



Corporate Presentation

May 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.

Q1 2023 Business Update Summary

- In Q1 2023, Clover Became a **Multi-Product Commercial Stage** (COVID-19 + Influenza) Vaccine Company
- 2 Premium Respiratory Vaccines Expected to Drive **Meaningful & Diversified Revenue in 2023** with Continued Growth
- Continued Progress Planned in 2023 to **Build a Leading Respiratory Vaccine Franchise** via Internal R&D and External BD

SCB-2019

- ☒ Successfully launched in China, with listing achieved in 24 provinces (>80% total population coverage)
- ☐ ≥1 EUA and bilateral supply agreement globally (ex-China) planned in H1 2023

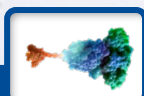
Quadrivalent Flu (AdimFlu-S)

- ☒ Deal signed with Adimmune (FEB)
- ☒ AdimFlu-S commercial production at Adimmune ongoing
- ☒ In-house commercial team build-up on-track
- ☐ Planned launch in mainland China in H2 2023

R&D Pipeline Expansion & Advancement

- ☒ Only Chinese company with commercial quadrivalent flu & recommended COVID-19 vaccine
- ☐ ≥1 additional mid-to-late stage in-licensing deal in 2023
- ☐ Advancement of in-house vaccine programs planned (Multivalent SARS-CoV-2, Rabies, etc.)

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 launched in China in Q1-2023, and Global (ex-China) EUAs and bilateral supply agreements expected in 2023
- ✓ **Quadrivalent flu vaccine to be launched** in mainland China in H2 2023; the only approved imported QIV product in mainland China
- ✓ **Additional Mid- to Late- Stage Pipeline Expansion** planned during 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)



Global Collaborations with Reputable Partners

- ✓ **Exclusive agreement with Adimmune** established to commercialize AdimFlu-S (QIV) in mainland China
- ✓ **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)



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 Footprint: Business & Leadership Without Borders

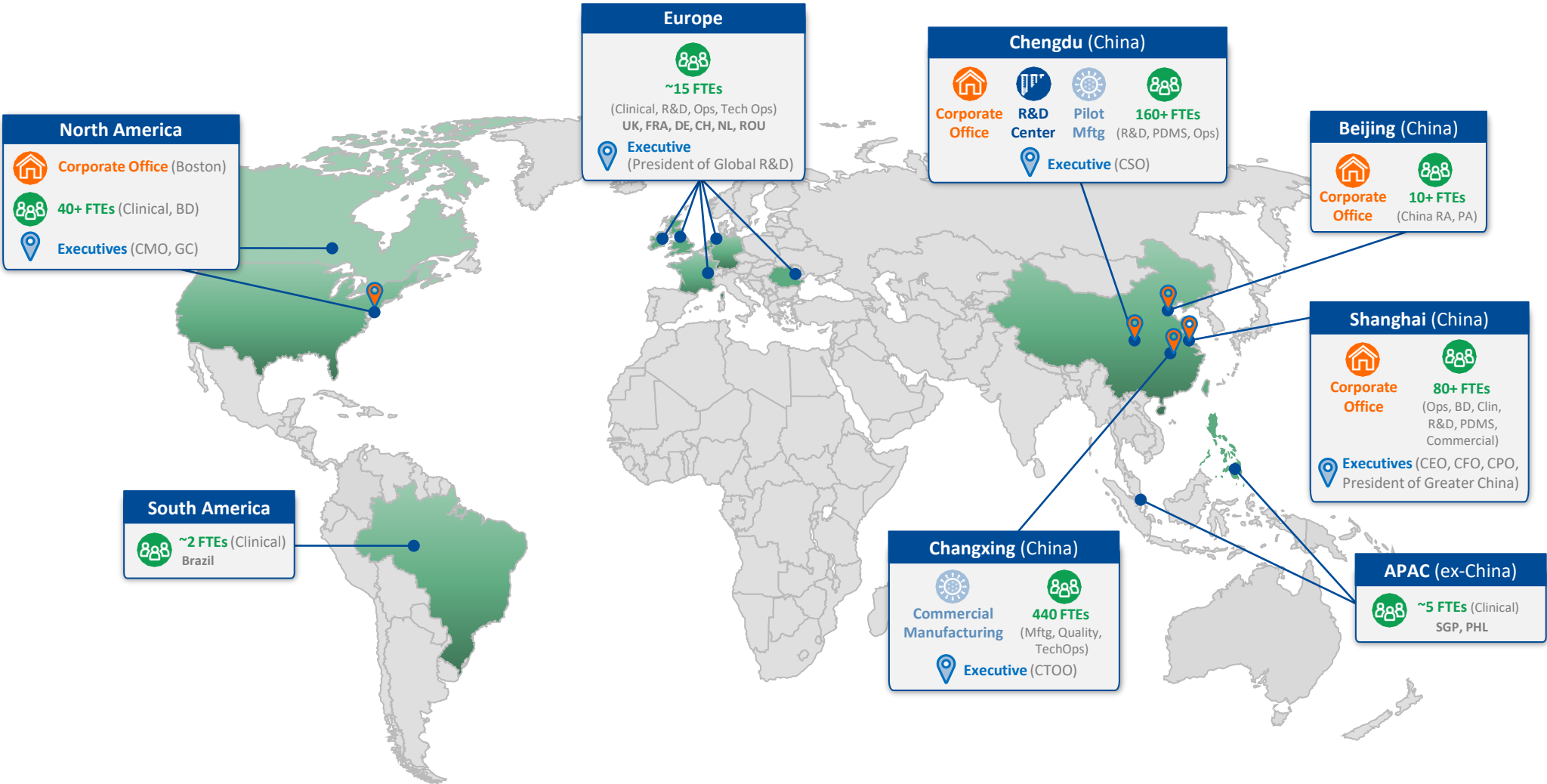
Integrated Vaccine R&D, Manufacturing & Global Clinical Development Capabilities

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




CEO

 **Joshua Liang**  

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**  

Founder, Chairman of the Board & Chief Scientific Officer




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

 **Xiaodong Wang, PhD**   

Non-Executive Director (NED)




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

R&D & Tech Ops Leaders

 **Nicholas Jackson, PhD**  




President of Global R&D

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

 **LiongHo Chua**  



President of Greater China

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

 **Htay Htay Han, MBBS**  




Chief Medical Officer (CMO)

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

 **Francois Verdier, PhD** 



Head of Global Regulatory Affairs

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

 **Yang Li, PhD**  




Chief Technical Officer (CTO)

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

 **Nicolas Burdin, PhD** 




EVP, Global Head of Research

- Global Head of Immunology at Sanofi Pasteur

 **Tracy Wang**  

SVP, Head of China Regulatory Affairs




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

 **Wei Tan, PhD**  

SVP, Head of China Research




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

Corporate Leaders

 **Aileen Wang**  




Chief Financial Officer (CFO)

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

 **Lily Yang**  




Chief People Officer (CPO)

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

 **Xiaoyan Wang**  

General Counsel (GC)

- General Counsel, AIM Vaccine
- China Legal Director, Sanofi Pasteur

 **Abigail Bracha, PhD**  

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



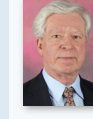
Frank Rockhold MD
Biostatistics Advisor

- 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

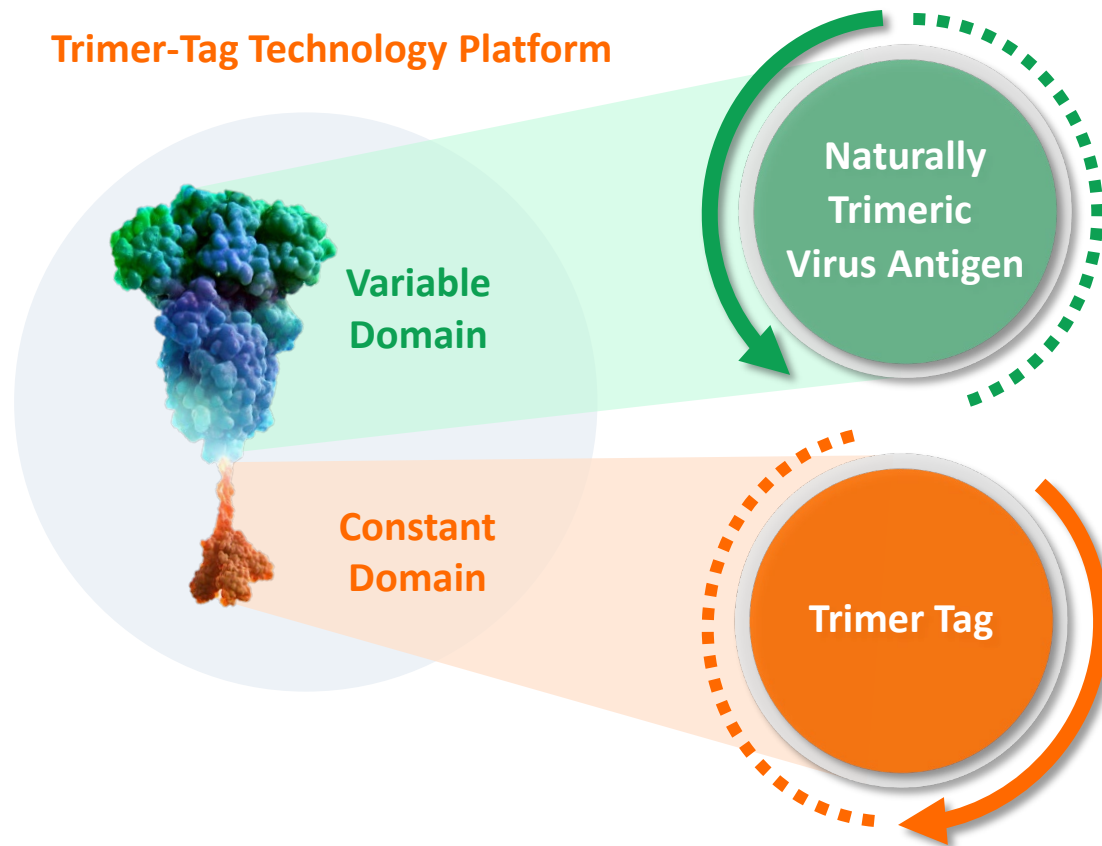


- ✓ **EU GMP Certificate Received** for the production of SCB-2019 (CpG 1018/Alum); strong track record in vaccines/biologics manufacturing and global regulatory approvals (EMA, FDA, WHO)
- ✓ **Completed production-related transfer activities** from Clover to WuXi Vaccines for SCB-2019
- ✓ Capacity to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



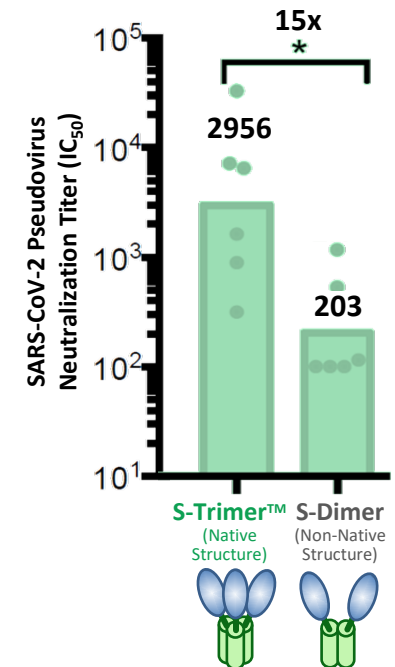
20+ Potential Virus Antigens

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).

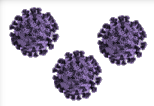
Robust Pipeline Focused on Innovative Vaccine Candidates

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

Assets	Product Candidate	Target	Indication	Discovery	Preclinical	IND/CTA	Phase 1	Phase 2	Phase 3	Filing	Approval/ EUA
Vaccines	SCB-2019 (CpG 1018/Alum) ⁽¹⁾	SARS-CoV-2 S-Trimer (Broad Neutralization)	COVID-19 Universal Booster								China
											Global (Ex-China)
	AdimFlu-S (QIV) ⁽²⁾	Influenza A and B	Seasonal Influenza								China
	≥1 Mid-to-Late Stage ⁽³⁾ In-Licensed Vaccines	--	Respiratory Vaccines (Pneumococcal, etc.) Pediatric Vaccines (EV71, Combination Pediatric, etc.)								Phase 2 / Phase 3 / Approved Assets
	Multivalent SARS-CoV-2 Vaccine ⁽⁴⁾	SARS-CoV-2 S-Trimers (Multivalent)	COVID-19								
	RSV Vaccine	RSV F-trimer	Respiratory Syncytial Virus (RSV)								
	SCB-1001 ⁽⁵⁾	Rabies G-Trimer	Rabies								
Other Assets	SCB-219M ⁽⁶⁾	TPO Mimetic Bispecific-Fc	Chemotherapy-Induced Thrombocytopenia (CIT)								
	SCB-313 ⁽⁷⁾	TRAIL-Trimer	Intracavitary Malignancies (Malignant Ascites, Malignant Pleural Effusions, Peritoneal Carcinomatosis)								

(1) COVID-19 vaccine received EUA in China in December 2022; at least one global (ex-China) EUA expected in H1 2023. **(2)** Clover entered into an exclusive agreement with Adimmune to commercialize AdimFlu-S (QIS) in mainland China in February 2023. **(3)** Additional mid- to late- stage in-licensing deal is planned in 2023 with focus on respiratory vaccines and pediatric vaccines, in China and Asia Pacific region. **(4)** To be based on a multivalent S-Trimer vaccine; advancement to clinical development is planned in 2023. **(5)** Additional preclinical results and update on development plans are expected in 2023. **(6)** Interim Phase 1 data and recommended Phase 2 dose selection anticipated in 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. Five 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.

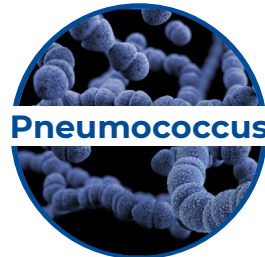
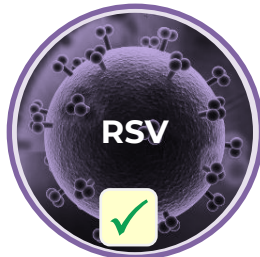
Pipeline Expansion Strategy & Prioritization



To Build a Leading Respiratory Vaccine Franchise

- Respiratory virus/bacterial outbreaks typically observe similar seasonal nature (peaks during winter)
- Potential commercial synergies (potential co-promotion & co-administration of multiple products in private market)
- Lifecycle management (LCM) opportunities to develop co-formulated product(s)

Prioritized Area
for BD Evaluation



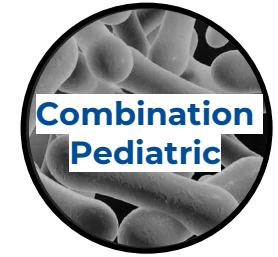
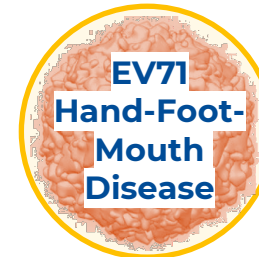
+



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



- Additional deal(s) under evaluation & expected in 2023 for Mid- to Late-Stage Vaccines (Ph 2, Ph3, Commercial)
- Focused on commercial rights in China, Asia Pacific & Latin America

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

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

S2

Trimer-Tag

-- Global Collaborations Established --

- Up to \$397.4 M grant funding by **CEPI**
- Commercial supply agreements with **DYNAVAX** 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 new BQ.1.1 and XBB Subvariants)



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”

SCB-2019 (CpG 1018/Alum) Development Overview

☑ Comprehensive Global Clinical Development Completed

Phase 2/3 Development Across Broad Populations & Booster Settings

Ages & Conditions	 Adult & Elderly (18+ Years)	☑ N = 30,000+ ⁽¹⁾
	 Adolescents (12-17 Years)	☑ N = 1,250+
	 Co-Morbidities ⁽²⁾	☑ N = 2,000+ ⁽²⁾
Booster Settings	 Prior SARS-CoV-2 Infection <i>Natural Infection + SCB-2019</i>	☑ N = 14,250+ ⁽¹⁾
	 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.

10+ Publications in Peer-Reviewed Journals

Published time	Journal	Title
Feb 2023	<i>Vaccine</i>	Six-month safety follow-up of an adjuvanted SARS-CoV-2 trimeric S-protein subunit vaccine (SCB-2019) in adults: a phase 2/3, double-blind, randomized study
Feb 2023	<i>Vaccine</i>	Immunogenicity of an adjuvanted SARS-CoV-2 trimeric S-protein subunit vaccine (SCB-2019) in SARS-CoV-2-naïve and exposed individuals in a Phase 2/3, double-blind, randomized study
Dec 2022	<i>medRxiv</i>	Heterologous boosting of neutralizing activity against Delta and Omicron SARS-CoV-2 variants in CoronaVac-primed adults; a randomized study with SCB-2019 vaccine
Nov 2022	<i>Clinical Infectious Diseases</i>	Impact of vaccination with SCB-2019 COVID-19 vaccine on transmission of SARS-CoV-2 infection: a household contact study in the Philippines
Aug 2022	<i>Open Forum Infectious Diseases</i>	Homologous and heterologous boosting of the ChAdOx1-S1-S COVID-19 vaccine with the SCB-2019 vaccine candidate: a randomized, observer-blinded, controlled, phase 2 study
Jun 2022	<i>Virology: Current Research</i>	Protection from Omicron and other VOCs by Bivalent S-Trimer™ COVID-19 Vaccine
Apr 2022	<i>The Lancet Infectious Diseases</i>	Impact of previous exposure to SARS-CoV-2 and of S-Trimer (SCB-2019) COVID-19 vaccination on the risk of reinfection: a randomised, double-blinded, placebo-controlled, phase 2 and 3 trial
Jan 2022	<i>The Lancet</i>	Efficacy of the adjuvanted subunit protein COVID-19 vaccine, SCB-2019: a phase 2 and 3 multicentre, double-blind, randomised, placebo-controlled trial
Nov 2021	<i>The Journal of Infectious Diseases</i>	Immunogenicity of SCB-2019 coronavirus disease 2019 vaccine compared with 4 approved vaccines
Sep 2021	<i>The Journal of Infectious Diseases</i>	Persistence of the Immune Responses and Cross-Neutralizing Activity With Variants of Concern Following 2 Doses of Adjuvanted SCB-2019 Coronavirus Disease 2019 Vaccine
May 2021	<i>BioRxiv</i>	Broad Neutralization Against SARS-CoV-2 Variants Induced By A Modified B.1.351 Protein-based COVID-19 Vaccine Candidate
May 2021	<i>Journal of Virology</i>	Cryo-EM Structure Of S-Trimer, A Subunit Vaccine Candidate For COVID-19
Feb 2021	<i>The Lancet</i>	Safety And Immunogenicity Of S-Trimer (SCB-2019), A Protein Subunit Vaccine Candidate For COVID-19 In Healthy Adults: A Phase 1, Randomised, Double-Blind, Placebo-Controlled Trial
Feb 2021	<i>Nature Communications</i>	S-Trimer, A COVID-19 Subunit Vaccine Candidate, Induces Protective Immunity In Nonhuman Primates

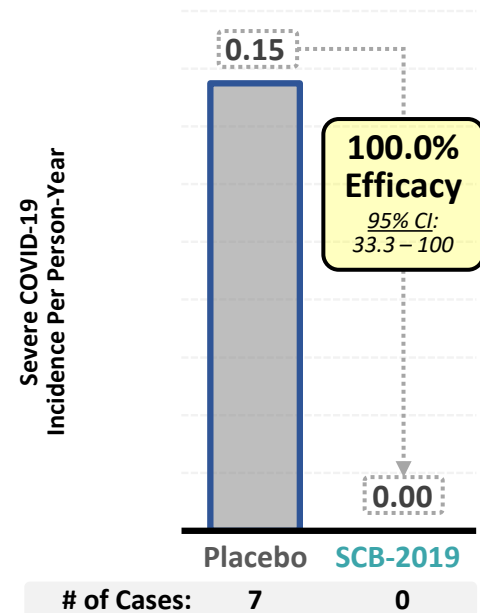
* Only includes publications from Jan 2021 to date. For full list of publications, please visit company website.

High & Durable Efficacy in Elderly Population

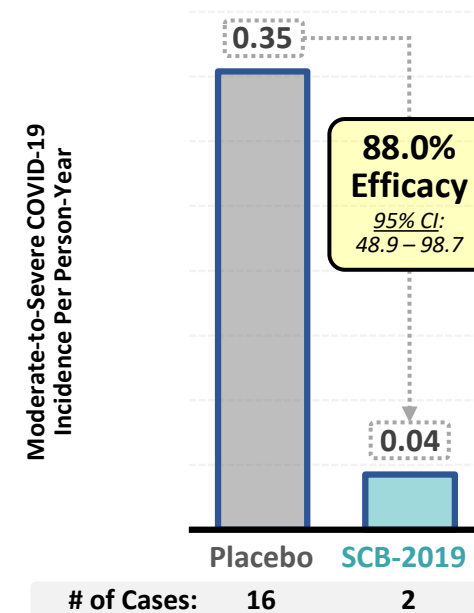
- ✓ 100% efficacy against severe COVID-19 in elderly at 6-months after dosing
- ✓ 88% efficacy against moderate-to-severe COVID-19 in elderly at 6-months after dosing

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

Severe COVID-19

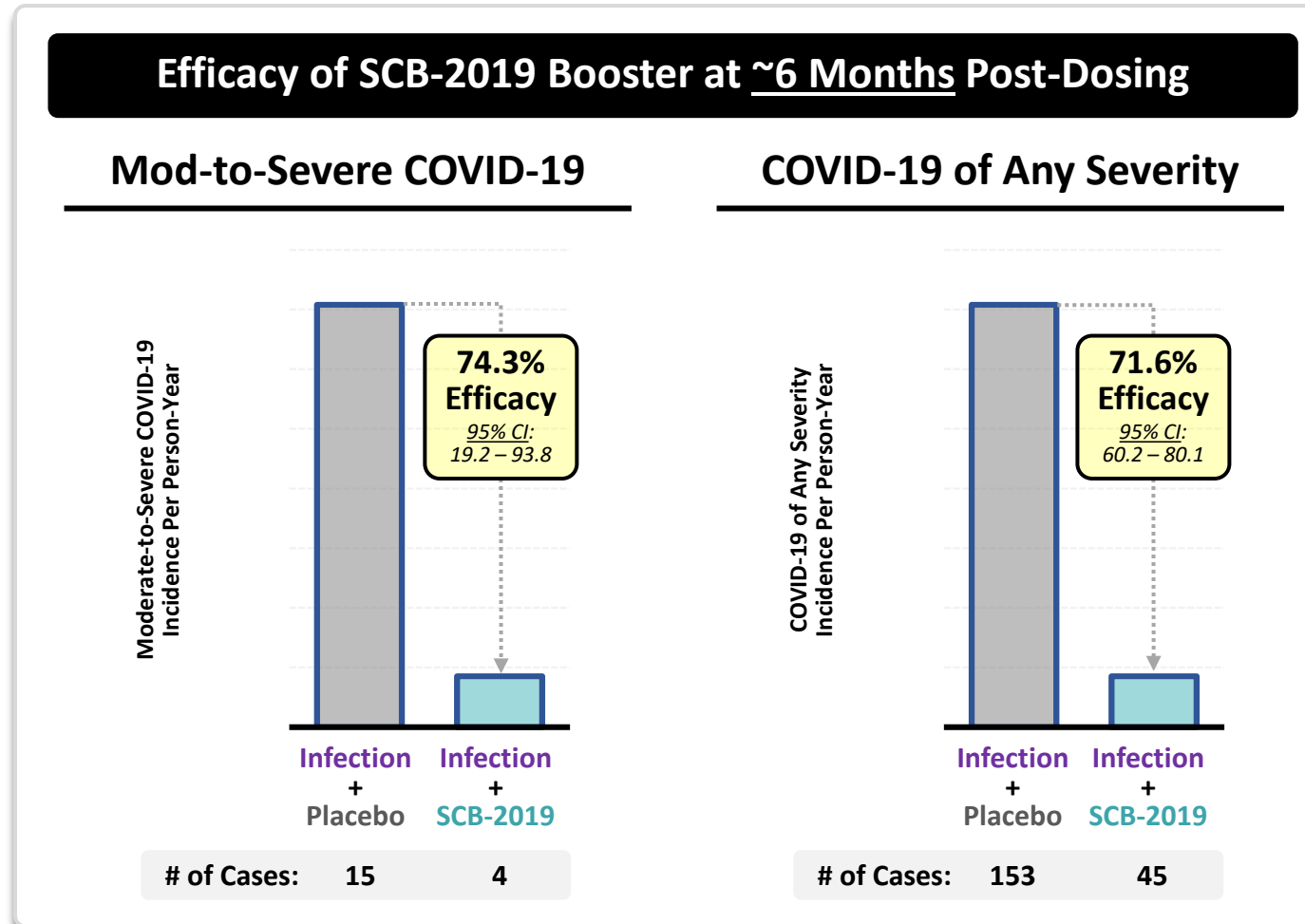


Mod-to-Severe COVID-19



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**



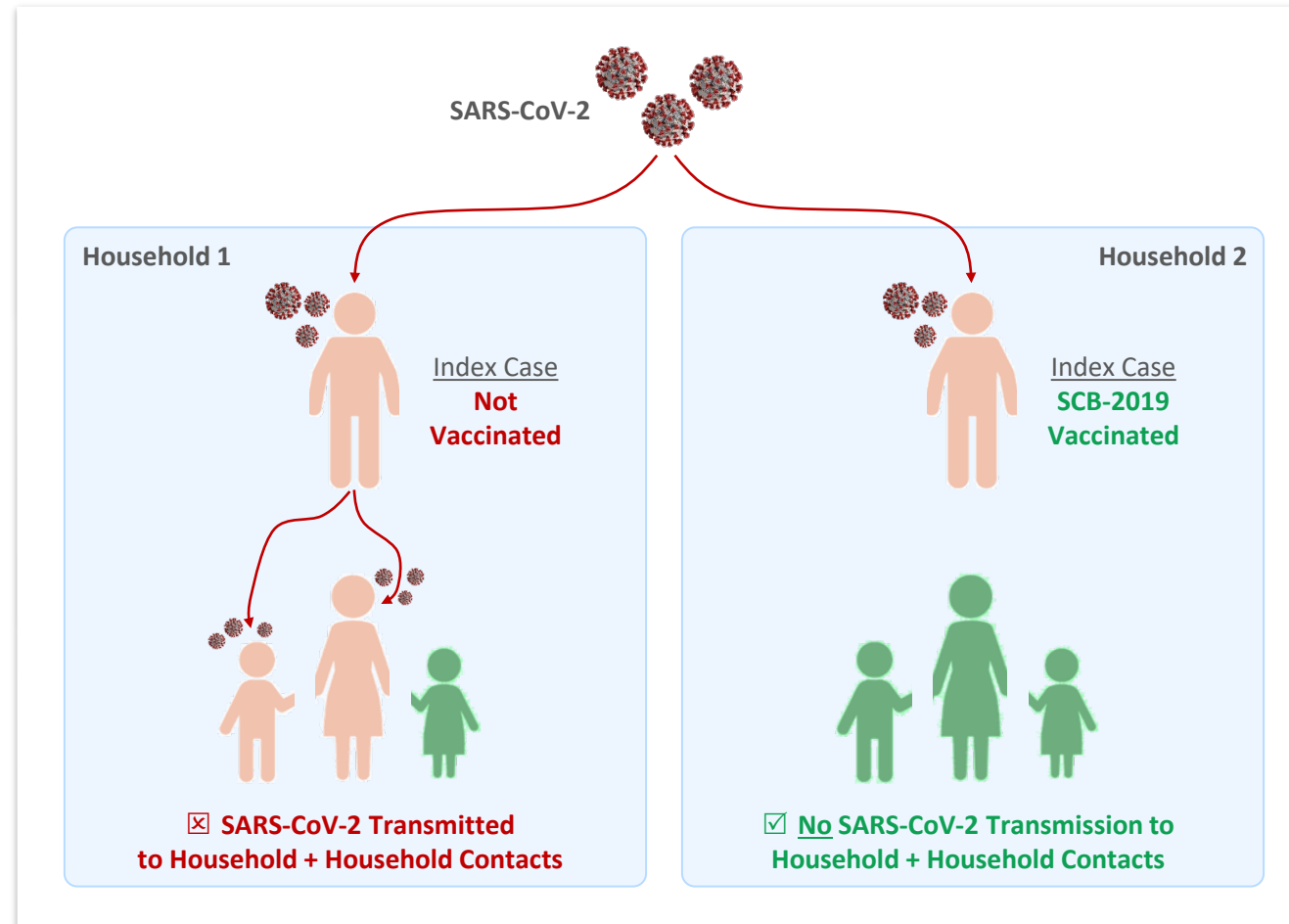
Notes: Data from SPECTRA Phase 2/3 trial enrolling participants with evidence of prior SARS-CoV-2 infection subsequently receiving 2 doses of SCB-2019 (CpG 1018/Alum) on Days 1 and 22. Efficacy data are approximately 6 months after dosing with SCB-2019. Evidence of prior SARS-CoV-2 infection status was determined by the presence of antibodies binding to SARS-CoV-2 Spike (S) protein in baseline serum samples (Roche Elecsys® anti-S test).

Significant Reduction in Household Transmission of SARS-CoV-2

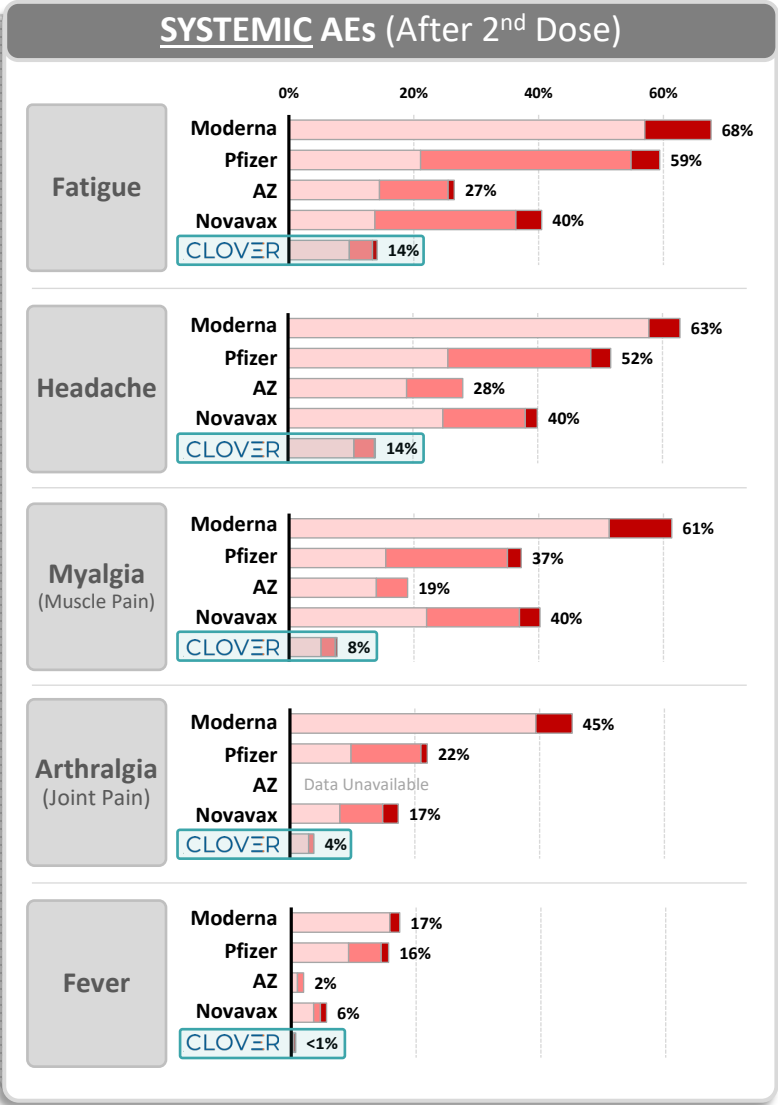
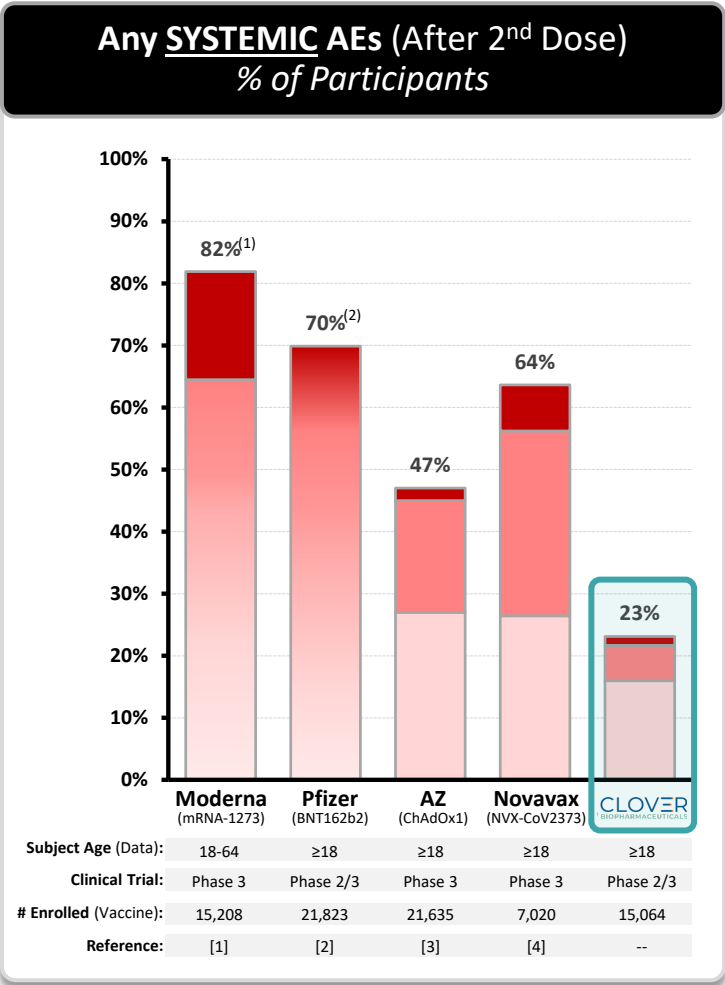
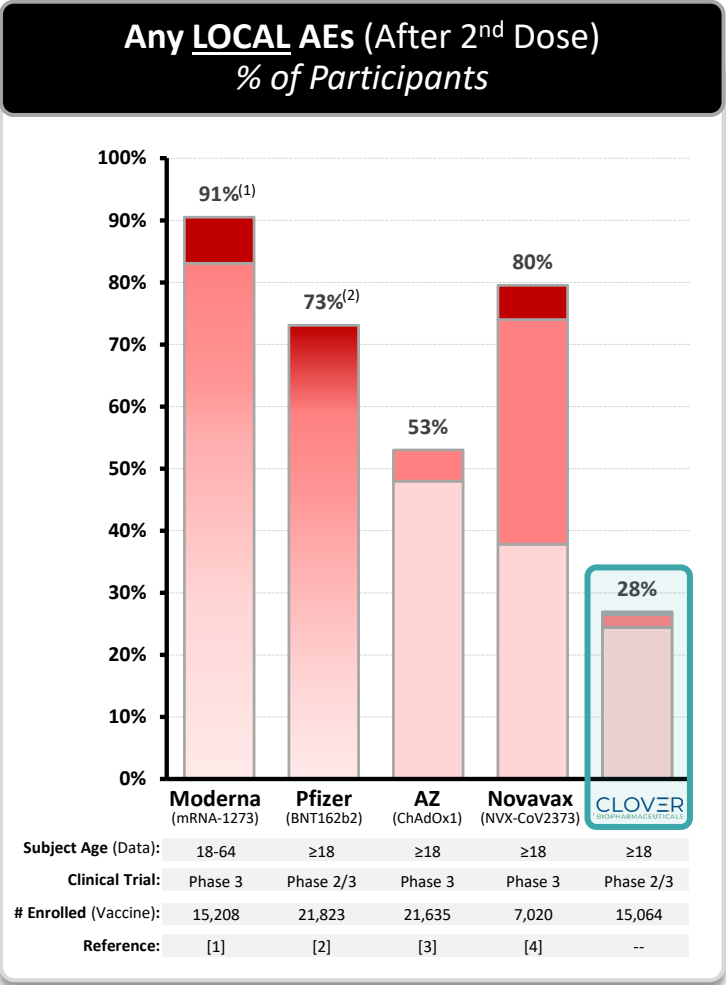
- ✓ Individuals vaccinated with SCB-2019 were **84% less likely** to transmit SARS-CoV-2 infection to another individual living in the same household (in Phase 2/3 trial)

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

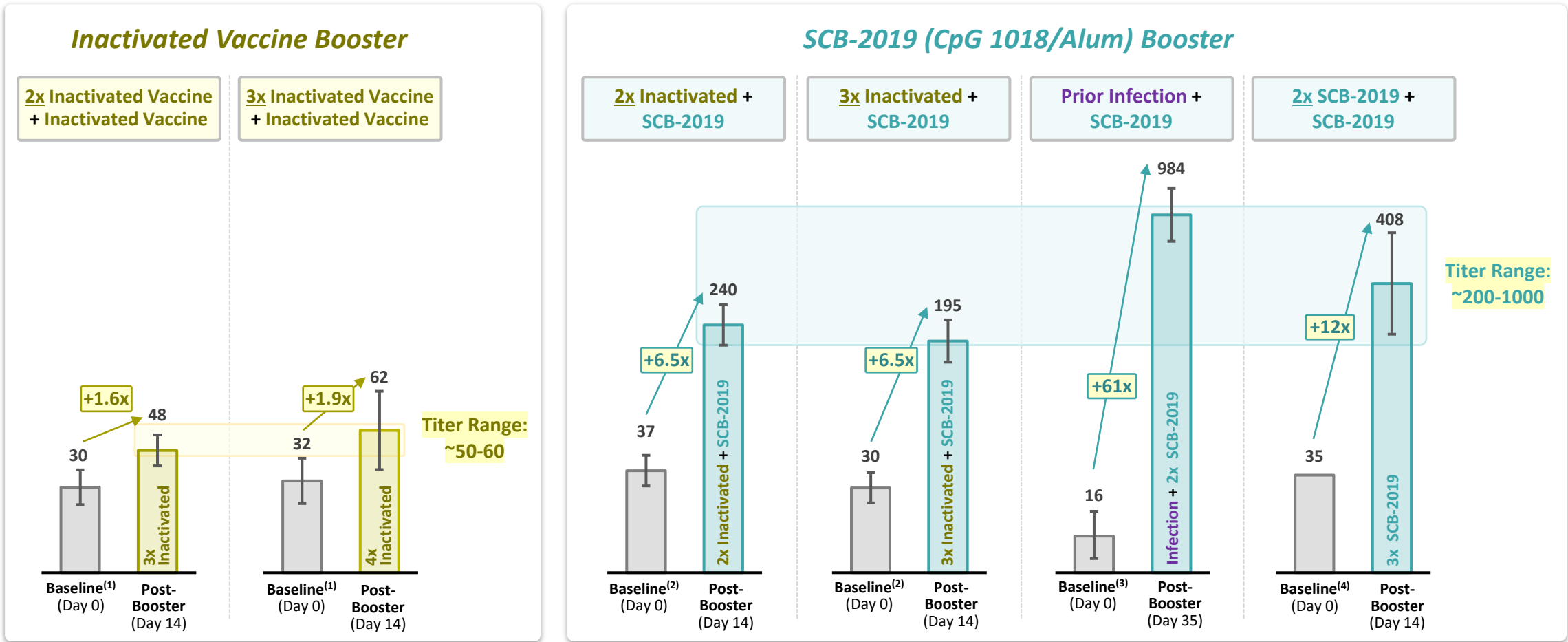


References: [1] Moderna FDA Briefing Document - VRBAC Meeting DEC 17, 2020, [2] Pfizer FDA Briefing Document – VRBAC Meeting DEC 10, 2020, [3] DOI: 10.1056/NEJMoa2105290, [4] DOI: 10.1056/NEJMoa2107659.
 Notes: **NON HEAD-TO-HEAD CROSS-TRIAL COMPARISONS FOR ILLUSTRATIVE PURPOSES ONLY.** Percentage of 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)

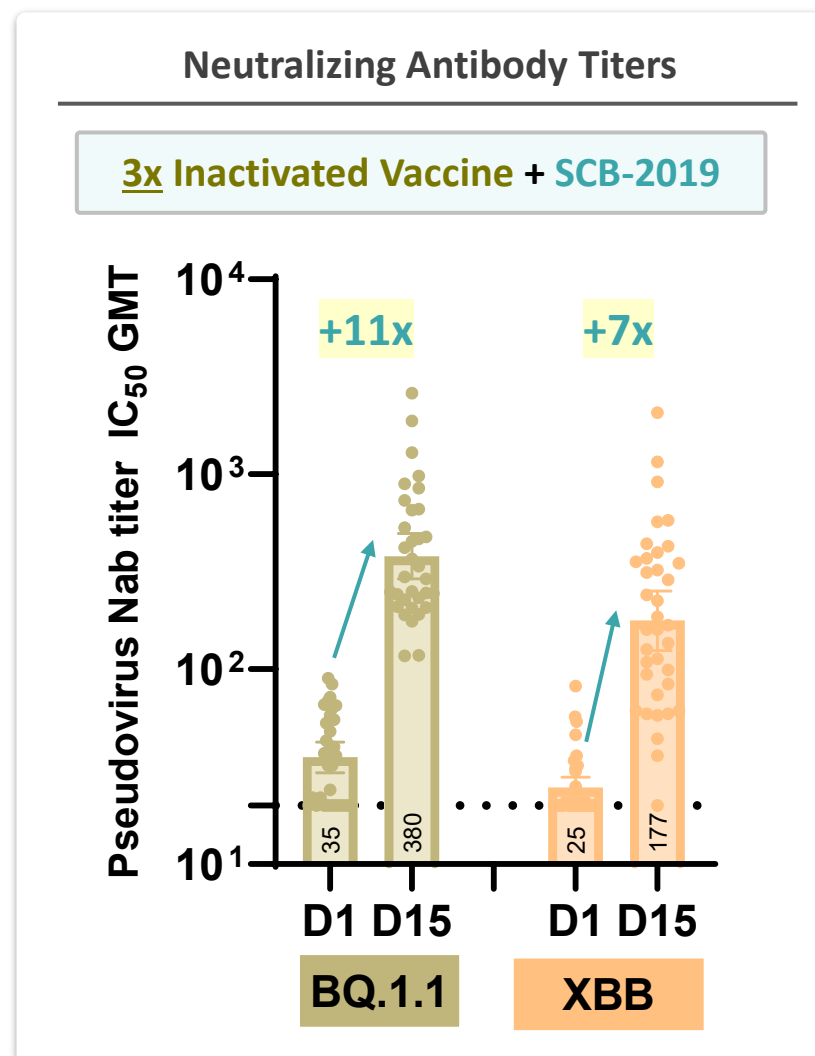
Omicron BA.5 Live Virus Neutralization Titers (MN₅₀)



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 \geq 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 \geq 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 \geq 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 XBB and BQ.1.1) are Neutralized by SCB-2019 Booster

- ✓ Preliminary data demonstrates significant neutralization responses against new Omicron variants (incl. XBB and BQ.1.1) for SCB-2019 booster



✓ To Date, SCB-2019 Booster Has Demonstrated Significant & Broad Neutralization Against All Omicron Subvariants Tested

(Including BA.1, BA.2, BA.4, BA.5, BF.7, BF.2.75, BQ.1.1, XBB)

Summary of Commercial Plan in 2023

- ✓ Commercial Launch Achieved in China & Planned Globally 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** achieved in multiple provinces and municipalities since initial launch
- **Listing** achieved in 24 provinces and municipalities (representing >80% population coverage)
- **Well-positioned to be a major player in upcoming vaccination campaign in 2023**



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

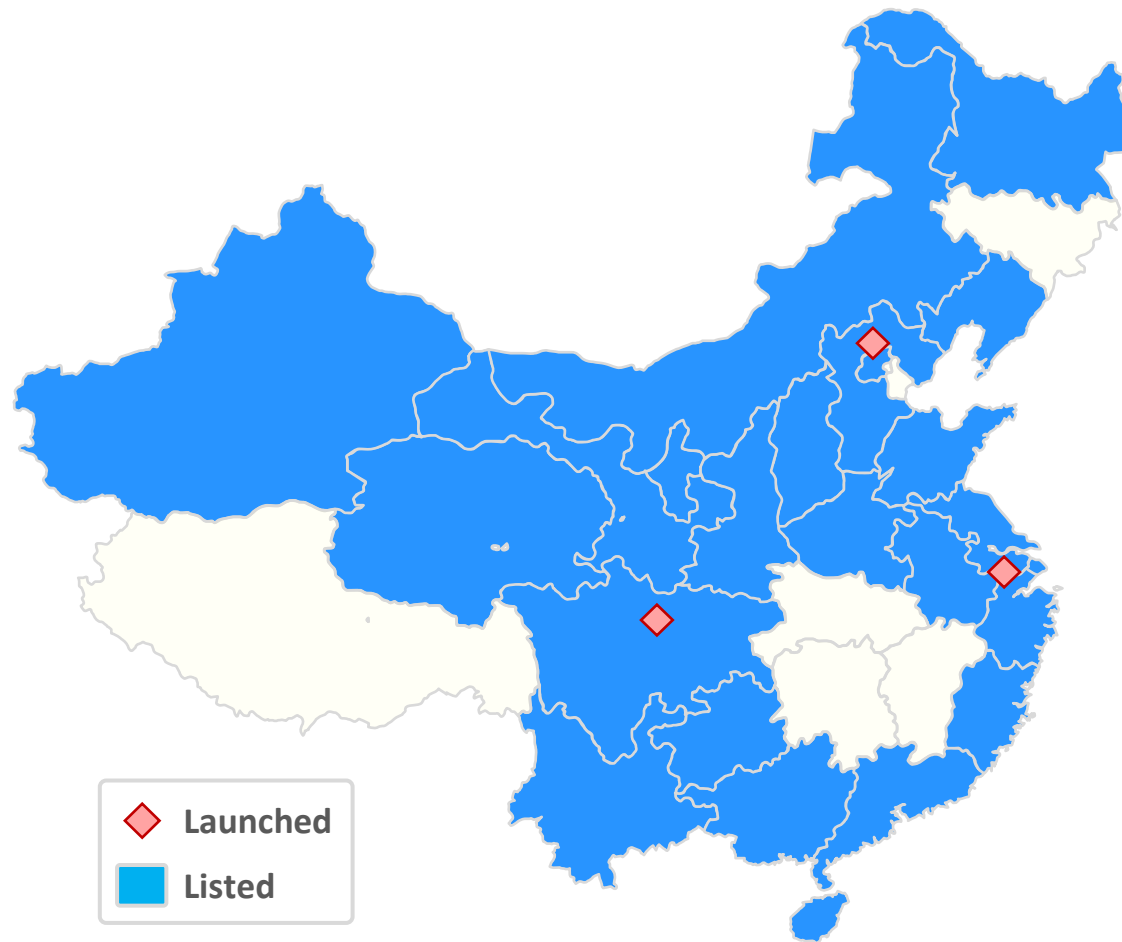
- **Stockpiling of Key Raw Material Inventory Completed** to Support Potential Production & Release of **Over 100 Million Doses of SCB-2019 in 2023**
- **Commercial Supply Planned from 2 GMP Facilities**, including Clover's Changxing Facility and a CDMO Facility



China:

SCB-2019 Commercially Launched With Broad Market Access

- **Launch Began in Feb 2023** (launched in Zhejiang, Sichuan, Beijing; launches in additional regions expected in Q2 2023)
- **Listing Achieved in 24 Provinces & Municipalities To-Date, Representing >80% Population Coverage**
 - 1 Billion+ Total Population Coverage; 200 Million+ Aged 60+ Years



✓ Broad Market Access Achieved in Q1-Alone Demonstrates Clover's Commercial Capabilities

✓ With Broad Market Access + Manufacturing Readiness, Clover is Well-Positioned to be Major Player in Upcoming COVID-19 Vaccination Campaigns in China in 2023

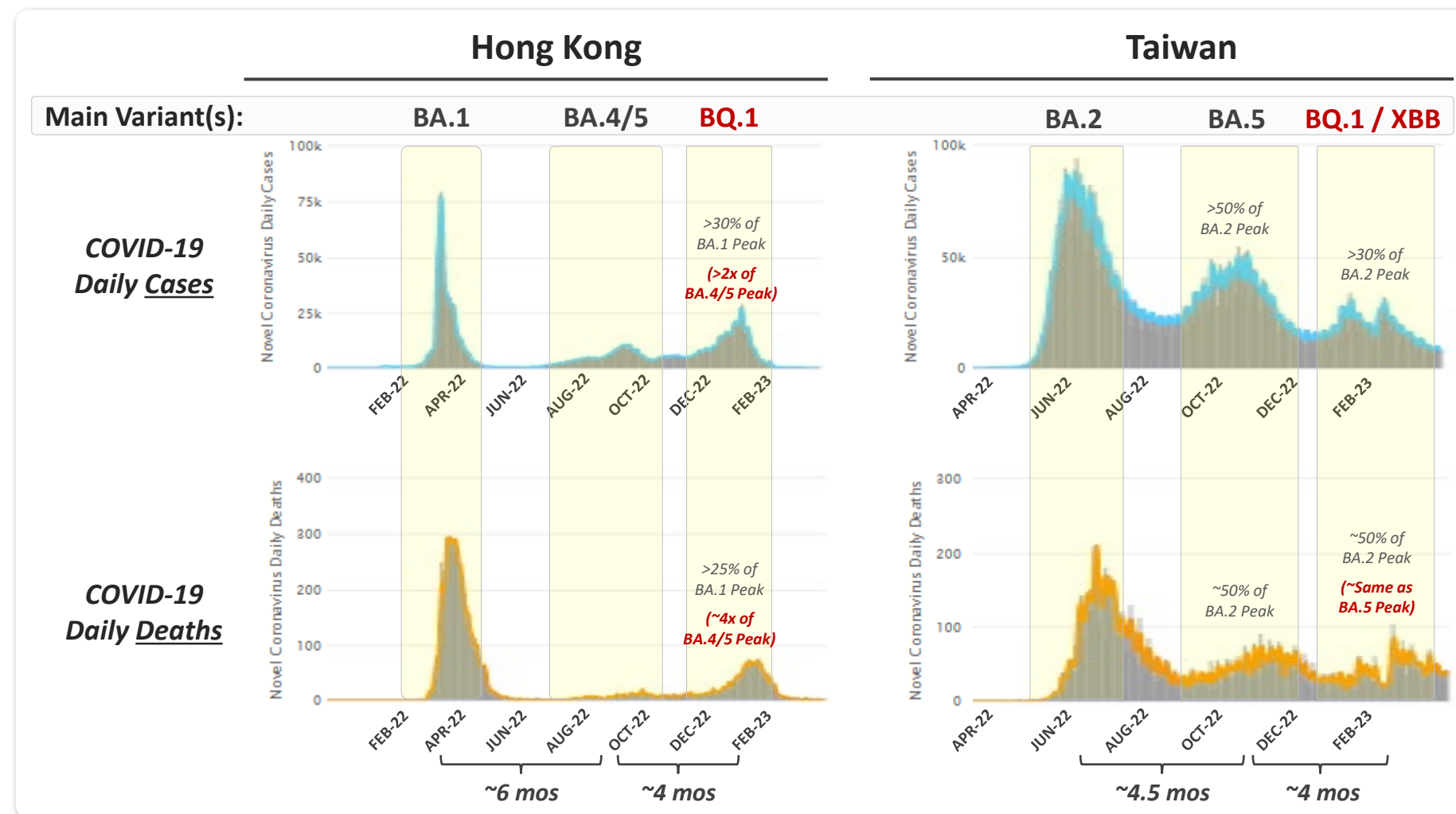


China:

Will Mainland China Observe Additional COVID-19 Outbreaks in 2023?



- ~4-6 months was observed between Omicron outbreak peaks in Hong Kong & Taiwan
- In subsequent outbreaks, significant disease burden observed, as COVID-19 cases & deaths reached ~25-50% of levels versus initial Omicron wave
- Recent BQ.1 and XBB outbreaks have resulted in more/similar deaths compared to previous BA.5 outbreaks



Additional COVID-19 Outbreaks in Mainland China with Significant Disease Burden are Possible in 2023

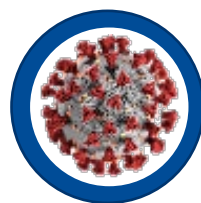


China:

Significant Near-Term & Sustained Long-Term Booster Market Expected

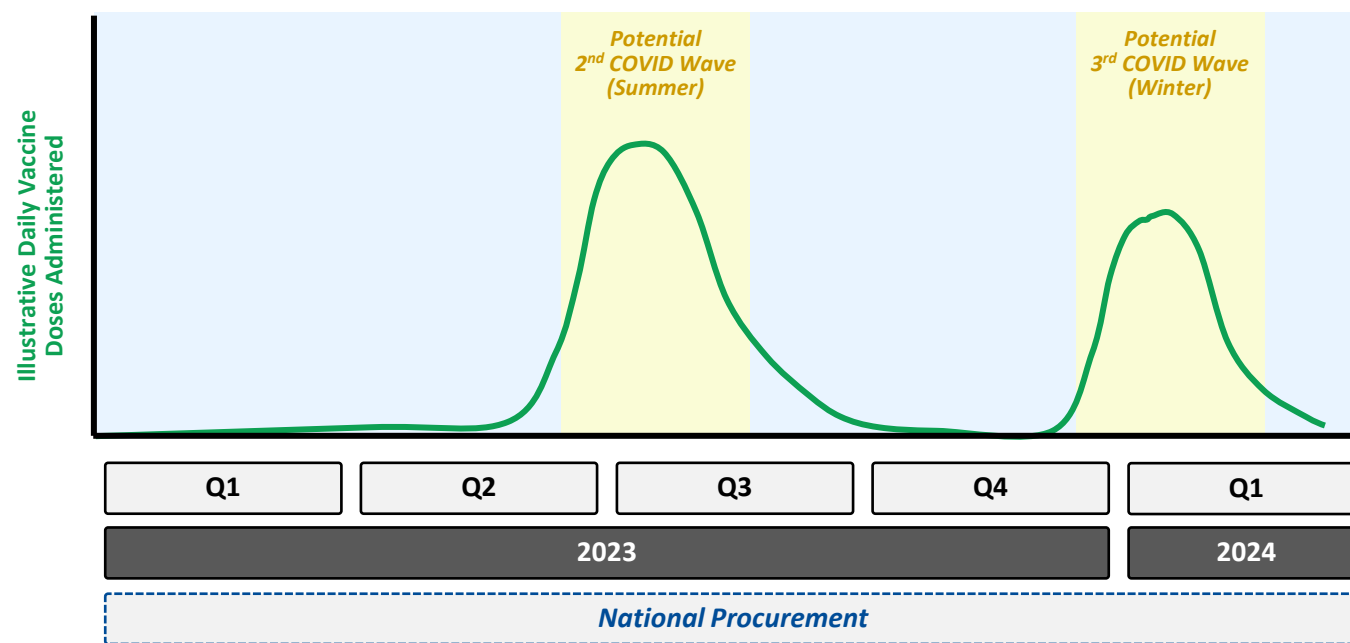


- Demand expected to pick up in late Q2 and peak in H2 2023, per immunization policy⁽¹⁾ & additional COVID-19 outbreak(s)
 - Severity & speed of upcoming outbreaks could drive scale/demand of upcoming national vaccination campaigns in 2023
- Robust & Stable Annual Booster Market anticipated in 2024+ (high awareness of potential COVID-19 disease burden), with potential private market enabling favorable pricing⁽²⁾



Rapid COVID-19 Outbreak
in Mainland China from
Dec 2022 to Feb 2023, with
~90% of population
infected

Illustrative Near-Term COVID-19 Vaccine Market in China ⁽¹⁾



Note: Illustrative figures for discussion purposes only.

(1) Current policy in China is for previously infected individuals to receive booster vaccination at interval of at least 6 months after infection. First COVID-19 outbreak in China peaked in DEC-2022/JAN-2023.

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



Global (Ex-China):

Significant Potential Commercial Opportunities in 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.

Adimmune Quadrivalent Flu Vaccine Deal Summary (Announced on Feb 20, 2023)

Clover adds a second commercial-stage product to its respiratory virus vaccine portfolio, by becoming exclusive distributor of AdimFlu-S (QIS) quadrivalent influenza vaccine in mainland China (and other selected countries)



Clover to Enter Attractive & Growing Flu Vaccine Market:

- **China:** Flu vaccine market in mainland China grew at ~30% CAGR⁽¹⁾; significant market recovery & growth expected in 2023 and beyond with country re-opening, increasing vaccination awareness and favorable government policies
- **Ex-China:** Potential upside from ex-China commercial rights (Bangladesh, Brazil, Philippines), if approvals received



Well-Positioned to Achieve Commercial Success:

- **AdimFlu-S (QIS) Commercial Differentiation:** Only imported quadrivalent flu vaccine currently approved in mainland China (ages 3 years & older); achieves attractive pricing & commercial advantages in private market
- **Commercial Synergies with COVID-19 Vaccine:** Deal enables Clover to leverage its existing & growing commercial presence in China to commercialize both COVID-19 & Flu vaccines; potential co-promotion opportunities in future



Favorable Deal Economics: No upfront or development cost (product already approved in mainland China); Clover to purchase AdimFlu-S (QIS) from Adimmune at negotiated transfer prices (tiered based on volume) which are expected to enable Clover to achieve healthy margins



Diversifies & Transforms Clover's Financial Profile: AdimFlu-S (QIS) commercial launch in mainland China under Clover expected in H2 2023; deal expected to be accretive starting in 2023 and contribute meaningful growth in 2024+

Sources: China CDC and National Institute for Food and Drug Control (NIFDC).

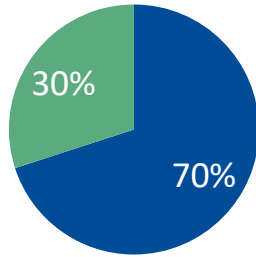
(1) Based on number of flu vaccine doses released in mainland China from 2016-2017 season to 2022-2023 season.

Mainland China Flu Market Summary

Expected to be a stable & growing multi-billion RMB market, with many tailwinds driving increased vaccination

Quadrivalent Flu Vaccines Dominant & Growing

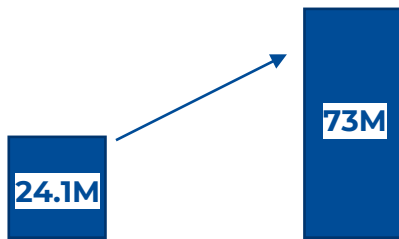
- Quadrivalent Flu Vaccine (QIV)
- Trivalent Flu Vaccine (TIV)



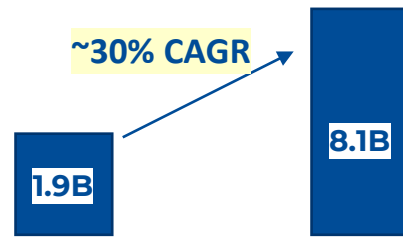
QIV flu vaccines achieved **70% market share*** in 2022; continued shift in demand from TIV to QIV is expected

Fast Growing Market Pre-COVID (~30% CAGR)

Batch Release Volume



Sales (RMB)



Tailwinds to Drive Continued Growth in Near- & Long-Term

✓ China Re-Opening & Ongoing H1N1 Outbreak (Q1 2023)

- Country re-opening (Dec 2022) expected to enable growth in the flu vaccine market by removing barriers to travel & access to POVs
- Major H1N1 Outbreak** during Q1 2023 has driven high awareness & “scare factor”, expected to contribute to robust growth in 2023 flu vaccine market

✓ Increased Vaccine Awareness & Education

- Due to COVID-19 pandemic & high vaccination rates achieved, **increased awareness** of respiratory virus disease burden & importance of vaccination
- Increasing education** for flu vaccines, especially targeting the elderly & children

✓ Favorable Government Policies

- With **increasing numbers of POVs & community hospitals**, vaccination rates for Type II vaccines (private market) are expected to increase

AdimFlu-S (QIV) China Commercial Strategy and Plan

To leverage AdimFlu-S (QIS) differentiation & premium pricing, Clover's existing footprint & commercial synergies to drive further market penetration and continued growth

Product Differentiation

- Only Imported QIV Flu Vaccine in China



~RMB
200/dose*

- Premium price of ~200 RMB/dose achieved in 2022 (Domestic QIVs ~120-160 RMB/dose*)
- Pre-filled Syringe (PFS) product formulation favorable
- High Quality Assurance: GMP inspections passed by Adimmune in multiple countries and regions (U.S., EU, Brazil, Canada and Taiwan)



Expand Footprint

- 22 Listed Provinces in 2022 for AdimFlu-S (QIS)



Clover to maintain listings in current provinces, while actively looking to expand market access through experiences gained with COVID-19 vaccine



Commercial Synergies

- Potential Synergies with COVID-19 Vaccine

- Clover actively hiring ~100 FTE Commercial Team (by H1 2023) to support commercial need of both COVID-19 & Flu vaccines
- Multi-product respiratory vaccine offering may increase stakeholder engagement & drive higher procurement for both
- Potential for Co-promotion if COVID-19 vaccines enter private vaccine market in future



Ex-China Upside

- Additional ex-China territories for AdimFlu-S (QIS) contingent on regulatory approvals

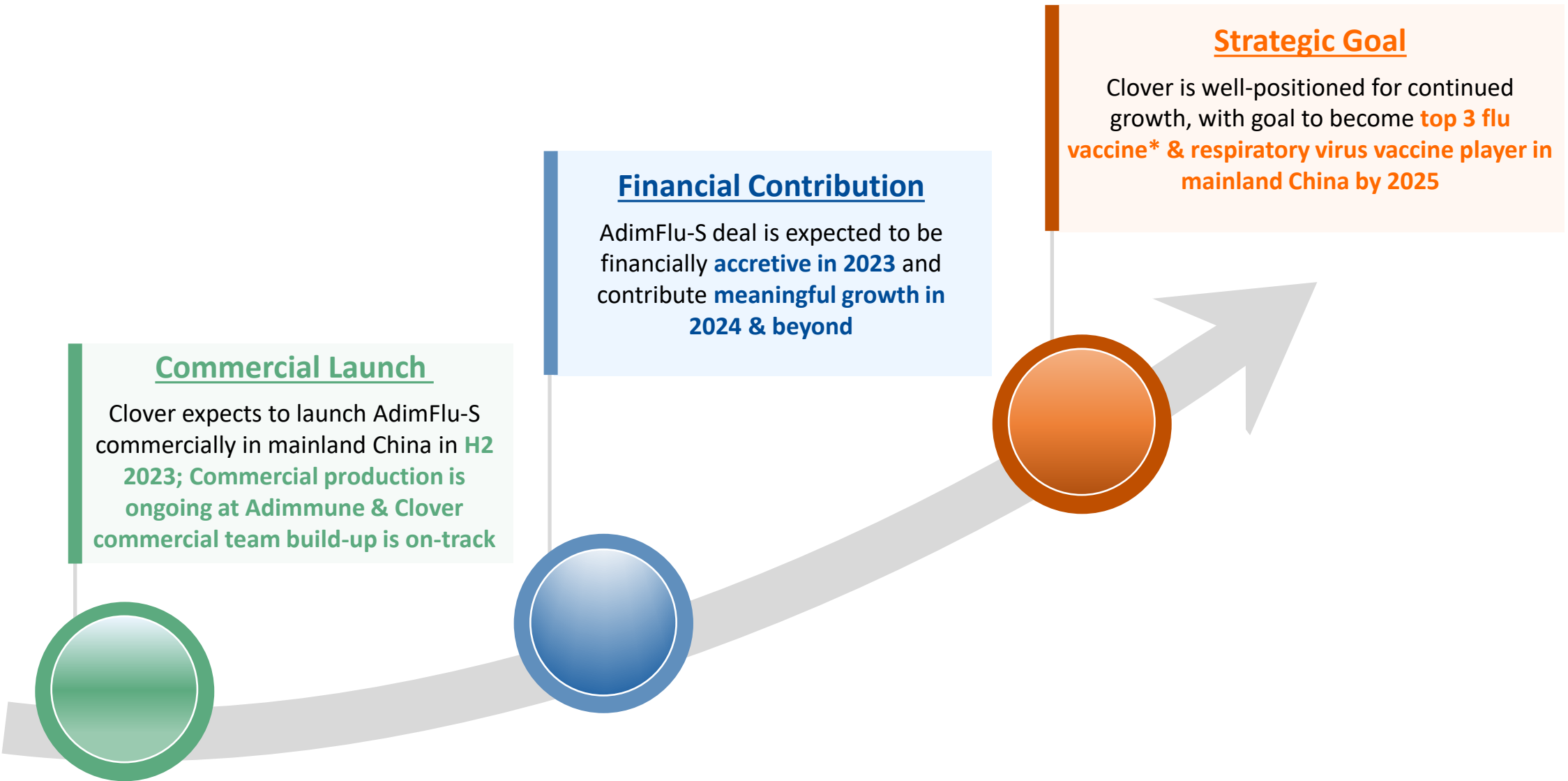


Potential market opportunities exist in ex-China countries such as Bangladesh, Brazil and Philippines that can create upside revenue for Clover

*Price information obtained from 2022 Type II vaccine bidding results from each province in China

Adimmune Deal Financial Considerations

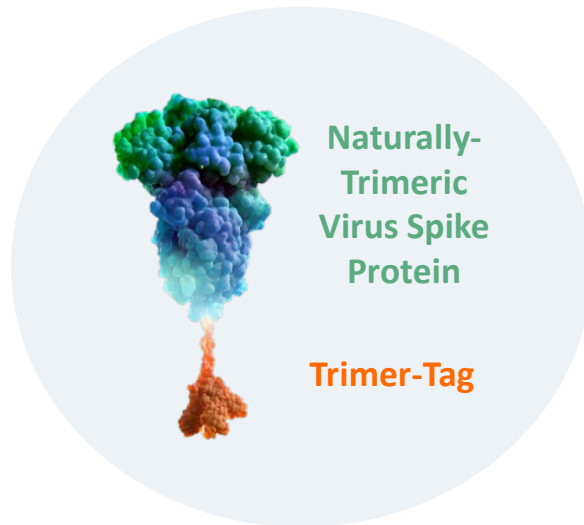
Mainland China launch in H2 2023; financially accretive in 2023, with significant growth expected in 2024+



*#3 player in mainland China released averagely 8.9M doses of flu vaccine during 2020 season (China CDC and NIFDC statistics).

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 **2023**.

Vaccine Development Capabilities Validated in 2022...

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



Financial Highlights – Full Year 2022

Annual Results for the year ended December 31, 2022

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Cash and cash equivalents	1,856,513	2,835,259
General and Administrative expenses	-410,237	-345,710
Research and Development expenses	-1,465,324	-1,826,301
Loss for the year	-2,451,903	-6,016,303
Adjusted loss for the year*	-2,356,880	-2,083,451

* Adjusted loss for the year is not defined under the IFRS. It represents the loss for the year excluding the effect brought by share-based payment expenses and fair value changes of convertible redeemable preferred shares.

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
- AdimFlu-S (quadrivalent flu vaccine) launch in mainland China under Clover in H2 2023 expected to be accretive, with additional growth expected thereafter
- 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

2023 R&D + G&A Expenditures: Expected to decrease significantly compared to 2022 ⁽²⁾

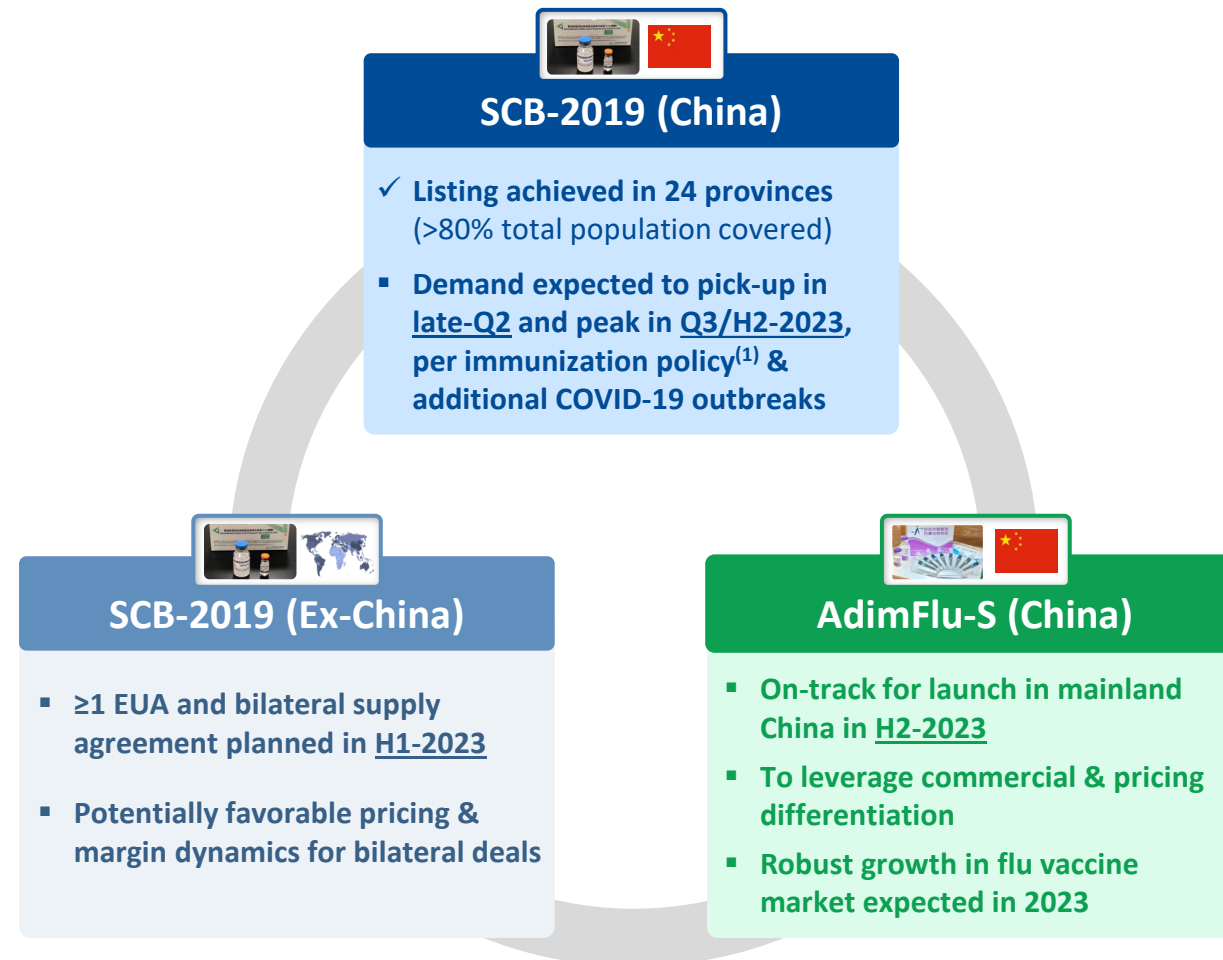
- Late-stage development for SCB-2019 (including multiple global Phase 2/3 clinical trials) has been substantially completed, and the company continues to streamline corporate operations

(1) RMB 1,857 million cash & cash equivalents as of December 31, 2022.

(2) 2022: For the twelve months ended December 31, 2022, R&D + Administrative Expenses were RMB 1.88 billion (R&D Expenses: RMB 1.47 billion, Administrative Expenses: RMB 410 million).

3 Potential Revenue Generation Opportunities Planned in 2023

- 2 Premium Respiratory Vaccines Expected to Drive Meaningful & Diversified Revenue in 2023 with Continued Growth



(1) Current policy in China is for previously infected individuals to receive booster vaccination at interval of at least 6 months after infection. First COVID-19 outbreak in China peaked in DEC-2022/JAN-2023.

2023: A Transformative Year with Commercial & Pipeline Expansion Milestones

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

Commercial Milestones

SCB-2019 (COVID-19)

AdimFlu-S

- ✓ FEB 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: Commercial Launch in mainland China market for AdimFlu-S (QIS) quadrivalent flu

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

- ✓ FEB 2023: Exclusive Right to distribute AdimFlu-S (QIS) in mainland China established
- ❑ 2023: Additional mid- to late-stage in-licensing deal(s), with focus on (1) respiratory vaccines and (2) pediatric vaccines, in China and Asia Pacific region

Early-Stage In-House Pipeline

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

Thank You!

