



Corporate Presentation

January 2023



Disclaimer

This presentation contains certain forward-looking statements and information relating to us and our subsidiaries that are based on the beliefs of our management as well as assumptions made by and information currently available to our management. When used, the words "aim," "anticipate," "believe," "could," "estimate," "expect," "going forward," "intend," "may," "might," "ought to," "plan," "potential," "predict," "project," "seek," "should," "will," "would" and the negative of these words and other similar expressions, as they relate to us or our management, are intended to identify forward-looking statements.

Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy and other future conditions. We give no assurance that these expectations and assumptions will prove to have been correct. Because forward-looking statements relate to the future, they are participant to inherent uncertainties, risks and changes in circumstances that are difficult to predict. Our results may differ materially from those contemplated by the forward-looking statements. They are neither statements of historical fact nor guarantees or assurances of future performance. We caution you therefore against placing undue reliance on any of these forward-looking statements. Any forward-looking statement made by us in this document speaks only as of the date on which it is made. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. Participant to the requirements of applicable laws, rules and regulations, we undertake no obligation to update any forward-looking statement, whether as a result of new information, future events or otherwise. All forward-looking statements contained in this document are qualified by reference to this cautionary statement.

In 2022... Clover Became a Commercial-Stage Company with Validated Vaccine Development Capabilities

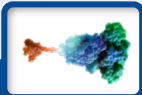
Emergency Use Authorization (EUA) Received in China for COVID-19 Vaccine

2 GMP Inspections Passed at Clover Changxing Facility (China GMP) and CDMO Facility (EU GMP)

Successful Booster Development Completed, Broad Neutralization Against New Omicron Variants Demonstrated



Clover is a Global Commercial-Stage Innovative Biotechnology Company Committed to Unleashing the Power of Innovative Vaccines to Save Lives & Improve Health around the World



Building a Leading Innovative Vaccine Portfolio

- ✓ **COVID-19 Vaccine Authorized for Emergency Use (EUA) in China:** SCB-2019 to be launched in China in Q1-2023, and Global (ex-China) EUAs and bilateral supply agreements expected in 2023
- ✓ **Mid- to Late- Stage Pipeline Expansion** planned beginning in H1 2023, with focus on respiratory virus and pediatric vaccine assets (Ph2, Ph3, Commercial)
- ✓ **Trimer-Tag™ Platform Validated** by SCB-2019, and advancement of in-house vaccine pipeline is planned in 2023 (multivalent SARS-CoV-2 vaccine, rabies vaccine)



Proven Global Vaccine R&D Capabilities

- ✓ **7+ Phase 2/3 Vaccine Clinical Trials** completed since 2020
- ✓ **Over 37,500 Participants Enrolled** for SCB-2019 across trials
- ✓ **Experience Across 5 Continents (in 8 Countries):** Including China/Asia, Europe, South America, Africa, Australia
- ✓ **750+ FTEs Across 12 Countries; World-Class SAB & DSMB**
- ✓ **Multiple Regulatory Submissions Completed or Ongoing** (China EUA, EUA in Other Countries, EMA, WHO)



Established Commercial Manufacturing

- ✓ **Capacity to Produce Hundreds of Millions of Vaccine Doses** across in-house Changxing facility and CDMO site (multiple 2000L bioreactors + drug product lines at each site)
- ✓ **Clover Changxing Site Passed China GMP Inspection** for SCB-2019 production in late-2022
- ✓ **CDMO Site Received EU GMP Certificate** for SCB-2019 production in Sept 2022 following inspection



Global Collaborations with Reputable Partners

- ✓ **Up to \$397M Grant Funding by CEPI** for research & development of SCB-2019
- ✓ **Advanced Purchase Agreement (APA) Signed with Gavi** for supply of SCB-2019 to COVAX facility
- ✓ **Adjuvant Supply Agreements with Dynavax** for supply of CpG 1018 adjuvant (clinical & commercial)

CEPI

Gavi
The Vaccine Alliance

COVAX
Speed. Scale. Access.

DYNAVAX

unicef

Global Footprint: Business & Leadership Without Borders

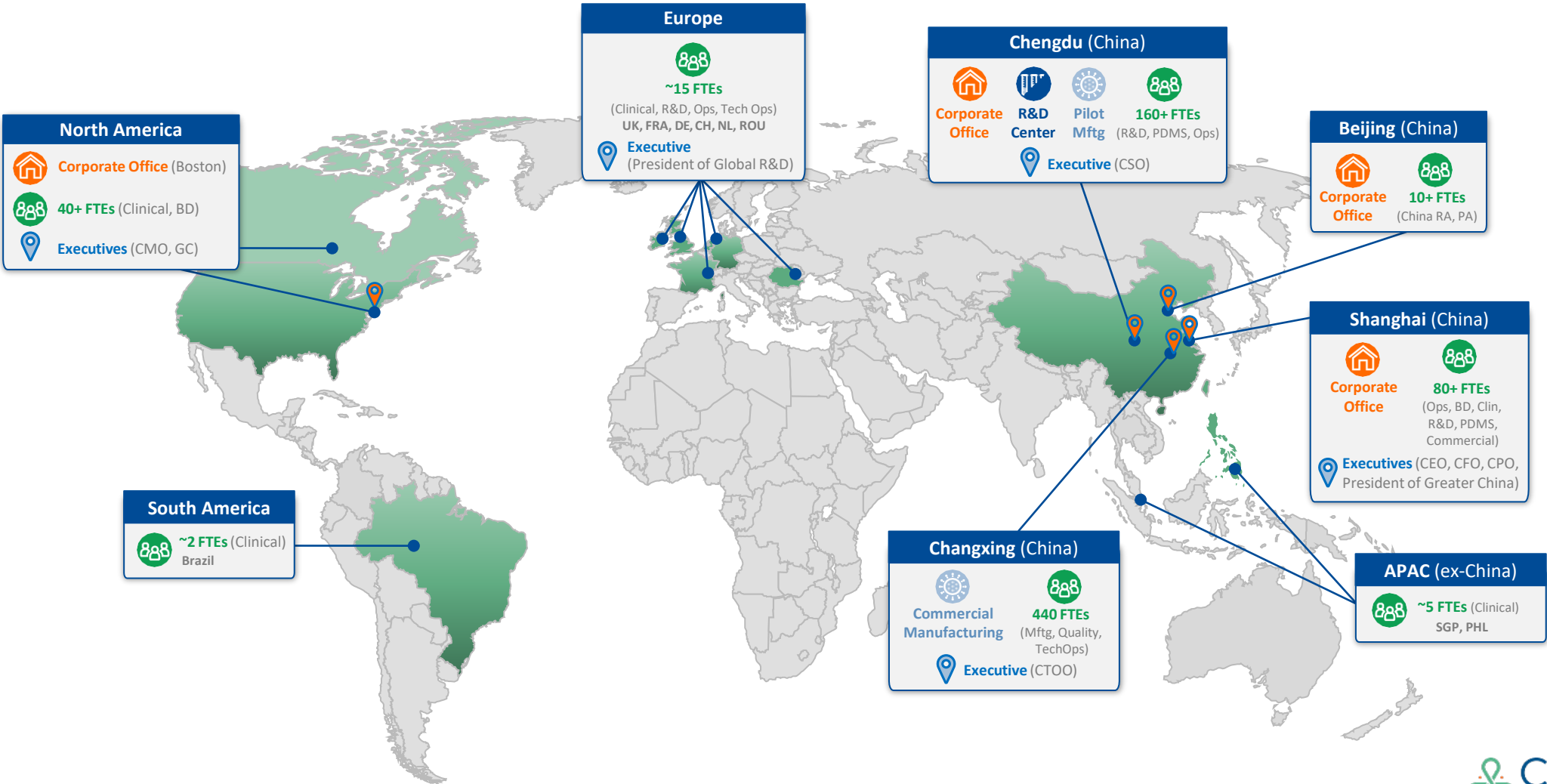
Integrated Vaccine R&D, Manufacturing & Global Clinical Development Capabilities

750+ FTEs (in 12 Countries)

4 Corporate Offices

2 Manufacturing Facilities

R&D Center



Note: As of December 2022.

Global Leadership Team: Diverse & Proven Vaccine Expertise

January 2023

CEO



Joshua Liang
CENTERVIEW
Wharton
University of Pennsylvania

Chief Executive Officer (CEO) & Executive Director of the Board

- Raised >US\$ 1 billion in financings (incl. IPO)
- Led Clover from 15 to 750+ FTEs

Founders



Peng Liang, PhD
GenHunter
HARVARD MEDICAL SCHOOL

Founder, Chairman of the Board & Chief Scientific Officer

- Inventor of Trimer-Tag™ Technology
- Founder & Chairman, GenHunter



Xiaodong Wang, PhD
BeiGene
NIBS
HHMI
HARVARD MEDICAL SCHOOL

Non-Executive Director (NED)

- Founding Director, NIBS
- Co-founder & SAB Chairman, BeiGene

R&D & Tech Ops Leaders



Nicholas Jackson, PhD
SANOFI
CEPI

President of Global R&D

- Global Head of Research, Sanofi Pasteur
- Head of Vaccine Programs & Tech, CEPI



LiongHo Chua
ATM 艾美疫苗
SANOFI

President of Greater China

- Executive President & CSO, AIM Vaccine
- General Manager, Sanofi Pasteur China



Htay Htay Han, MBBS
Takeda
gsk

Chief Medical Officer (CMO)

- Head Early Clinical Dev, Takeda Vaccines
- 23 Years at GSK Vaccines



Mike Berry, PhD
DYNAVAX
NOVARTIS VACCINES

Chief Technical Ops Officer (CTOO)

- VP of PDMS, Dynavax Technologies
- Director, MSAT, Novartis Vaccines



Yang Li, PhD
Celgene
Bristol Myers Squibb

Chief Technical Officer (CTO)

- Head of CMC (VP), Overland & Lyvgen
- Senior Scientist at Celgene & BMS



Nicolas Burdin, PhD
SANOFI

EVP, Global Head of Research

- Global Head of Immunology at Sanofi Pasteur



Igor Smolenov, MD PhD
Seqirus
A CSL Company
moderna

SVP, Global Clinical Development

- TA Head for R&D, CSL Seqirus
- Head of Clinical Dev (ID), Moderna



Wei Tan, PhD
NOVARTIS
Pfizer

SVP, Head of China Research

- Chief Scientific Officer, Coherent Bio
- Oncology Research, Novartis & Pfizer



Francois Verdier, PhD
SANOFI

Head of Global Regulatory Affairs

- AVP, Global Franchise Head of Regulatory Affairs at Sanofi Pasteur



Tracy Wang
parexel
SANOFI

SVP, Head of China Regulatory Affairs

- Head of China Reg Affairs, Parexel
- China RA at MSD, Novartis, Sanofi

Corporate Leaders



Aileen Wang
NOVARTIS
SANDOZ

Chief Financial Officer (CFO)

- Head of BP&A, Novartis Gene Therapies
- Chief Financial Officer, Sandoz China



Lily Yang
wework
NIKE

Chief People Officer (CPO)

- VP of People & Culture, WeWork China
- Senior Director, HRBP, Nike



Brian Krex
agtc
ALEXION
Pfizer

General Counsel (GC)

- General Counsel at AGTC / VP at Alexion
- Assistant General Counsel, Pfizer



Abigail Bracha, PhD
Rubius Therapeutics
GE

SVP, Corporate Strategy & BD

- VP, Corp Dev & Strategy, Rubius Therap.
- Head of Strategy (S&E), GE Healthcare

Board of Directors*



Donna Ambrosino, MD

Non-Executive Director (NED)



Ralf Clemens, MD PhD

Non-Executive Director (NED)



Jeff Farrow

Independent Non-Executive Director (INED)



Thomas Leggett

Independent Non-Executive Director (INED)



Xiang (Sam) Liao

Independent Non-Executive Director (INED)



Xiaobin Wu, PhD

Independent Non-Executive Director (INED)



*Board members in addition to the CEO and Founders.

Scientific Advisory Board (SAB)

Industry-leading advisors across a broad range of expertise | Advise and guide overall global vaccine development & portfolio strategy

SAB Chairman



Ralf Clemens MD/PhD
Chairman of SAB

- 30+ years in vaccine development
- Former Senior Vice President / Global Head of Vaccine Development at Takeda, Novartis Vaccines and GSK
- Member of Board of Trustees of International Vaccine Institute
- Advisor, Bill & Melinda Gates Foundation (BMGF)



SAB Members



Kaia Agarwal
Regulatory Affairs Advisor

- Former VP, Global Head of Regulatory Affairs, Novartis Vaccines
- Former VP, Reg Affairs, Genzyme



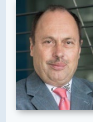
Donna Ambrosino MD
Research Advisor

- Scientific Advisor, BMGF & CEPI
- Former CEO, Mass Biologics
- Former Assoc. Professor of Pediatrics, Harvard



Sue Ann Costa Clemens
Clinical Development Advisor

- Visiting Professor of Global Health, Oxford Univ.
- Professor & Head of Institute for Global Health, Università di Siena
- Former VP of Vaccine Dev (Latin America), GSK



Michael Pfeleiderer PhD
Regulatory Affairs Advisor

- Former Head of Viral Vaccines Section, Paul Ehrlich Institut (PEI)
- Former Chair of Pandemic Task Force, EMA



Peter Richmond
Medical Advisor

- Head of Pediatrics University of W. Australia
- Head, Vaccine Trials Group, Telethon Kids Institute



Frank Rockhold MD
Biostatistics Advisor

- Professor, Biostatistics & Bioinformatics, Duke
- Former SVP & Chief Safety Officer, GSK



David Salisbury
Public Health Advisor

- Former Director of Immunization, Department of Health (London)
- Former Chair, Strategic Advisory Group on Immunization, WHO



George Siber MD
Research Advisor

- Co-Founder & Board Member, Affinivax
- Former EVP & CSO, Wyeth Vaccines
- Former Associate Professor, Infectious Diseases, Harvard



Nelson Teich MD
Public Health Advisor

- Former Minister of Health, Brazil
- Founder & Former President, Integrated Clinical Oncology Group (COI)



Anh Wartel MD
Clinical Development Advisor

- Deputy Director General, International Vaccine Institute (IVI)
- Former Country Medical Head (Vietnam/Cambodia), Sanofi



50+ SAB Meetings Convened Since July 2020

Established GMP Commercial Manufacturing Capabilities

2 GMP-Inspected & Compliant Commercial Facilities | Capacity to Produce Hundreds of Millions of Doses Annually at Peak



In-house Commercial Manufacturing Facility (Changxing, Zhejiang Province)



- ✓ Passed GMP inspection (China NMPA) for the production of SCB-2019 (CpG 1018/Alum)
- ✓ Received **Pharmaceutical Manufacturing Permit** from Zhejiang Medical Products Administration; received **EU QP Declaration** stating the facility operation complies with EU GMP standards
- ✓ Capacity to potentially produce **hundreds of millions of doses** of SCB-2019 (CpG 1018/Alum) annually at peak



High-Quality CDMO Partner Facility ()

WuXi Vaccines

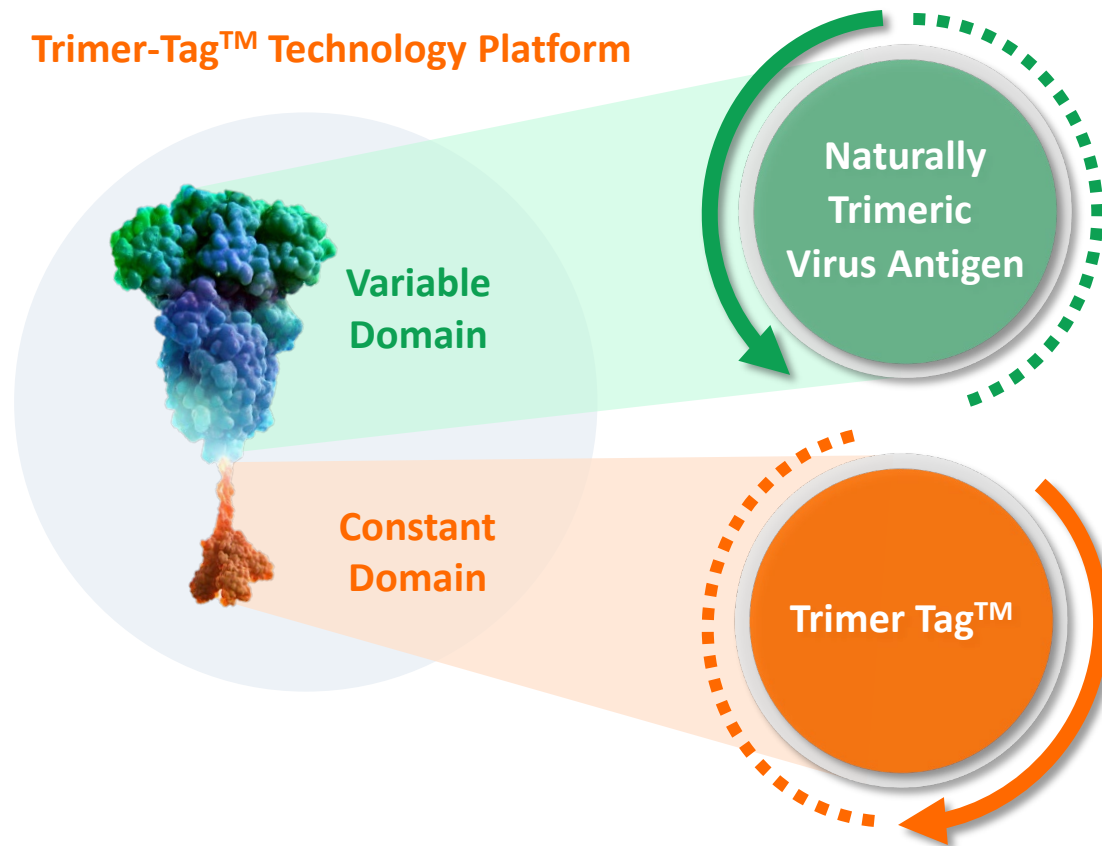


- ✓ EU GMP Certificate Received for the production of SCB-2019 (CpG 1018/Alum); strong track record in vaccines/biologics manufacturing and global regulatory approvals (EMA, FDA, WHO)
- ✓ **Completed production-related transfer activities** from Clover to WuXi Vaccines for SCB-2019
- ✓ Capacity to potentially produce **hundreds of millions of doses** of SCB-2019 (CpG 1018/Alum) annually at peak

Trimer-Tag™ Technology Platform for Vaccine Development

- Platform for development of **protein-based vaccines** based on **naturally-trimeric virus spike antigens**
- **Only technology platform globally** for producing recombinant covalently-trimerized antigens utilizing a **human-derived trimerization tag**
- **Platform has been fully validated** by COVID-19 vaccine (SCB-2019) that is authorized for Emergency Use in China

Trimer-Tag™ Technology Platform



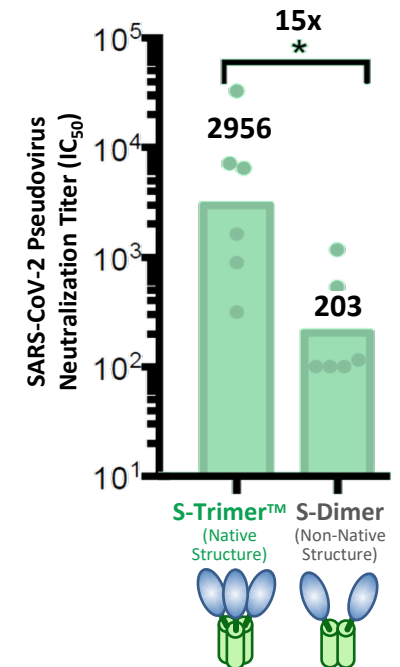
20+ Potential Virus Antigens

Coronavirus RSV Rabies
Influenza HSV-1 LASV

- ✓ **Trimerizes*** any protein of interest
- ✓ **Achieves stable** covalently-linked and **native-like trimeric structures** of virus antigens
- ✓ **Human-derived**, contributing to favorable safety profile and no ADA observed in Phase 2/3 for SCB-2019 (CpG 1018/Alum)
- ✓ **Secreted** trimeric fusion proteins produced in mammalian cells; **affinity-purification** achieves high antigen purity

Strong Neutralizing Immune Responses

Trimer-Tagged Native-Like Spike Antigens Induce Superior Immune Responses Compared to Non-Native Conformations (e.g., Dimeric Spike)⁽¹⁾



Note: Representative list of viruses with naturally trimeric spike antigens is illustrative and not exhaustive. Abbreviation: ADA (Anti-Drug Antibodies).

* A "trimer" refers to a molecule or an anion formed by combination or association of three molecules or ions of the same substance. Trimerization is a chemical reaction that uses three identical molecules to produce a single trimer. Proteins that are created through the joining of two or more genes that originally coded for separate proteins and consist of three identical simpler parts are referred to as "trimeric fusion proteins". Trimerization tag refers to a protein tag from the C-propeptide domain of procollagen (Trimer-Tag™), which is capable of self-assembly into a disulfide bond-linked trimer.

(1) SARS-CoV-2 pseudovirus neutralizing antibody responses in mice vaccinated with two doses of S-Trimer™ (Trimer-Tagged SARS-CoV-2 spike protein) or S-Dimer (Fc-Tagged SARS-CoV-2 spike protein) on Days 0 and 21. Data based on sera collected on Day 35 (14 days after second dose).

Robust Pipeline Focused on Innovative Vaccine Candidates

2023 Milestones: ☒ Commercialization of COVID-19 Vaccine | ☒ Expansion of Mid- to Late-Stage Vaccine Pipeline | ☒ Advancement of In-House Pipeline



(1) COVID-19 vaccine received EUA in China in Dec-2022; at-least one global (ex-China) EUA expected in H1-2023. (2) At least 1 mid- to late- stage in-licensing deal is planned in H1 2023 with focus on respiratory virus vaccines and pediatric vaccines, in China and Asia Pacific region. (3) SCB-2020S antigen is a chimeric SARS-CoV-2 spike protein based on the RBD of Beta variant and the NTD of the original strain. This candidate is being evaluated with CAS-1, an in-house developed oil-in-water emulsion-based adjuvant. Phase 1 results demonstrated robust immunogenicity and favorable safety profile. (4) To be based on multivalent S-Trimer vaccine; advancement to clinical development is planned in 2023. (5) Additional preclinical results and update on development plans are expected in H1-2023. (6) Interim Phase 1 data and recommended Phase 2 dose selection anticipated in first half of 2023. (7) Oncology product candidate for the treatment of malignant ascites (MA), malignant pleural effusions (MPE), and peritoneal carcinomatosis (PC) to address global unmet medical need of intracavitary malignancies. 5 Phase 1 trials completed in China and Australia. Continued internal development of SCB-313 has been paused and pending further assessment of development strategy and resource allocation.

SCB-2019 (CpG 1018/Alum) Overview

✓ Authorized for Emergency Use (EUA) in China

-- SCB-2019 (CpG 1018/Alum) Vaccine Design --

- **Adjuvanted Protein-Based COVID-19 Vaccine Candidate:** SCB-2019 antigen (30 µg/dose) in combination with CpG 1018 adjuvant and aluminum hydroxide (alum)
- SCB-2019 is a recombinant SARS-CoV-2 Spike (S) protein, preserved in the native trimeric prefusion conformation form utilizing **Trimer-Tag™ technology platform**

SCB-2019 Antigen Structure



S1

S2

Prefusion Spike (S)
Protein of SARS-
CoV-2 Prototype
Strain

Trimer-Tag™

-- Global Collaborations Established --

- Up to \$397.4 M grant funding by **C E P I**
- Commercial supply agreements with **DYN/VAX** for CpG 1018 adjuvant supply
- **Advanced Purchase Agreement (APA)** signed with **Gavi** to supply **COVAX** facility for global distribution

-- Differentiated “Universal Booster” COVID-19 Vaccine Candidate --



Robust Neutralization Against Omicron

(Broad Neutralization Against
Omicron, Including China-Dominant
BA.5 and BF.7 Strains)



Reduced Household Transmission

(84% Reduction in Transmission
of SARS-CoV-2 Infection to
Household Contacts)



Potential Best- in-Field Safety

(Favorable Safety &
Reactogenicity Profile)



Convenient Storage & Distribution

(Stable at 2-8°C Refrigeration
and Room Temperature)



**Attractive Product Profile for China &
Global Markets as a “Universal Booster”**

☑ Comprehensive Global Clinical Development Completed

Phase 2/3 Development Across Broad Populations & Booster Settings

Ages & Conditions	Participants Enrolled	
	Icon	Participants Enrolled
	Adult & Elderly (18+ Years)	☑ N = 30,000+ ⁽¹⁾
Booster Settings	Adolescents (12-17 Years)	☑ N = 1,250+
	Co-Morbidities ⁽²⁾	☑ N = 2,000+ ⁽²⁾
	Prior SARS-CoV-2 Infection <i>Natural Infection + SCB-2019</i>	☑ N = 14,250+ ⁽¹⁾
Booster Settings	Prior Inactivated Vaccine <i>2-3x Inactivated Vaccine + SCB-2019</i>	☑ N = 700+
	Prior Viral Vector Vaccine <i>2x AstraZeneca Vaccine + SCB-2019</i>	☑ N = 500+
	Prior SCB-2019 Vaccination <i>2x SCB-2019 + SCB-2019</i>	☑ N = 2,750+

37,500+
Participants Enrolled
Across Clinical Trials

7 Phase 2/3
Clinical Trials

8 Countries,
5 Continents



10+
Publications in Peer-
Reviewed Journals

The Lancet (x2) *Lancet Infectious Diseases* *Clinical Infectious Diseases* *Nature Communications*
Journal of Infectious Diseases (JID) (x2) *Journal of Virology*
Open Forum Infectious Diseases (OFID) *Virology: Current Research*

(1) 30,128 total adult & elderly participants enrolled in Phase 2/3 SPECTRA trial, including 14,622 participants with evidence prior of SARS-CoV-2 infection.

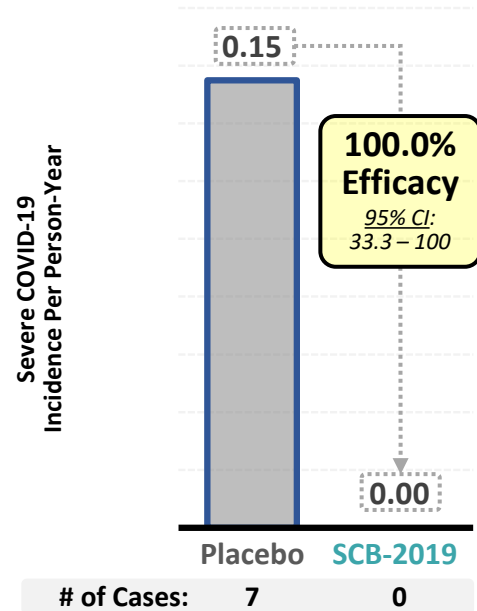
(2) Enrolled in Phase 2/3 SPECTRA trial; co-morbidities (associated with high risk of severe COVID-19) include chronic kidney disease, chronic obstructive pulmonary disease, obesity with BMI ≥30 kg/m², serious heart conditions such as hypertension, heart failure, coronary artery disease or cardiomyopathies, and Type 2 diabetes mellitus.

High & Durable Efficacy in Elderly Population

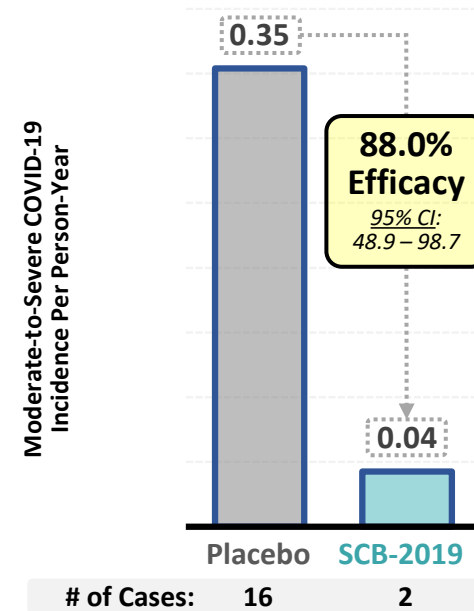
- ✓ 100% efficacy against severe COVID-19 in elderly at 6-months after dosing
- ✓ 88% efficacy against moderate-to-severe COVID-19 in elderly at 6-months after dosing

Efficacy in Elderly (≥60 Years) at 6 Months After Dosing

Severe COVID-19



Mod-to-Severe COVID-19



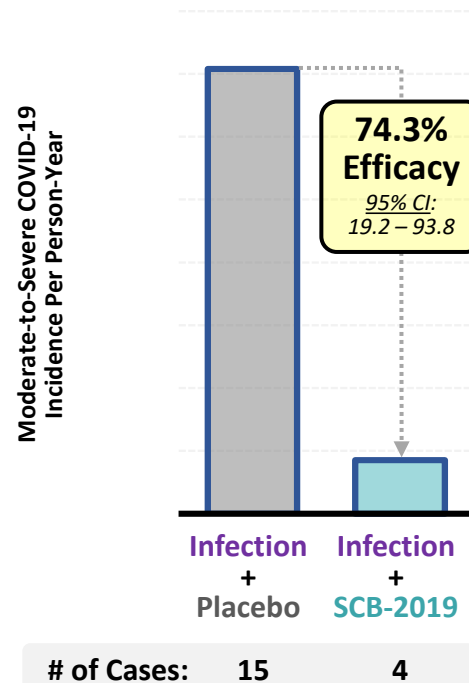
Notes: Figures show data for PCR-confirmed COVID-19 (caused by any strain of SARS-CoV-2) starting from ≥14 days after second dose in participants without evidence of prior SARS-CoV-2 infection (baseline seronegative). Data shown represents average follow-up of approximately 6 months after dosing.

Significant & Durable Efficacy for SCB-2019 Booster in Previously-Infected Population

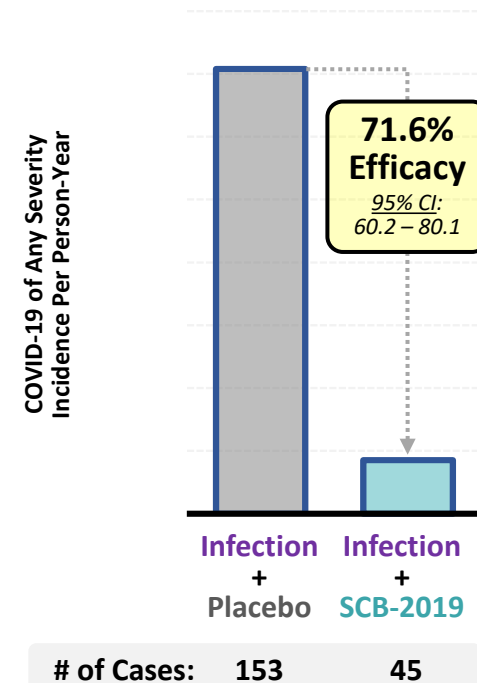
- ✓ **Strong & Durable Efficacy:** >70% efficacy for SCB-2019 against COVID-19 in previously-infected population for at least 6-months, compared to infection-alone
- ✓ Demonstrates **significant value of boosting previously-infected population with SCB-2019**, and that **protection induced by infection-alone is insufficient & wanes over time**

Efficacy of SCB-2019 Booster at ~6 Months Post-Dosing

Mod-to-Severe COVID-19



COVID-19 of Any Severity

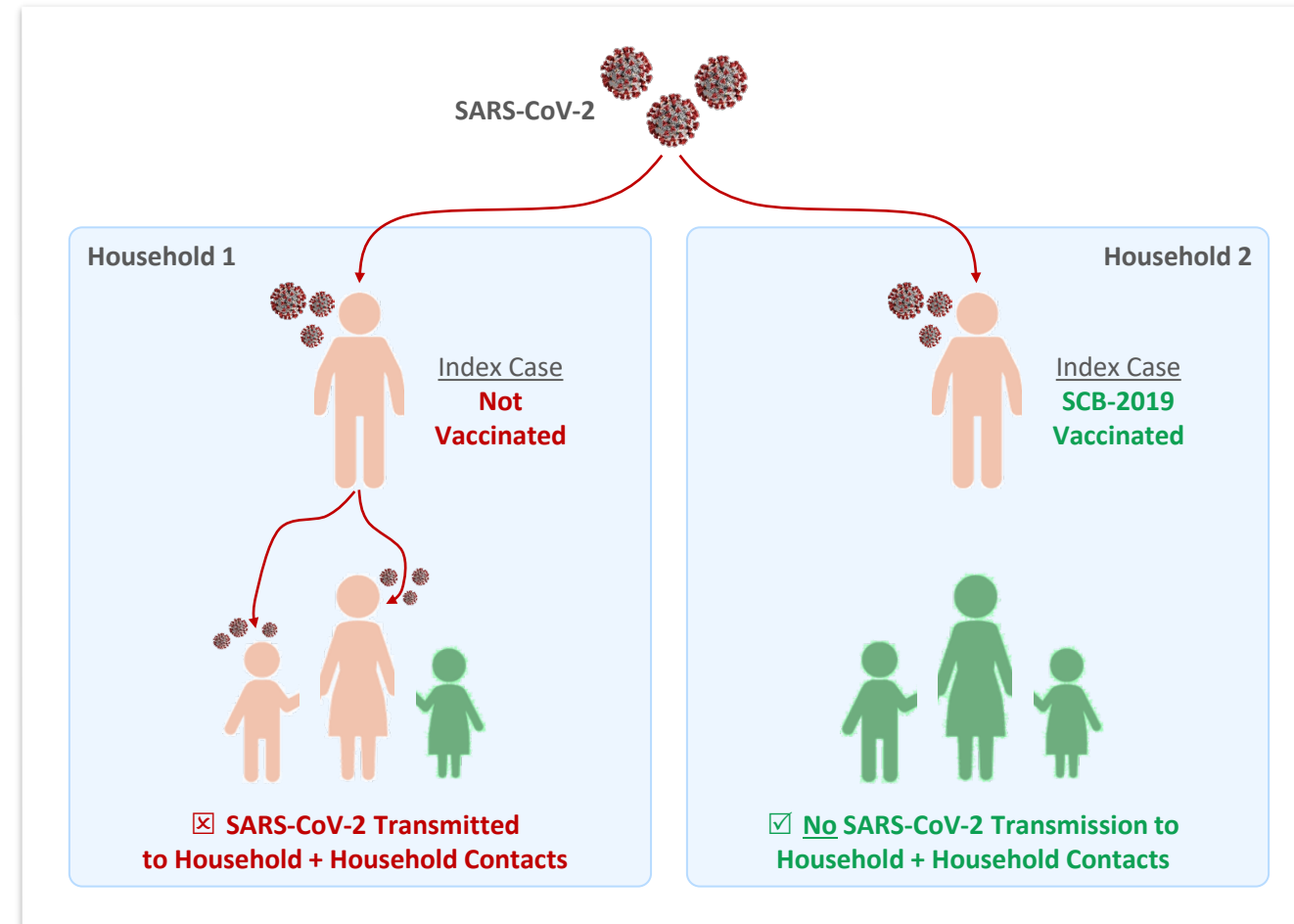


Significant Reduction in Household Transmission of SARS-CoV-2

- ✓ Individuals vaccinated with SCB-2019 were **84% less likely** to transmit SARS-CoV-2 infection to another individual living in the same household (in Phase 2/3 trial)

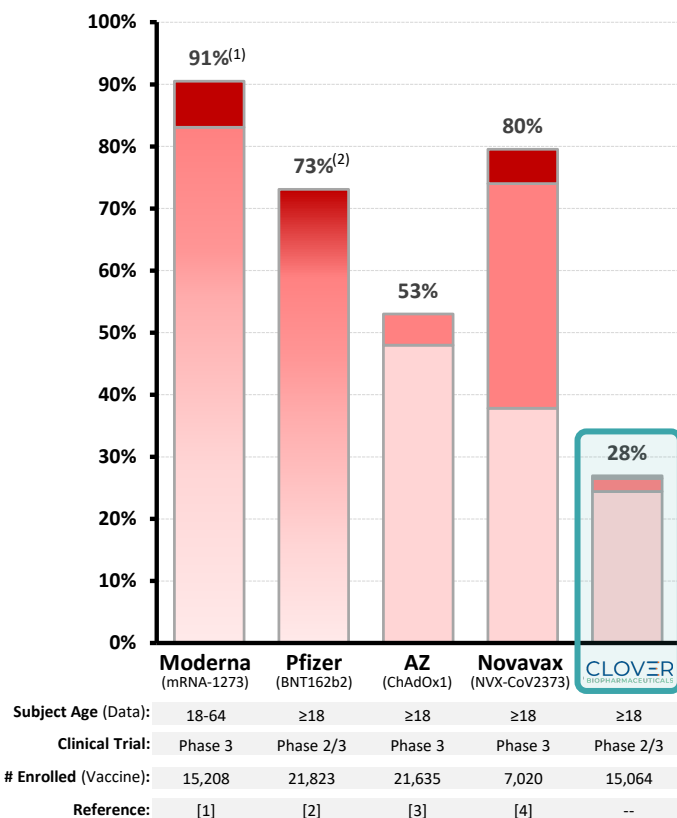
SCB-2019 (CpG 1018/Alum) Vaccination Demonstrated:

- ✓ **84% Reduction in Transmission of Any SARS-CoV-2 Infection to Household Contacts** (n=1/134 household contacts for SCB-2019-vaccinated index cases versus n=12/250 household contacts for placebo-vaccinated index cases)
- ✓ **79% Reduction in Transmission of Symptomatic SARS-CoV-2 Infection to Households** (n=1/51 households for SCB-2019-vaccinated index cases versus n=12/103 households for placebo-vaccinated index cases)

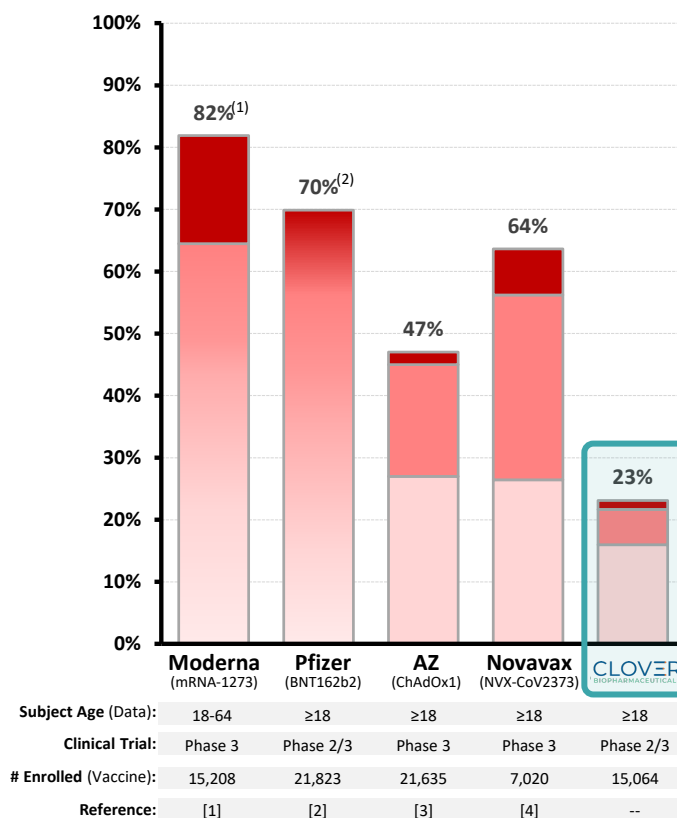


Potential Best-in-Field Safety Profile

Any LOCAL AEs (After 2nd Dose) % of Participants

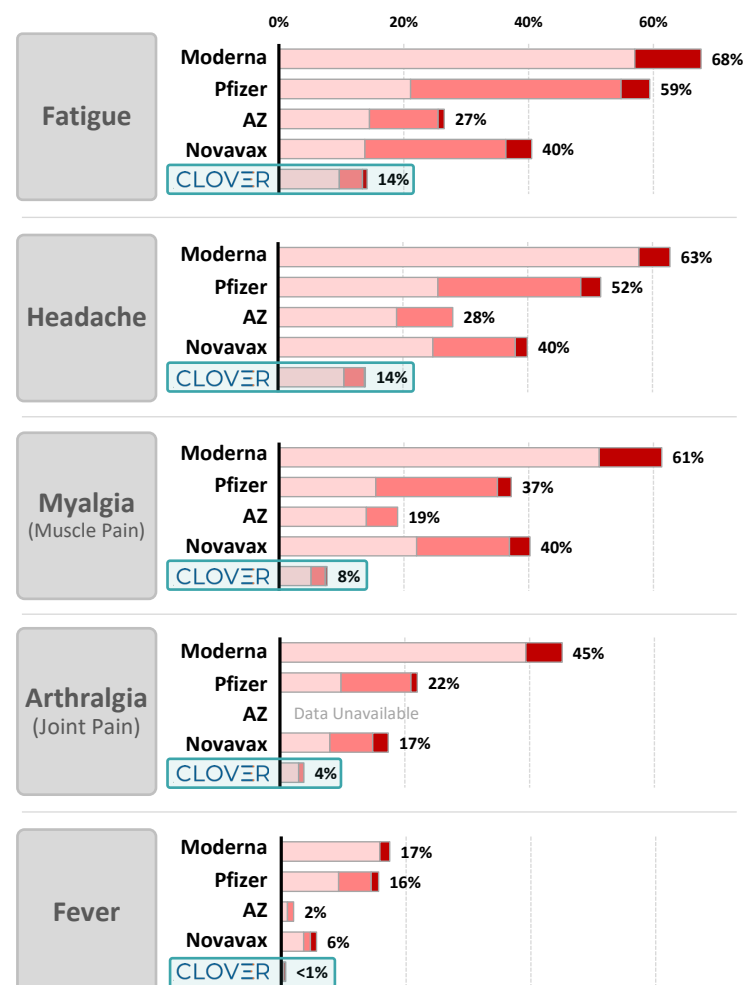


Any SYSTEMIC AEs (After 2nd Dose) % of Participants



Mild (Grade 1)
 Moderate (Grade 2)
 Severe (Grade 3 and above)

SYSTEMIC AEs (After 2nd Dose)



References: [1] Moderna FDA Briefing Document - VRBAC Meeting DEC 17, 2020, [2] Pfizer FDA Briefing Document - VRBAC Meeting DEC 10, 2020, [3] DOI: 10.1056/NEJMoa2105290, [4] DOI: 10.1056/NEJMoa2107659.

Notes: **NON HEAD-TO-HEAD CROSS-TRIAL COMPARISONS FOR ILLUSTRATIVE PURPOSES ONLY.** Percentage of participants experiencing adverse events (AEs) are shown in figures.

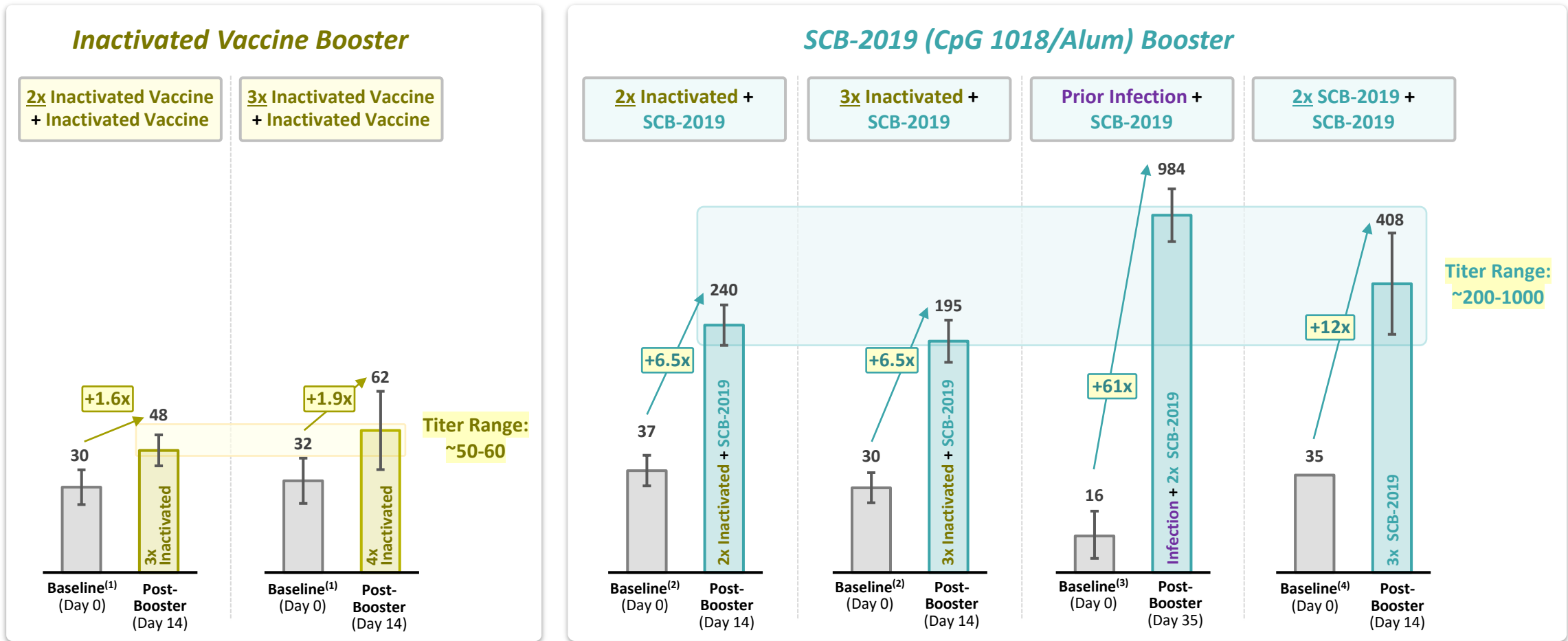
(1) Data not disclosed separately for mild and moderate AEs. Shown in figure as combined mild-moderate AEs.

(2) Data not disclosed separately for mild, moderate and severe AEs. Shown in figure as combined mild-moderate-severe AEs.

Omicron BA.5 Neutralizing Antibodies Significantly Boosted by SCB-2019

- ✓ **Rapid & Strong Omicron BA.5 Neutralizing Antibody Responses Across All Booster Settings Studied** (GMTs of ~200-1000 for SCB-2019 booster compared to ~50-60 for Inactivated Vaccine booster)

Omicron BA.5 Live Virus Neutralization Titers (MN₅₀)

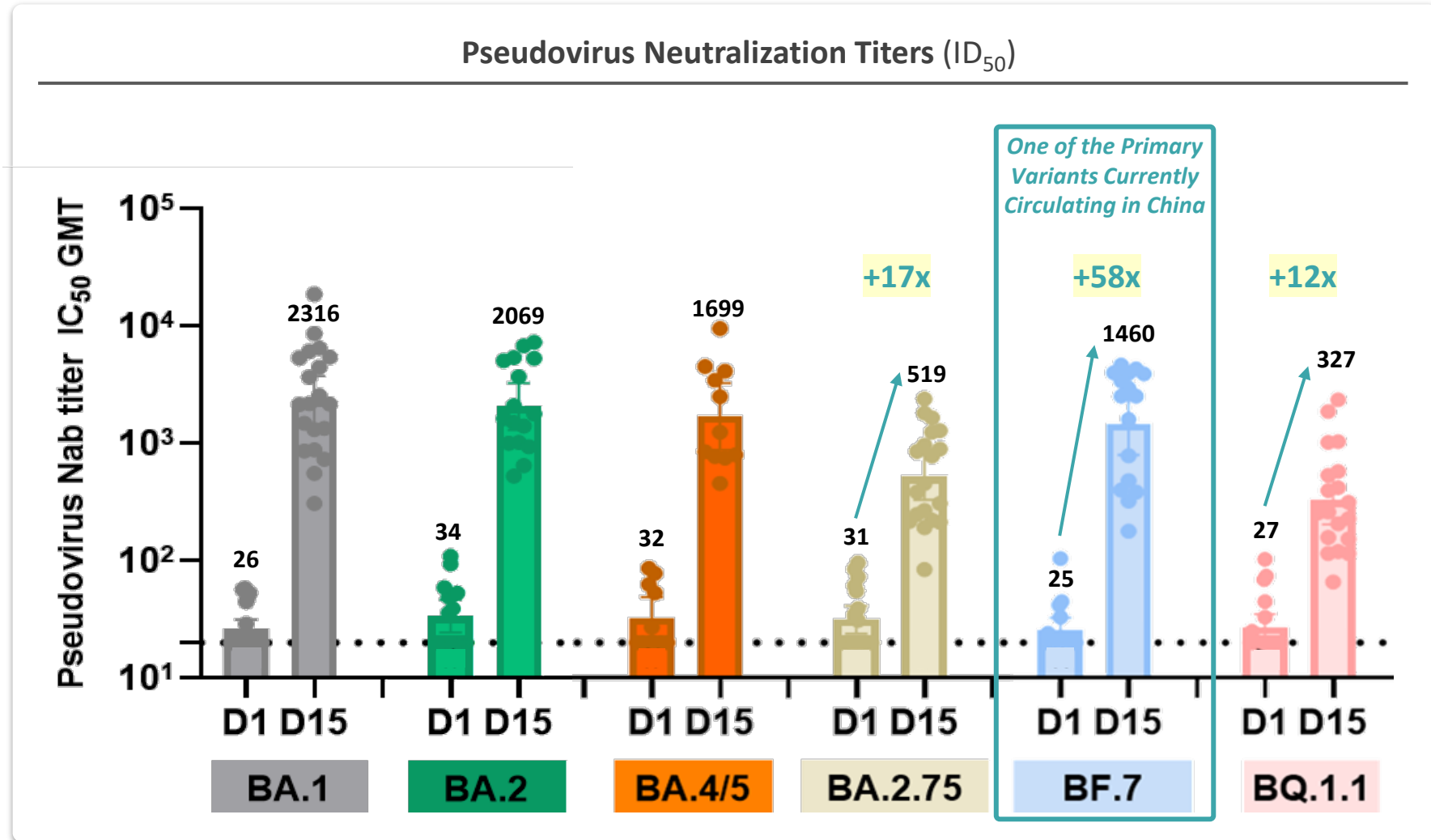


Notes: Bars represent Geometric Mean Titers (GMT) \pm 95% confidence intervals (95% CI). Same validated live-virus neutralization assay against Omicron variant strains of SARS-CoV-2 utilized across all studies shown (VisMederi).

(1) Data readout in participants receiving 2 or 3 doses of inactivated vaccine at ≥ 3 months prior to enrolling and receiving a booster dose of inactivated vaccine (data shown for participants with baseline titers <100). (2) Data readout in participants receiving 2 or 3 doses of inactivated vaccine at ≥ 3 months prior to enrolling and receiving a booster dose of SCB-2019 (data shown for participants with baseline titers <100). (3) Data readout in participants with evidence of prior SARS-CoV-2 infection that enrolled and received 2 doses of SCB-2019 (CpG 1018/Alum), 21 days apart. Evidence of prior SARS-CoV-2 infection status was determined by the presence of antibodies binding to SARS-CoV-2 Spike (S) protein in baseline serum samples (Roche Elecsys[®] anti-S test). (4) Data readout from participants receiving 2 doses of SCB-2019 (CpG 1018/Alum) at ≥ 6 months prior to enrolling and then receiving a homologous SCB-2019 third dose booster (data shown for baseline seronegative participants defined as subjects with no evidence of natural infection prior to receiving SCB-2019 booster based on anti-N antibody testing and antibody titer reduction >2 -fold between primary series and booster dose).

New Omicron Variants (including BF.7 and BQ.1.1) are Neutralized by SCB-2019 Booster

- ✓ Preliminary data demonstrates significant neutralization responses against new Omicron variants (incl. BF.7 and BQ.1.1) for SCB-2019 booster
- ✓ BF.7 titers comparable to BA.4/5 (BF.7 is one of the primary variants currently circulating in mainland China)



Notes: Preliminary and exploratory pseudovirus neutralization results shown in subjects enrolled with low baseline neutralization titers (baseline pre-boost neutralization titers ≤ 100) based on each strain. Bars represent Geometric Mean Titers (GMT) \pm 95% confidence intervals (95% CI). Data shown in subjects receiving 2 doses of SCB-2019 (CpG 1018/Alum) at ≥ 6 months prior to enrolling and then receiving a homologous SCB-2019 third dose booster.

Summary of Commercial Plan in 2023

January 2023

- ✓ Commercial Launches in China & Globally are Planned in 2023, with Significant Commercial Opportunities
- ✓ Conversion of Inventory into Revenue and Cash to Begin (stockpiled inventory enables production of >100 million doses)



China Market

- **Commercial Launch in Q1-2023** expected in multiple provinces and municipalities
- **Additional Launches Anticipated in 2023** in other provinces and municipalities, based on production capacity and market dynamics



Global (Ex-China) Markets

- **Anticipating ≥ 1 EUA Received & Multiple EUA Submissions Completed in H1 2023**, with priority countries in Asia Pacific and Latin America
- **≥ 1 Bilateral Supply Agreement Anticipated in H1 2023**, driving commercial value starting in 2023

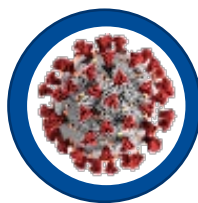


Commercial Manufacturing

- **Stockpiling of Key Raw Material Inventory Completed** to Support Potential Production & Release of **Over 100 Million Doses of SCB-2019 in 2023**
- **Commercial Supply Planned from 2 GMP Facilities**, including Clover's Changxing Facility and a CDMO Facility



- Given the scale and impact of the ongoing COVID-19 outbreaks across China, Clover anticipates a **significant near-term** and **more sustained long-term** booster market opportunity for Clover's premium and broadly protective COVID-19 vaccine



Rapid COVID-19 Outbreak in Mainland China Ongoing Since December 2022

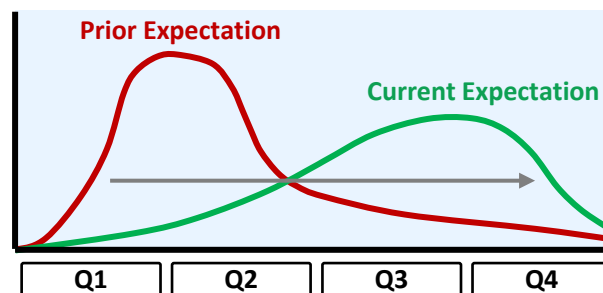
Proportion of Infected People Expected to Increase Significantly Through H1 2023

Near-Term: 2023 4th Dose National Booster Campaign

"Wider" Vaccination Curve is Now Expected

- Boosters for previously-infected population expected to begin in Q2 2023 ⁽¹⁾, and potentially peak during H2 2023 ahead of winter season
- Provides more time for Clover to produce & release SCB-2019, and to maximize its impact

Illustrative COVID-19 Vaccine Market in China ⁽²⁾

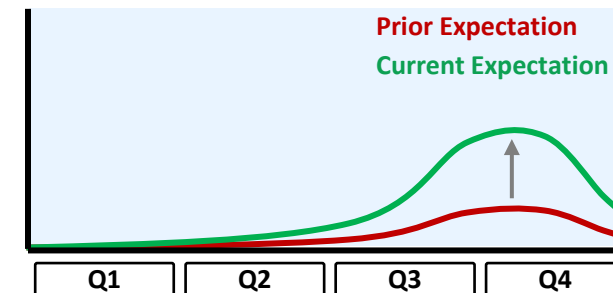


Longer-Term: 2024+ Annual Booster Market

Robust & Stable Annual Market is Anticipated

- Significantly increased awareness of potential COVID-19 disease severity & impact
- Especially for high-risk populations (elderly, co-morbidities, etc.)
- Private market could enable favorable pricing (flu vaccine pricing: ~RMB 130/dose) ⁽³⁾

Illustrative COVID-19 Vaccine Market in China ⁽²⁾



(1) Current policy in China is for previously infected individuals to receive booster vaccination at interval of at least 6 months after infection.

(2) Illustrative figures showing the potential impact of the recent and ongoing COVID-19 outbreak in China on the overall COVID-19 vaccine market in China.

(3) Quadrivalent influenza vaccine in China achieves pricing of approximately RMB 100-165 per dose in private market setting.



✓ Most Commercial Launch Preparation Activities Have Been Completed

- Launch to Begin in Q1 2023, with Potential Additional Expansion Thereafter (Additional Locations & Populations)

December 2022

H1 2023

H2 2023

- ✓ **China EUA Received**: Announced on 05-DEC 2022
- ✓ **Included & Recommended in National Immunization Plan**: China National Health Commission (NHC) published the first version of its 4th dose booster ("3+1") plan on 13-DEC 2022
 - **Heterologous Boosting is Recommended** (Non-Inactivated Vaccines, including protein-based SCB-2019)
 - **Vaccines with Broad Neutralization against Omicron are Prioritized for Use** (includes SCB-2019)
 - **Initial Coverage in High-Risk Populations** (Age 60+, Co-Morbidities, etc.)
- ✓ **National Procurement Pricing Finalized**: Process with National Healthcare Security Administration completed
- ✓ **National Batch Release Testing Ongoing**: Multiple batches of SCB-2019 sent for national batch release testing
- ✓ Engagement with Provincial & City CDCs to Advance Provincial Listing (Robust Interest & Demand Received To-Date)

- **Q1 2023: National Release Testing to be Completed** for the First Commercial Batches of SCB-2019
- **Q1 2023: Launch in Multiple Provinces & Municipalities**
 - Key provinces and municipalities prioritized based on strategic fit, population size, competitive environment

- **Q2 2023: Dosing in Previously Infected Population to Begin⁽¹⁾**
 - Potential peak rollout during H2 2023 in advance of upcoming winter season
- **2023: Launch in Additional Provinces & Municipalities**
 - Based on production capacity and market dynamics
- **2023: Potential Expansion of Booster Vaccination Coverage**
 - Younger Adults (18-59 years), Adolescents (12-17 years), etc.

Note: "3+1" refers to populations previously receiving 3 doses of inactivated vaccines + 1 booster dose (i.e. 4th dose).

(1) Current policy in China is for previously infected individuals to receive booster vaccination at interval of at least 6 months after infection.



Global (Ex-China): Significant Potential Commercial Opportunities in 2023

January 2023

- Bilateral Supply Agreements and EUAs in Key Countries in Asia Pacific & Latin America are Prioritized in 2023
- At least 1 EUA and Bilateral Supply Agreement is Expected in H1 2023, Potentially Driving Commercial Value in 2023

Target Markets

Countries in
Asia Pacific &
Latin America

GAVI ⁽¹⁾

Considerations

- Potential **significant revenue & cash generation opportunities** (via bilateral supply deals) in 2023 have been identified in **multiple countries**
- **Favorable pricing & margin** opportunities (compared to National Procurement in China)
- To leverage China EUA for **potential rapid approvals**
- Although near-term commercial opportunity is expected to be limited compared to bilateral deals, EMA and WHO approvals would strengthen value of SCB-2019 in the global markets and validate Clover's global development capabilities

Milestones Expected in 2023

H1 2023: ≥1 Global (ex-China) EUA Granted and multiple EUA Submissions Completed

H1 2023: ≥1 Bilateral Supply Deal established

2023: EMA and WHO EUL Submissions Completed

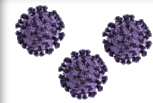
(1) Advanced Purchase Agreement (APA) signed with GAVI to supply COVAX facility with up to 64 million doses of SCB-2019 (CpG 1018/Alum) for global distribution.

Expansion of Mid- to Late-Stage Vaccine Pipeline in 2023

- ≥1 In-Licensing Deal in H1 2023 is Expected for a Mid- to Late-Stage Vaccine (Phase 2, Phase 3, Commercial, etc.)
- Focused on: (1) Building a Leading Respiratory Vaccine Franchise and (2) Establishing a Presence in Pediatric Vaccine Market in China & Asia Pacific Region

Multiple In-Licensing Opportunities are Currently Actively Being Pursued

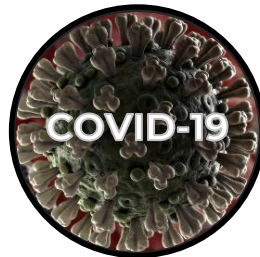
Following deal execution, Clover to utilize its proven R&D capabilities to achieve near-term catalysts that can continue to drive value



To Build a Leading Respiratory Virus Vaccine Franchise

- Respiratory virus outbreaks typically observe similar seasonal nature (peaks during winter)
- Potential commercial synergies achieved by co-promoting with Clover's COVID-19 vaccine
- Lifecycle Management opportunity to develop co-formulated product(s)

Prioritized Areas for BD Evaluation



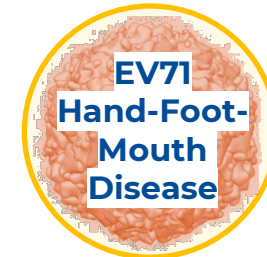
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To Establish Presence in Pediatric Vaccine Market

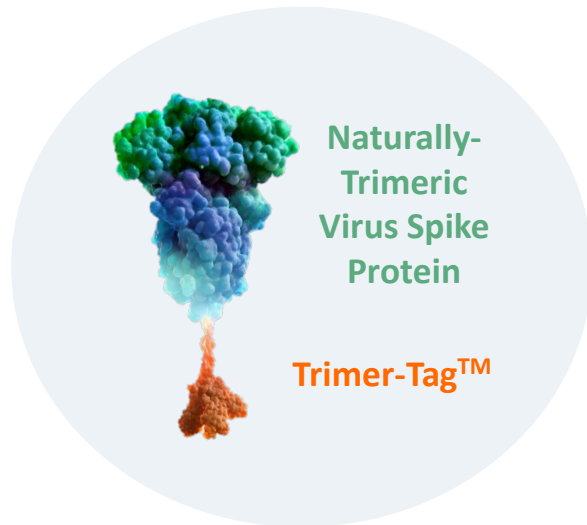
- Attractive financial opportunity in China (stable market & premium pricing)
- Potential commercial synergies (e.g. cross-sell respiratory vaccines to parents & grandparents bringing children & grandchildren to vaccination centers)

Prioritized Areas for BD Evaluation



Advancement of In-House Trimer-Tag™ Pipeline in 2023

Clover To Utilize ☒ Validated Trimer-Tag™ Platform for Continued Development of New Vaccines



- ✓ **Validated Platform Technology:** SCB-2019 (EUA in China) has validated Trimer-Tag™ approach to COVID-19 vaccine development
- ✓ **Rapid ‘Plug & Play’ Development Expected** with more experienced global team & expanded capabilities at Clover

Multivalent SARS-CoV-2 Vaccine Candidate

Clover plans to advance a multivalent S-Trimer™ vaccine candidate that could be broadly protective against all current and potential future strains of SARS-CoV-2, based on bioinformatics analyses and matrix *in vivo* study results.

Clinical development is planned in 2023. Immunological bridging to SCB-2019 is planned to support potential regulatory approvals.

SCB-2020S COVID-19 Vaccine Candidate (chimeric beta and original strain)

Candidate is being evaluated with in-house adjuvant **CAS-1 (oil-in-water emulsion)**.

In an ongoing Phase 1 study in South Africa, initial immunogenicity results indicated a robust immune response and broad neutralization against multiple Omicron strains elicited by SCB-2020S (CAS-1) that were in line with data for SCB-2019. A favorable safety and tolerability profile for SCB-2020S and CAS-1 was also observed. Results demonstrate (1) **proof-of-concept for strain-change utilizing Trimer-Tag™** and (2) the **immunogenicity & safety of Clover’s in-house CAS-1 adjuvant**.

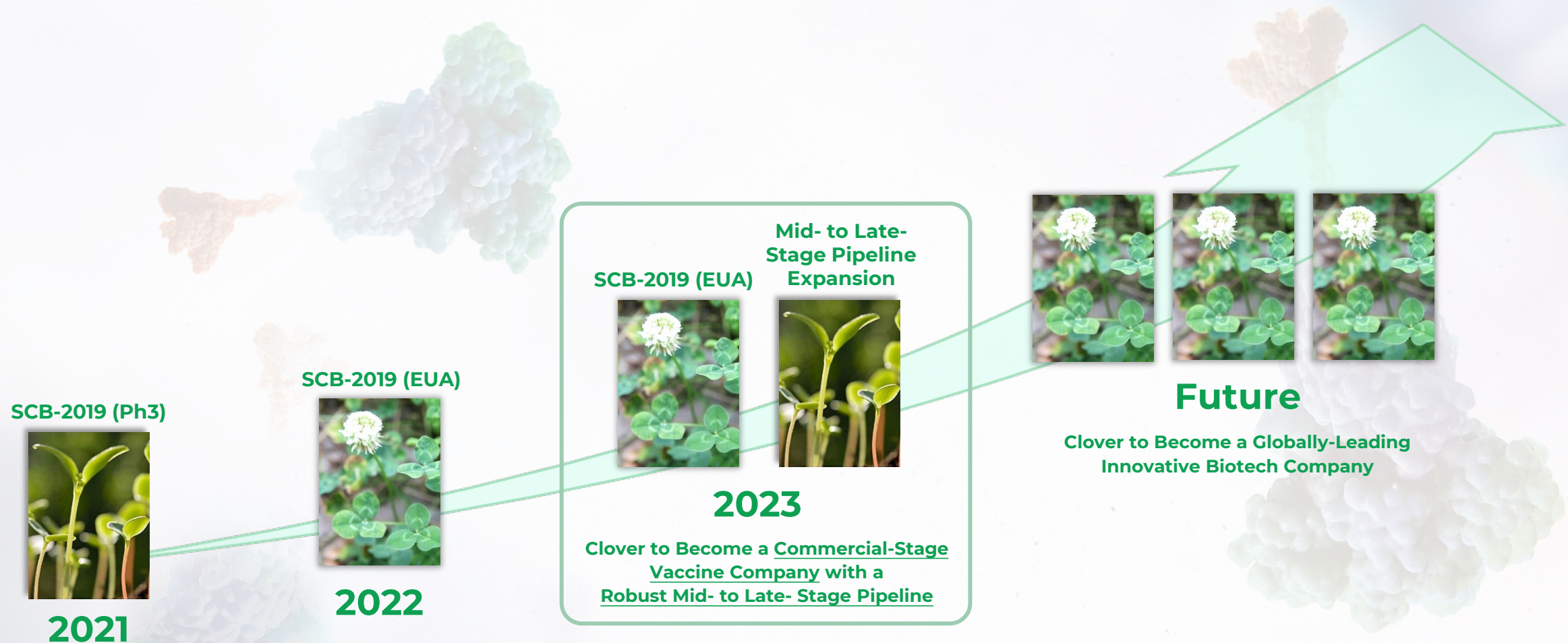
Data generated to-date supportive of further development of Clover’s planned **multivalent SARS-CoV-2 vaccine candidate**, as well as the planned **use of CAS-1 adjuvant in other new vaccines** (internally and via partnerships).

SCB-1001 (Rabies G-Trimer Vaccine)

Additional preclinical results & update on development plans are expected in **H1-2023**.

Vaccine Development Capabilities Validated in 2022...

On Track for Continued Expansion in 2023 & Long-Term Growth...



Financials & Cash Position

- **~US\$270 Million Cash-on-Hand⁽¹⁾** (as of Dec 31, 2022) supports & positions Clover for continued success beyond 2023
- Stockpiling of key raw material inventory (to support potential production of over 100 million doses of SCB-2019) has already been completed in 2022, and conversion of inventory into revenue and cash to begin in 2023
- Up to US\$300 million credit agreement with China Merchant's Bank and up to US\$50 million credit agreement with HSBC are both in place and could be accessed to support potential additional working capital needs during commercial launch if needed
- **2023 R&D + G&A Expenditures:** Expected to decrease significantly compared to 2022⁽²⁾ and 2021⁽³⁾
- Late-stage development for SCB-2019 (including multiple global Phase 2/3 clinical trials) has been substantially completed, and the company continues to streamline corporate operations

(1) Unaudited cash & cash equivalents as of December 31, 2022. Approximately RMB 1.9 billion.

(2) H1 2022: For the six months ended June 30 2022, R&D + Administrative Expenses were RMB 1.08 billion (R&D Expenses: RMB 855 million, Administrative Expenses: RMB 225 million).

(3) Full-Year 2021: For the year ended December 31 2021, R&D + Administrative Expenses were RMB 2.17 billion (R&D Expenses: RMB 1,826 million, Administrative Expenses: RMB 346 million).

Clover to Become a Commercial Stage Vaccine Company with a Robust Mid- to Late-Stage Pipeline in 2023

SCB-2019 Commercial Milestones

- ❑ Q1-2023: China Commercial Launch in multiple provinces & municipalities
- ❑ H1-2023: ≥1 Global (ex-China) EUA Granted and multiple EUA Submissions Completed
- ❑ H1-2023: ≥1 Bilateral Supply Deal established ex-China
- ❑ H2-2023: Real-World Effectiveness Data
- ❑ 2023: EMA and WHO Submissions Completed

Mid- to Late- Stage Pipeline Expansion (Ph 2, Ph 3, Commercial)

- ❑ H1-2023: ≥1 Mid- to Late-Stage In-Licensing Deal Announced, with focus on (1) respiratory virus vaccines and (2) pediatric vaccines, in China and Asia Pacific region

Early-Stage In-House Pipeline

- ❑ 2023: Multi-Valent SARS-CoV-2 Vaccine Candidate – Advancement into clinical development
- ❑ 1H-2023: SCB-1001 (Rabies Vaccine) – Preclinical data & update on development plans
- ❑ 1H-2023: SCB-219M (Chemo-Induced Thrombocytopenia) – Phase 1 data

Thank You!



Successful Global Pivotal Phase 2/3 **SPECTRA** Efficacy Trial

SPECTRA Established High & Durable Efficacy of SCB-2019 Against COVID-19 with a Favorable Safety Profile

Study Snapshot

30,000+ Participants Enrolled
(Adult & Elderly)

4 Continents, 5 Countries

 Belgium  Colombia  Brazil

 South Africa  Philippines

*Strong geographic and ethnic **Diversity***

100% of SARS-CoV-2 strains observed
were **variants** (multiple variants
of concern & interest)

<6 Months From enrollment initiation until
final efficacy data announced

Mar 24, 2021 Initiated Enrollment
Sep 22, 2021 Final Data Announced

Final Efficacy Data (Reported September 2021)

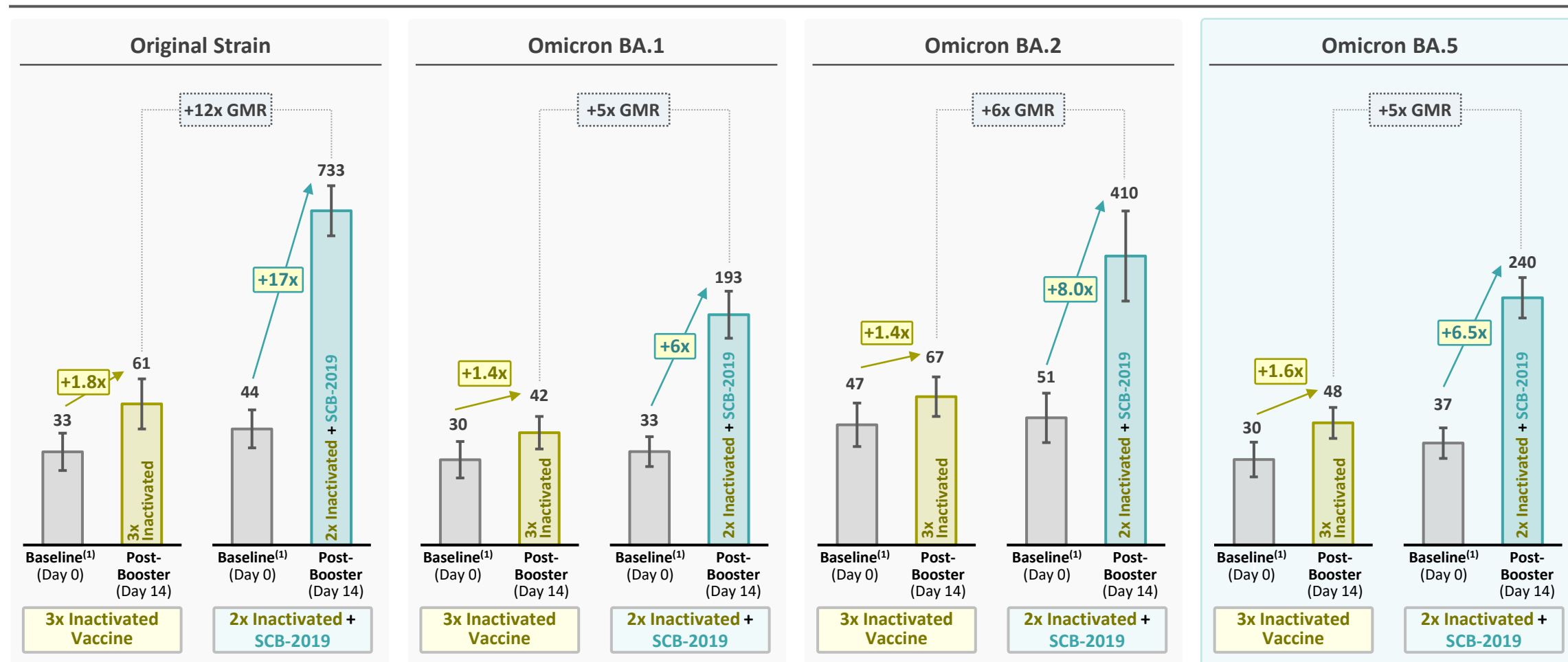
- ✓ **Primary & Secondary Efficacy Endpoints Successfully Met**
- ✓ **100% Efficacy Against Severe COVID-19 & Hospitalization**, 84% efficacy against moderate-to-severe COVID-19, 67% efficacy against COVID-19 of any severity caused by any strain of SARS-CoV-2 in SPECTRA
- ✓ **Favorable Safety Profile:** No significant differences in systemic solicited adverse events (AEs) or severe/serious adverse events (SAEs) compared to placebo

Follow-Up Efficacy at 5-Months After Primary Vaccination (Reported March 2022)

- ✓ **100% Efficacy Maintained Against Severe COVID-19**
- ✓ **95% Efficacy Against Hospitalization** Associated With COVID-19
- ✓ **No Safety Concerns** Observed

- ✓ SCB-2019 demonstrated superior booster response & antibody breadth (including BA.5) compared to inactivated vaccine booster

Live Virus Neutralization Titers (MN₅₀)

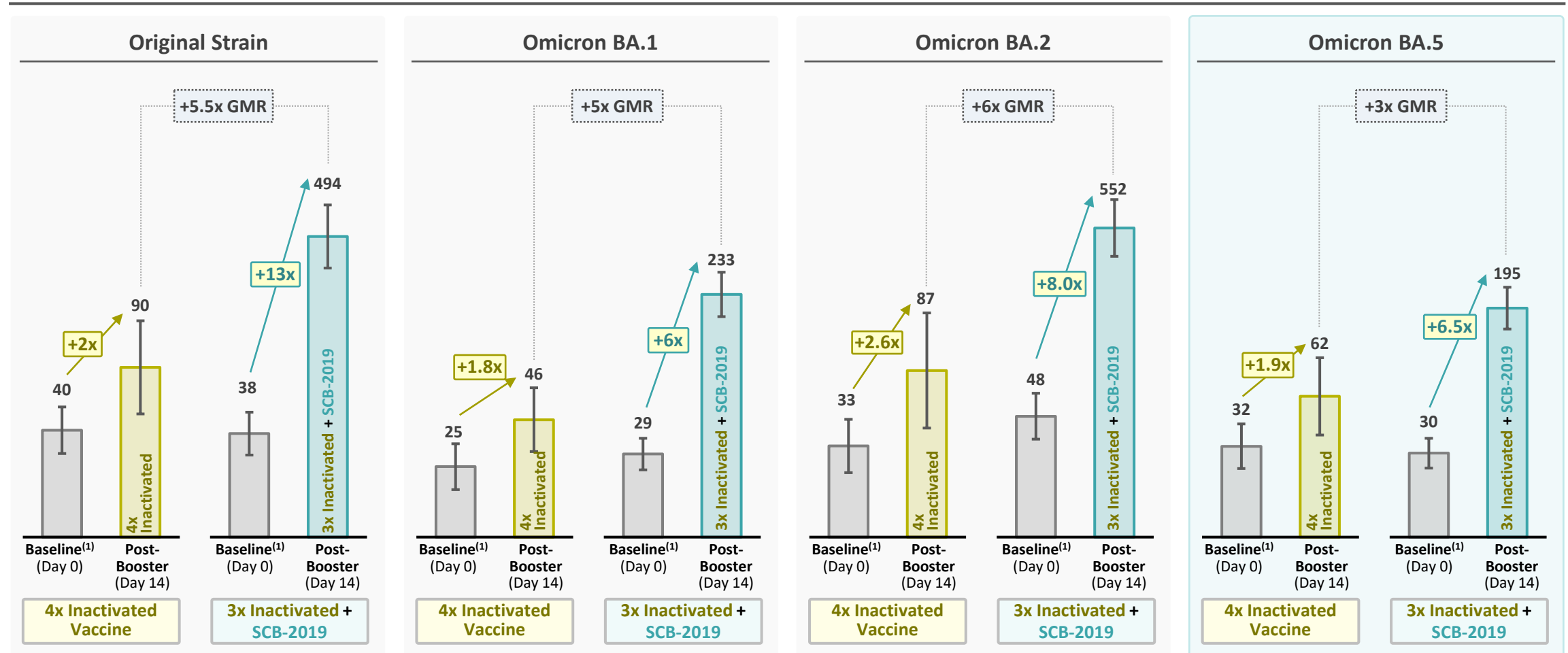


Notes: Preliminary results in subjects enrolled with low baseline neutralization titers (baseline pre-boost neutralization titers ≤ 100) based on each strain. Bars represent Geometric Mean Titers (GMT) \pm 95% confidence intervals (95% CI). Validated live virus neutralization assays (VisMederi). 50% microneutralization titers shown (MN₅₀).

(1) Study enrolled subjects ≥ 18 years of age who received 2 doses of Inactivated Vaccine ≥ 3 months prior to participating in the study and receiving a booster (3rd) dose of either SCB-2019 (n=212) or Inactivated Vaccine (n=212).

✓ Results Observed in “3+1” Booster Setting Comparable to “2+1” Results

Live Virus Neutralization Titers (MN₅₀)



Notes: Preliminary results in subjects enrolled with low baseline neutralization titers (baseline pre-booster neutralization titers ≤ 100) based on each strain. Bars represent Geometric Mean Titers (GMT) \pm 95% confidence intervals (95% CI). Validated live virus neutralization assays (VisMederi). 50% microneutralization titers shown (MN₅₀).

(1) Study enrolled subjects ≥ 18 years of age who received 3 doses of Inactivated Vaccine ≥ 3 months prior to participating in the study and receiving a booster (4th) dose of either SCB-2019 (n=125) or Inactivated Vaccine (n=125).

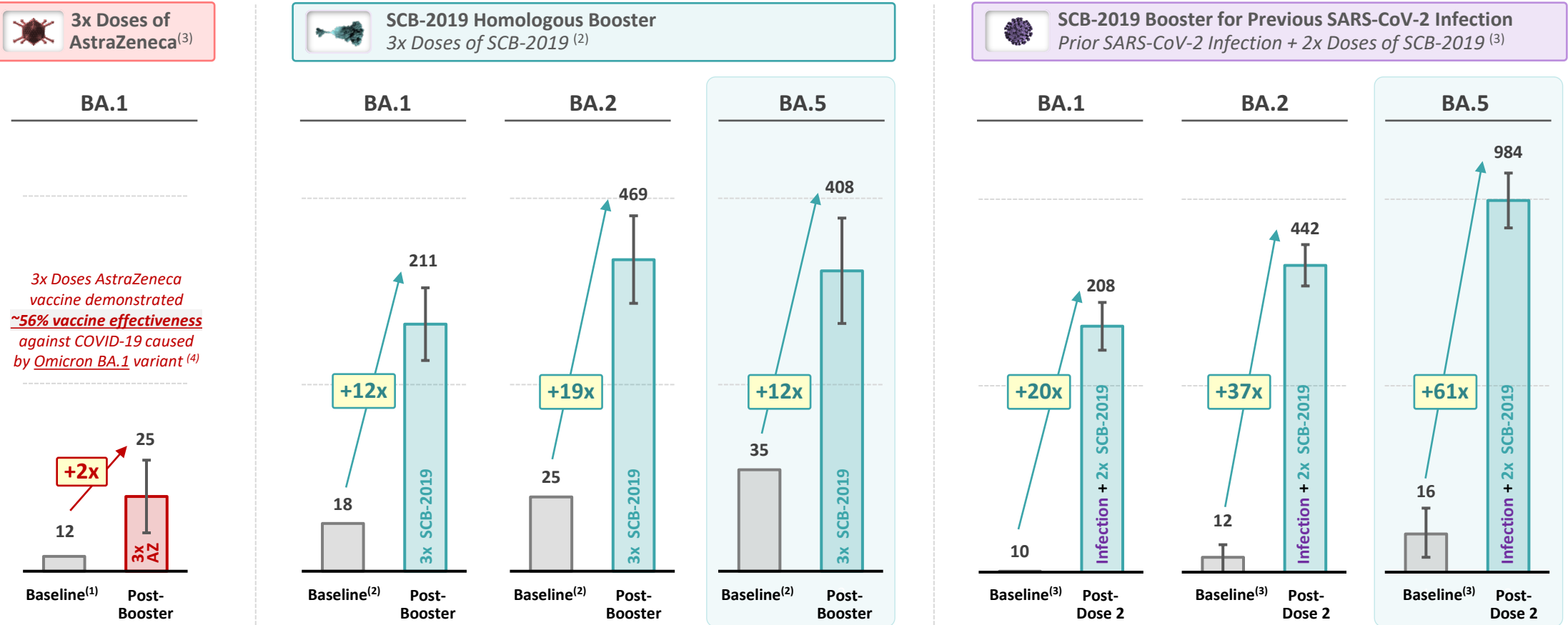


Universal Booster:

Significant Omicron Neutralizing Antibodies Boosted by SCB-2019

- ✓ **Rapid & Strong Booster Immune Responses Against Multiple Omicron Strains (including BA.5)** at levels expected to be significantly protective
- ✓ **Robust & Potentially Differentiated BA.5 Neutralization Responses** (BA.5 neutralization observed to be comparable to BA.1/BA.2)

Live Virus Neutralization Titers Against Omicron Strains (MN₅₀)



Notes: Bars represent Geometric Mean Titers (GMTs) \pm 95% confidence intervals (95% CI). Same validated live-virus neutralization assay against Omicron variant strains of SARS-CoV-2 utilized across all studies shown (VisMederi).

(1) Final data readout from Phase 2 study enrolling participants receiving 2 doses of AstraZeneca COVID-19 vaccine \geq 6 months prior to enrolling and receiving homologous AstraZeneca third dose booster. (2) Data readout from SPECTRA booster clinical trial in baseline seronegative participants (defined as subjects with no evidence of natural infection prior to receiving homologous booster based on anti-N antibody testing and antibody titer reduction $>$ 2-fold between primary series and booster dose). Enrolled participants receiving 2 doses of SCB-2019 (CpG 1018/Alum) \geq 6 months prior to receiving a homologous SCB-2019 third dose booster. (3) Data readout from SPECTRA trial in participants with evidence of prior SARS-CoV-2 infection that enrolled and received 2 doses of SCB-2019 (CpG 1018/Alum), 21 days apart. Evidence of prior SARS-CoV-2 infection status was determined by the presence of antibodies binding to SARS-CoV-2 Spike (S) protein in baseline serum samples (Roche Elecsys[®] anti-S test). (4) Andrews et al., 2022 (DOI: 10.1056/NEJMoa2119451).