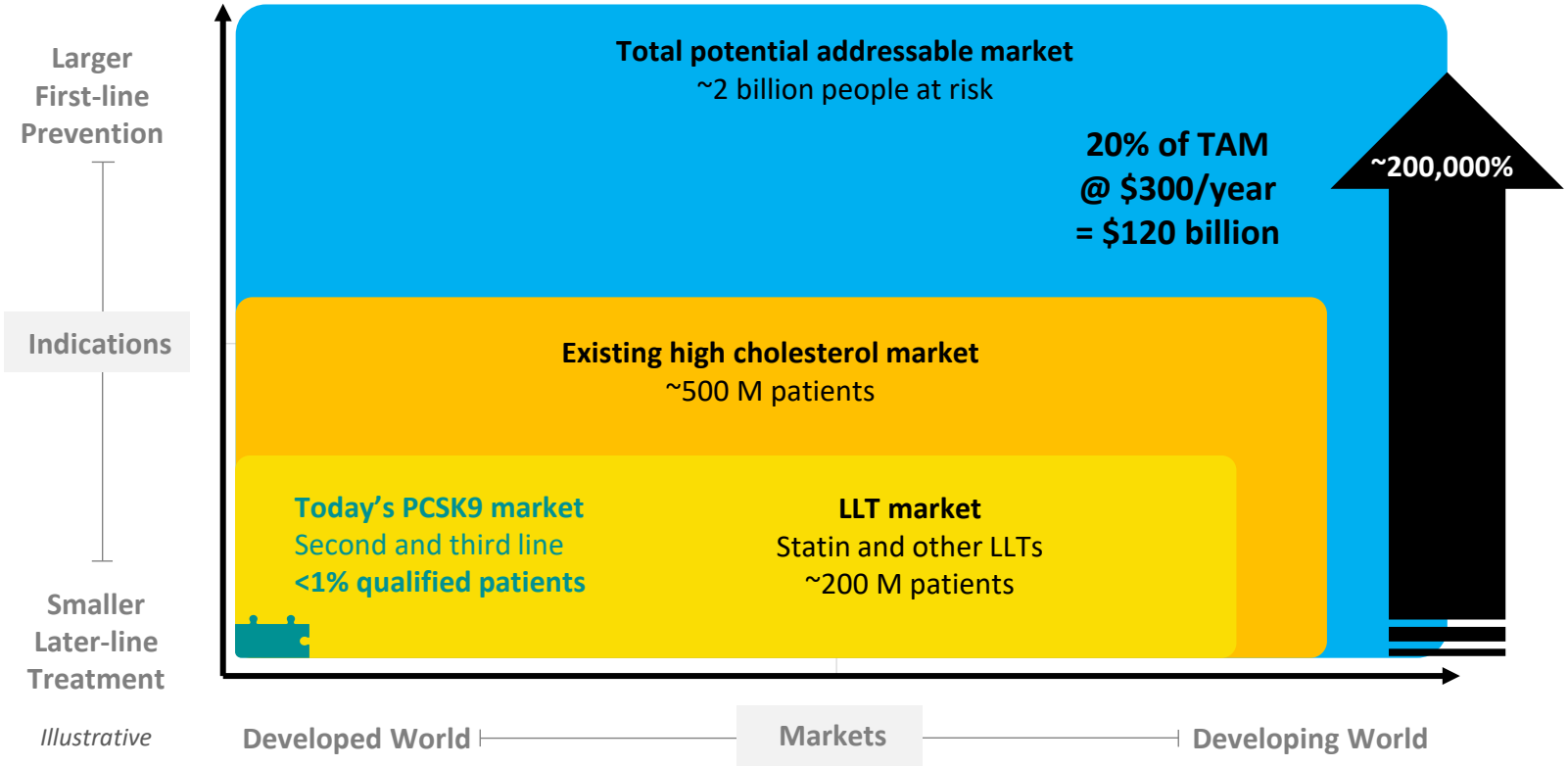
Simplified primary prevention guidelines

New class of PCSK9 drugs are well-tolerated and effective, but large unmet need remains:

- Accessibility without payer hurdles
- Better compliance of first-line drugs through more convenient dosing schedule and better tolerability

How could a PCSK9 vaccine address unmet need?

VXX-401 has large commercial opportunity in meeting major global public health need



Market size estimates based on internal analyses and third-party research reports.

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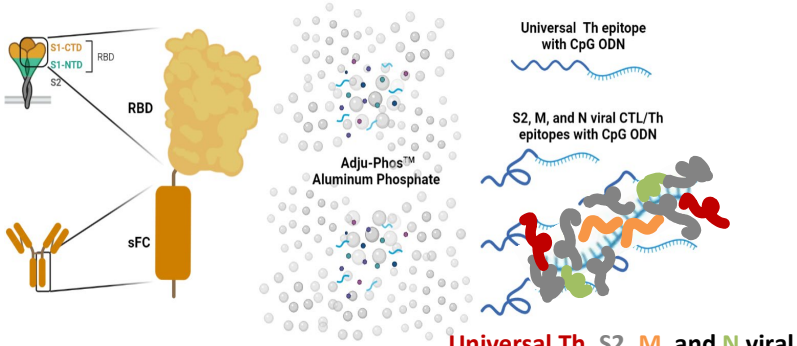
UB-612: Positive readout in Ph3 pivotal trial

UB-612 is next-generation COVID-19 booster against S1-RBD designed for broader and more durable protection

UB-612 is a protein/peptide vaccine targeting S1-RBD site and other epitopes on S, N and M proteins



Universal Th, S2, M, and N viral CTL/Th epitopes with CpG ODN

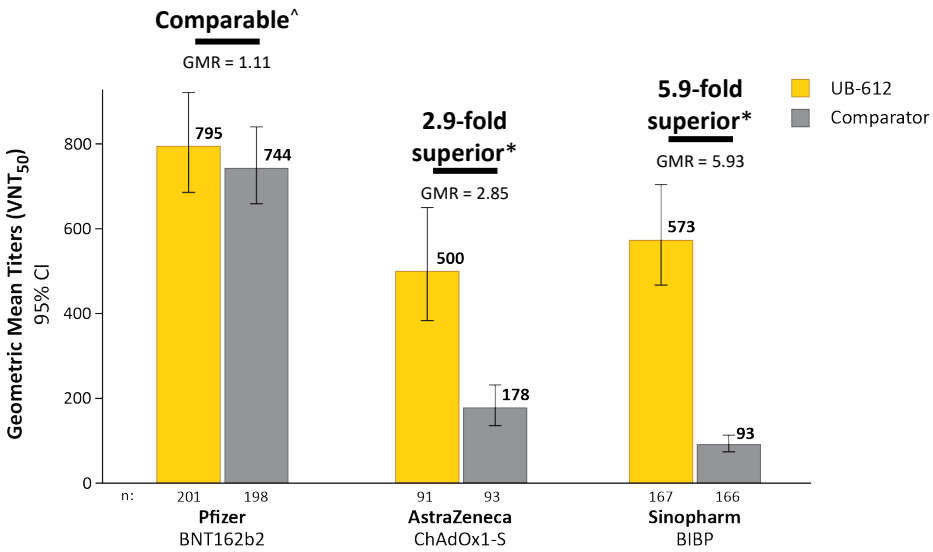
Preparing MAA Submission to MHRA and TGA 1H 2023

Broad variant coverage	• Neutralizing activity across many SARS-CoV-2 variants including Omicron BA.5, Delta, Alpha, Beta*
Durable response	• Antibody half-life ~6 months* (competing platforms 1-3 months)
Convenient	• Standard 2-8°C cold chain
Capacity and COGS	• Capacity to manufacture and price at market with strong margins

*Guirakhoo et al., Journal of Infectious Diseases (2022)

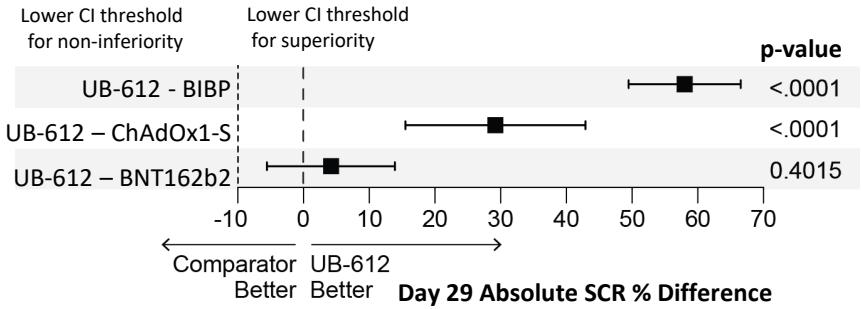
Phase 3 global study shows UB-612 boosts antibodies comparable to Pfizer-BioNTech and multi-fold superior to AZ and Sinopharm vaccines

Neutralizing Antibodies: Omicron BA.5



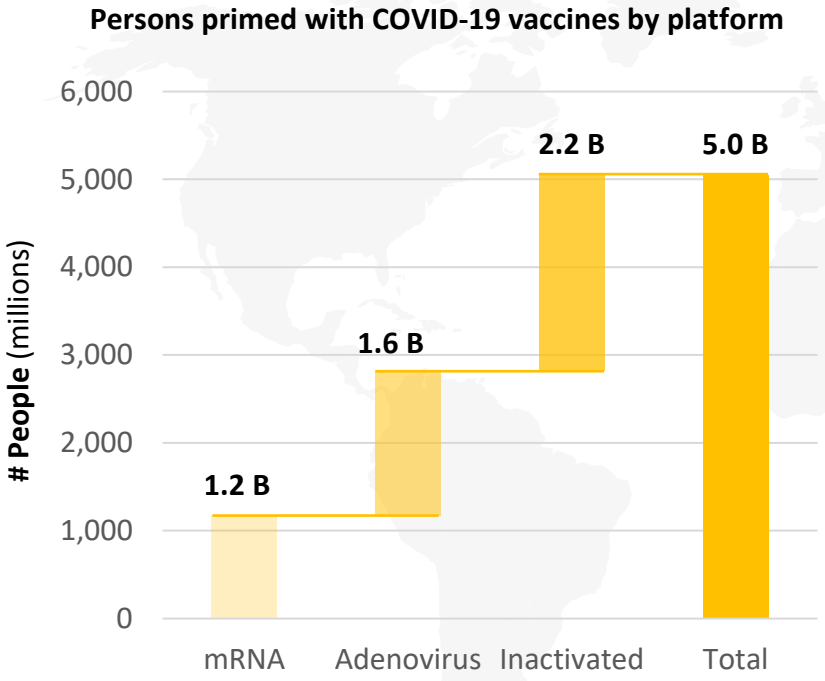
Ph3 topline results from live SARS-CoV-2 virus neutralization assay 28 days post-injection
^Statistically non-inferior, defined by the lower bound of 95% CI of the geometric mean ratio (GMR) > 0.67; * p<0.0001
Lower bound GMR CI UB-612 vs. Pfizer against Omicron = 0.94

Seroconversion Rates: Omicron BA.5



*Statistically non-inferior to BNT162b2, defined as lower bound of 95% CI for UB-612 SCR – comparator SCR > -10%; statistically superior to ChAdOx1-S and BIBP

Framing the COVID-19 booster market



- **2.6 billion booster doses sold to date, and climbing**
- **2% of market @ $12 / dose = $600 M**

Market size estimates based on internal analyses and third-party research reports.

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Vaxxinity 2023 milestones supported by strong financial position

Program	2023 1H	2023 2H
UB-311 (Aβ)		Begin pivotal trial with partner
UB-312 (αSyn)	Ph1 Part B Read-out	
UB-313 (CGRP)	Ph1 Topline	
VXX-401 (PCSK9)	Ph1 Start →	→ Ph1 Topline
UB-612 (SARS-CoV-2)	MAA Submission →	→ Approval

$102.2M* *as of 9/30/2022*
Cash + liquid assets

$10M
Grants from CEPI & MJPP

126.04M *as of 9/30/2022*
Common Shares Outstanding

*Includes $18.9M in cash & cash equivalents; $80.2M in short-term investments; $3.1M restricted cash

DEMOCRATIZE HEALTH.

Our vision is to provide cheaper, safer, more convenient, and effective medicines for chronic disease to all.