CLOVER BIOPHARMACEUTICALS

Corporate Presentation

August 2022

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.

Clover is a Global Innovative Biotechnology Company that Aspires to Empower Humanity with a Healthier Future Through Transformative Science

August 2022

-- Corporate Snapshot --

Validated Trimer-Tag™ Technology Platform

Establishment of **Additional Drug Discovery Platforms** Ongoing (including monoclonal antibody and in-house vaccine adjuvant)

Global rights to all pipeline programs

Focused on Vaccines & Oncology (Disease Immunology)

COVID-19 Vaccine Candidates

SCB-2019 (CpG 1018/Alum) (Prototype S-Trimer™)
SCB-2020S (Beta/Prototype Chimeric S-Trimer™)
Bivalent (Omicron + Prototype S-Trimer™)

Oncology

SCB-313 (Intracavitary Malignancies)
SCB-219M (Chemotherapy-Induced Thrombocytopenia)

840+ FTEs Across **15 Countries** (As of Aug 24, 2022)

~$328 Million **Cash & Cash Equivalents** As of Aug 24, 2022 (RMB 2.25 Billion)

-- SCB-2019 (CpG 1018/Alum): *Potentially Differentiated COVID-19 Vaccine Candidate* --

Attractive Product Profile for Global Markets as a Universal Booster & for Primary Vaccination

High & Durable Vaccine Efficacy
(100% Efficacy Against Severe COVID-19 & Hospitalization | Durable Efficacy at 5-Months)

Potential Best-in-Field Safety
(Favorable Safety & Reactogenicity Profile)

Convenient Storage & Distribution
(Stable at 2-8°C Refrigeration and Room Temperature)

Global Collaborations

- **Up to $397.4 million** grant funding from CEPI
- **Advanced Purchase Agreement (APA)** signed with Gavi to supply **up to 414 million doses** to the COVAX facility for global distribution

Regulatory Submissions & Commercial Launch

- Regulatory Submissions anticipated to be completed in **Second Half of 2022** for the **China NMPA, EMA and WHO**
- **Product launches** commencing thereafter upon receiving conditional approvals

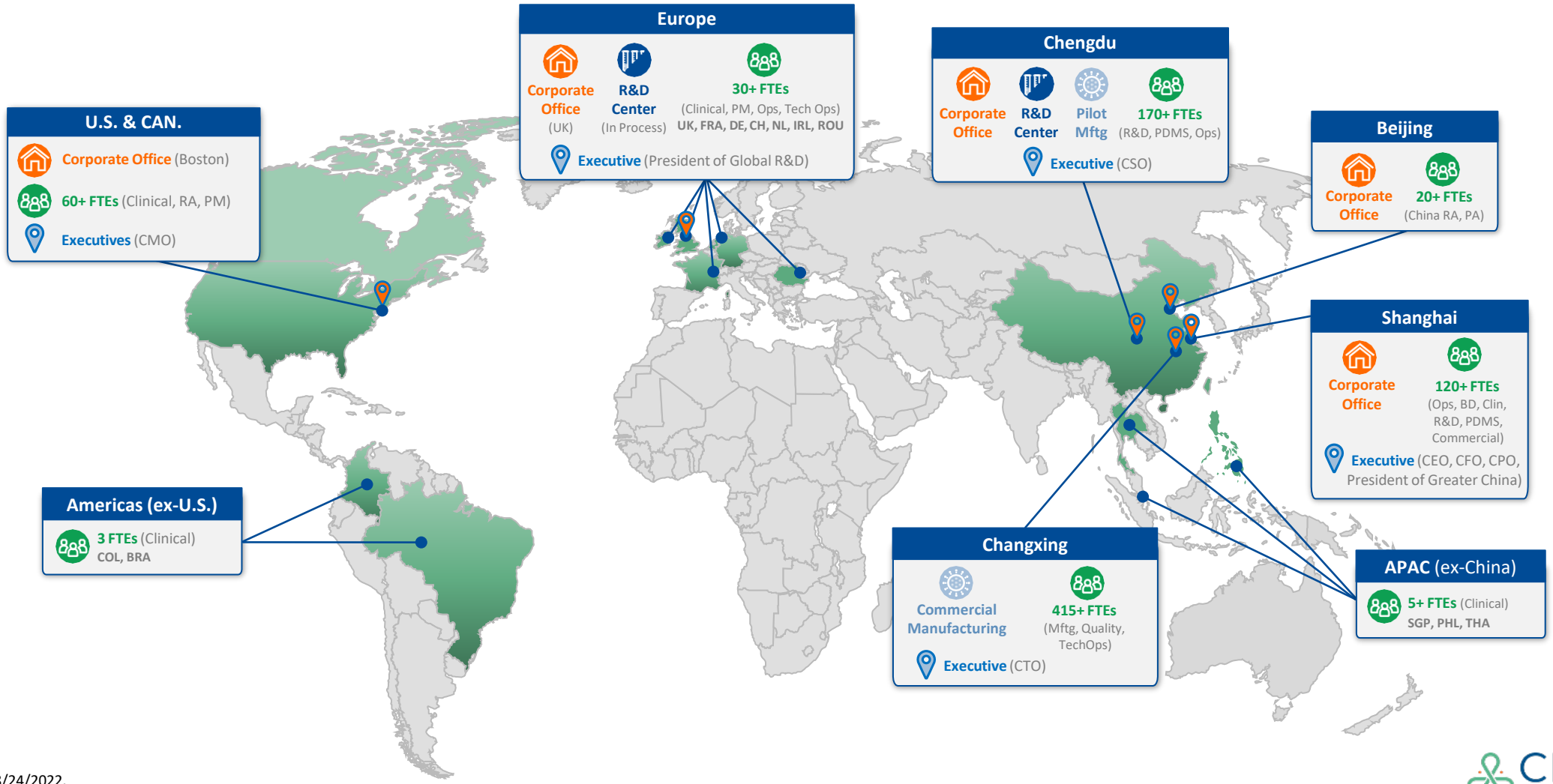
CLOVER BIOPHARMACEUTICALS

Global Footprint: Business & Leadership Without Borders

August 2022

Integrated R&D, Manufacturing & Global Clinical Development Capabilities

840+ FTEs (in 15 Countries) | **5 Corporate Offices** | **2 Manufacturing Facilities** | **2 R&D Centers**



Note: As of 08/24/2022.

Diverse Global Leadership Team with Proven Expertise

August 2022

CEO

Joshua Liang

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

CENTERVIEW · Wharton

Founders

Peng Liang, PhD

Founder, Chairman of the Board & Chief Scientific Officer

GenHunter · Harvard Medical School · Vanderbilt

Xiaodong Wang, PhD

Non-executive Director

BeiGene · NIBS · HHMI · National Academy of Sciences

R&D and Tech Ops Leaders

Nicholas Jackson, PhD

President of Global R&D

CEPI · Sanofi

LiongHo Chua

President of Greater China

AIM · Sanofi · Gilead

Htay Htay Han, MBBS

Chief Medical Officer - Vaccines (CMO)

Takeda · GSK

Mike Berry, PhD

Chief Technical Operations Officer (CTOO)

DYNAVAX · Novartis

Nicolas Burdin, PhD

EVP, Global Head of Research

Sanofi

Yang Li, PhD

SVP, Process Development & Manufacturing Sciences

Celgene · Bristol Myers Squibb

Qi Liang, PhD

SVP, Antibody Discovery

kymab · Sanofi

Igor Smolenov, MD PhD

SVP, Global Clinical Development - Vaccines

moderna · GSK

François Verdier, PhD

Head of Global Regulatory Affairs

Sanofi

Helena Tong, PhD

SVP, Global Regulatory Affairs

WuXi Biologics · Pfizer

Tracy Wang

SVP, Head of China Regulatory Affairs

parexel · Sanofi

Derek Xu, MD

SVP, Clinical Operations - Oncology

Roche · Bayer

Rong Xu, MD, PhD

SVP, Vaccine Research

Sabin · Pfizer

Corporate Leaders

Aileen Wang

Chief Financial Officer

Novartis · G · M

Brian Krex

General Counsel

agtc · Alexion · Pfizer

Lily Yang

Chief People Officer

wework · Nike

Andrew Baker

SVP, Global Procurement

GSK

Cindy Min

SVP, Public Affairs

Janssen · Novartis · Ogilvy

Abigail Bracha, PhD

SVP, Corporate Strategy & Business Development

Rubius Therapeutics · GE

Naomi Eichenbaum

VP, Investor Relations

GENFIT · Solebury Trout

Board of Directors*

Jeffrey Farrow

Independent Non-Executive Director (INED)

GBT · ZS

Thomas Leggett

Independent Non-Executive Director (INED)

affinia Therapeutics · Black Diamond Therapeutics

Xiang (Sam) Liao

Independent Non-Executive Director (INED)

Novartis · Sanofi

Xiaobin Wu, PhD

Independent Non-Executive Director (INED)

BeiGene · Pfizer

Dong Lyu

Non-Executive Director (NED)

HILLHOUSE · PAG

Ralf Clemens MD/PhD

Non-Executive Director (NED)

Novartis Vaccines · GSK · Takeda · IVI International Vaccine Institute

Donna Ambrosino MD

Non-Executive Director (NED)

CEPI · Bill & Melinda Gates Foundation · MassBiologics · Harvard Medical School

*Board members in addition to the CEO and Founders.

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Vaccine Scientific Advisory Board (SAB)

August 2022

Industry-leading advisors across a broad range of expertise | Advise and guide overall global COVID-19 vaccine development 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

Reg Affairs Advisor

- Former VP, Global Head of Reg 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 Dev Advisor

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

Pierre Desmons PhD

CMC Advisor

- Former VP, Head of R&D China, GSK
- Former Head of Asia Strategic Partnership, GSK

Michael Pfleiderer PhD

Reg Affairs Advisor

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

Antoinette Quinsaat

Project Mgmt Advisor

- Former Head of Clinical Operations (Intl.), GSK and Novartis Vaccines
- Former Head of Study Mgmt (APAC), Sanofi

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 Asocociate 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 Dev Advisor

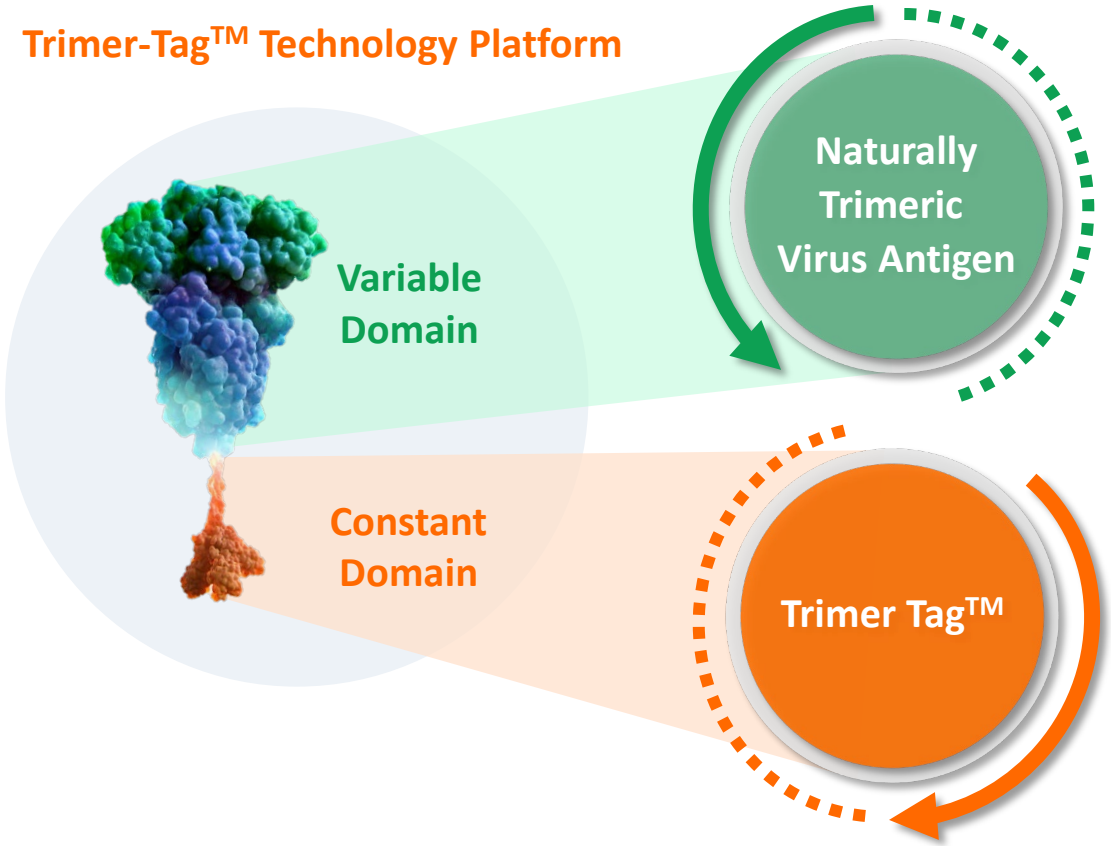
- Deputy Director General, International Vaccine Institute (IVI)
- Former Country Medical Head (Vietnam/ Cambodia), Sanofi

Trimer-Tag™ Technology Platform for Vaccine Development

August 2022

- Platform for development of **protein-based vaccines** based on **naturally trimerization-dependent targets**
- **Only technology platform globally** for producing recombinant covalently-trimerized antigens utilizing a **human-derived trimerization tag**
- **Platform validated** by COVID-19 vaccine (SCB-2019) in global Phase 2/3 trial for efficacy & safety

Trimer-Tag™ Technology Platform



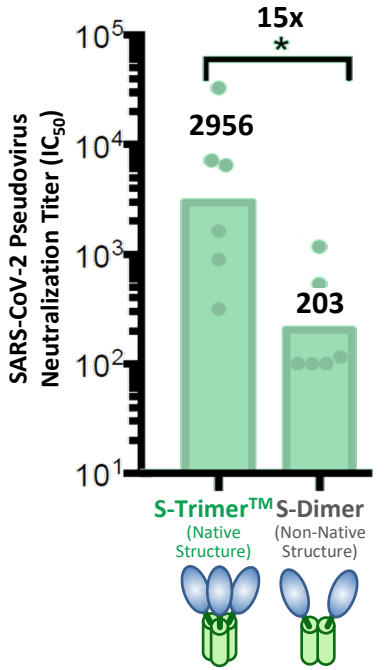
20+ Potential Virus Antigens

Coronavirus	Influenza	Ebola
Rabies	RSV	HIV
Togavirus	Measles/ Mumps	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).

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Strong Commercial Manufacturing Capabilities

Commercial Manufacturing Infrastructure Established | Building a Global CDMO Network

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

- **4 x 2,000L bioreactor capacity** and **commercial-scale fill-finish lines**
- Received **Pharmaceutical Manufacturing Permit** from Zhejiang Medical Products Administration; received **QP Declaration** stating the facility operation has been complying with EU GMP standards
- Supplied clinical trial material SCB-2019 (CpG 1018/Alum) for **global Phase 2/3** SPECTRA trial
- Capacity to potentially produce **hundreds of millions of doses** of SCB-2019 (CpG 1018/Alum) annually at peak

Global CDMO Network Established with Experienced, High-Quality Partners (WuXi Vaccines BIOFABRI)

- CDMO partners (China & Ex-China) with GMP sites with **strong track record** in vaccines/biologics manufacturing and global regulatory inspection experience (EMA, FDA and/or WHO)
- **Technology transfer activities** from Clover to WuXi Vaccines and BioFabri (Spain) currently ongoing
- Capacity to potentially produce **hundreds of millions of doses** of SCB-2019 (CpG 1018/Alum) annually at peak

Abbreviation: CDMO (Contract Development & Manufacturing Organization).

Robust Pipeline of Innovative Vaccine & Oncology Candidates

Key Milestones In 2022: COVID-19 Vaccine (SCB-2019) to Enter Commercial Stage Globally | 2+ New Clinical Stage Programs (SCB-2020S / SCB-219M)

Assets	Product Candidate	Target	Indication	Discovery	Preclinical	IND/CTA	Phase 1	Phase 2	Phase 3	BLA
Vaccines	SCB-2019 (CpG 1018/Alum) (1)	SARS-CoV-2 S-Trimer™ (Prototype Strain)	COVID-19 Primary Vaccination							
			COVID-19 Universal Booster							
	SCB-2020S (CAS-1) (2)	SARS-CoV-2 S-Trimer™ (B.1.351 variant chimera)	COVID-19							
	Bivalent COVID-19 Vaccine(3) (SCB-2019 + SCB-2022B)	SARS-CoV-2 S-Trimers™ (Prototype + Omicron)	COVID-19							
	Rabies Vaccine(3)	RABV G-Trimer	Rabies							
	RSV Vaccine(3)	RSV F-Trimer	RSV							
	Influenza Vaccine(3)	HA-Trimers	Quadrivalent Seasonal Flu Pandemic Flu							
Oncology	SCB-313(4)	TRAIL-Trimer	Malignant Ascites							
			Malignant Pleural Effusion							
			Peritoneal Carcinomatosis							
		+ APG-1387 (Ascentage) IAP Antagonist Combo (5)	Peritoneal Carcinomatosis							
	SCB-219M	TPO Mimetic Bispecific-Fc	Chemotherapy-Induced Thrombocytopenia (CIT)							
	Undisclosed(6)	4-1BB x Undisclosed Bispecific Trimer	Immuno-Oncology							

(1) COVID-19 vaccine candidate. Announced on September 2021 SPECTRA met the primary and secondary efficacy endpoints. We expect to obtain conditional approvals in 2022 and commence product launch soon after. **(2)** SCB-2020S antigen is a chimeric SARS-CoV-2 spike protein based on the RBD of Beta variant and the NTD of the prototype strain. This candidate will be evaluated with CAS-1, an in-house developed oil-in-water emulsion-based adjuvant. **(3)** Other vaccine candidates in early-stage development. **(4)** Our 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. Currently, continued internal development has been paused and pending further assessment of development strategy and resource allocation. **(5)** On December 9th 2021, we entered a partnership with Ascentage to jointly conduct Phase 1b/2 study to evaluate the safety, tolerability, pharmacokinetics/pharmacodynamics (PK/PD), and efficacy of SCB-313 in combination with APG-1387 for the treatment of patients with primary or secondary peritoneal carcinomatosis. **(6)** This oncology product candidate is in early-stage development, and we are still assessing the target indication(s) for this product.

Clover's COVID-19 Vaccine Candidate: SCB-2019 (CpG 1018/Alum)

-- 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 million** grant funding by CEPI
- Clinical & commercial supply agreements with DYNAVAX for **CpG 1018 adjuvant supply**
- **Advanced Purchase Agreement (APA)** signed with Gavi The Vaccine Alliance to supply **up to over 400 million doses (64 million committed doses)** to COVAX facility for global distribution

-- Product Differentiation --

High & Durable Vaccine Efficacy
(100% Efficacy Against Severe COVID-19 & Hospitalization | Durable Efficacy at 5-Months)

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 Global Markets for Primary Vaccination and as a Universal Booster

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SCB-2019 (CpG 1018/Alum) Development Status

August 2022

Primary Vaccination: **Positive Ph 2/3 efficacy & safety established in adults & elderly**; data in **adolescents** in **2022**

Universal Booster: **Positive initial booster data**; multiple **data readouts in 2022** & **to be included in regulatory submissions**

			Phase (Location)	Planning/ IND/CTA	Recruiting	Data	Milestones
Primary Vaccination	**Naïve Populations** (No Prior Vaccination or SARS-CoV-2 Infection)	**Adult & Elderly** (18+ Years)	**Phase 2/3** SPECTRA (Global)	N = 30,000+ (1)			SEP-2021: Final Efficacy Data Reported ☑ **High Efficacy + Favorable Safety**
			Phase 2 (China)	N = 650+			Study Enrollment Completed
		Adolescents (12-18 Years)	**Phase 2/3** SPECTRA (Global)	N = 1,250+			Immunogenicity & Safety **Data Expected Q3:2022**
		Pediatrics (<12 Years)	**Phase 3** (Global)	Planned			Pediatric Investigation Plan (PIP) approved by EMA Pediatric Committee
Universal Booster	**Heterologous Booster**	**Prior SARS-CoV-2 Infection**	**Phase 2/3** SPECTRA (Global)	N = 14,500+ (1)			SEP-2021: Final Efficacy Data Reported ☑ **Strong Boosting (incl. Omicron)+High Efficacy**
		Prior AstraZeneca Vaccination (Viral Vector Vaccine)	**Phase 2** Investigator-Initiated (Brazil)				1H-2022: Final Results Reported ☑ **Strong Boosting Response (incl. Omicron)**
			Phase 3 (Global)				Immunogenicity & Safety **Data Expected Q3:2022**
		Prior CoronaVac Vaccination (Inactivated Vaccine)	**Phase 3** (Global)	3rd Dose (2)			Immuno & Safety **Data Expected Q3:2022**
				4th Dose (3) *Initiating Enrollment 2H 2022*			Immuno & Safety **Data Expected Q4:2022**
		Prior Pfizer Vaccination (mRNA Vaccine)	**Phase 3** (Global)				Immunogenicity & Safety **Data Expected Q3:2022**
	Homologous Booster	**Prior SCB-2019 Vaccination** (Protein-Based Vaccine)	**Phase 2/3** SPECTRA (Global)	N = 3,755			1H-2022:Final Results Reported ☑ **Strong Boosting Response (incl. Omicron)**

(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) SCB-2019 (CpG 1018/Alum) given as a booster dose (3rd dose) in individuals previously receiving 2 doses of CoronaVac.
(3) SCB-2019 (CpG 1018/Alum) given as a booster dose (4th dose) in individuals previously receiving 3 doses of CoronaVac.

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Primary Vaccination: Key Takeaways from Global Phase 2/3 SPECTRA Trial

August 2022

SPECTRA Established Efficacy of SCB-2019 (CpG 1018/Alum) Against COVID-19 with a Favorable Safety Profile

Study Snapshot

<6 Months From enrollment initiation until final efficacy data announced

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

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)

Delta was **predominant strain**

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
- **79% Efficacy Against COVID-19 of Any Severity** caused by **Delta**
- **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

Notes: Final efficacy data represents average follow-up of approximately 54 days after second dose.

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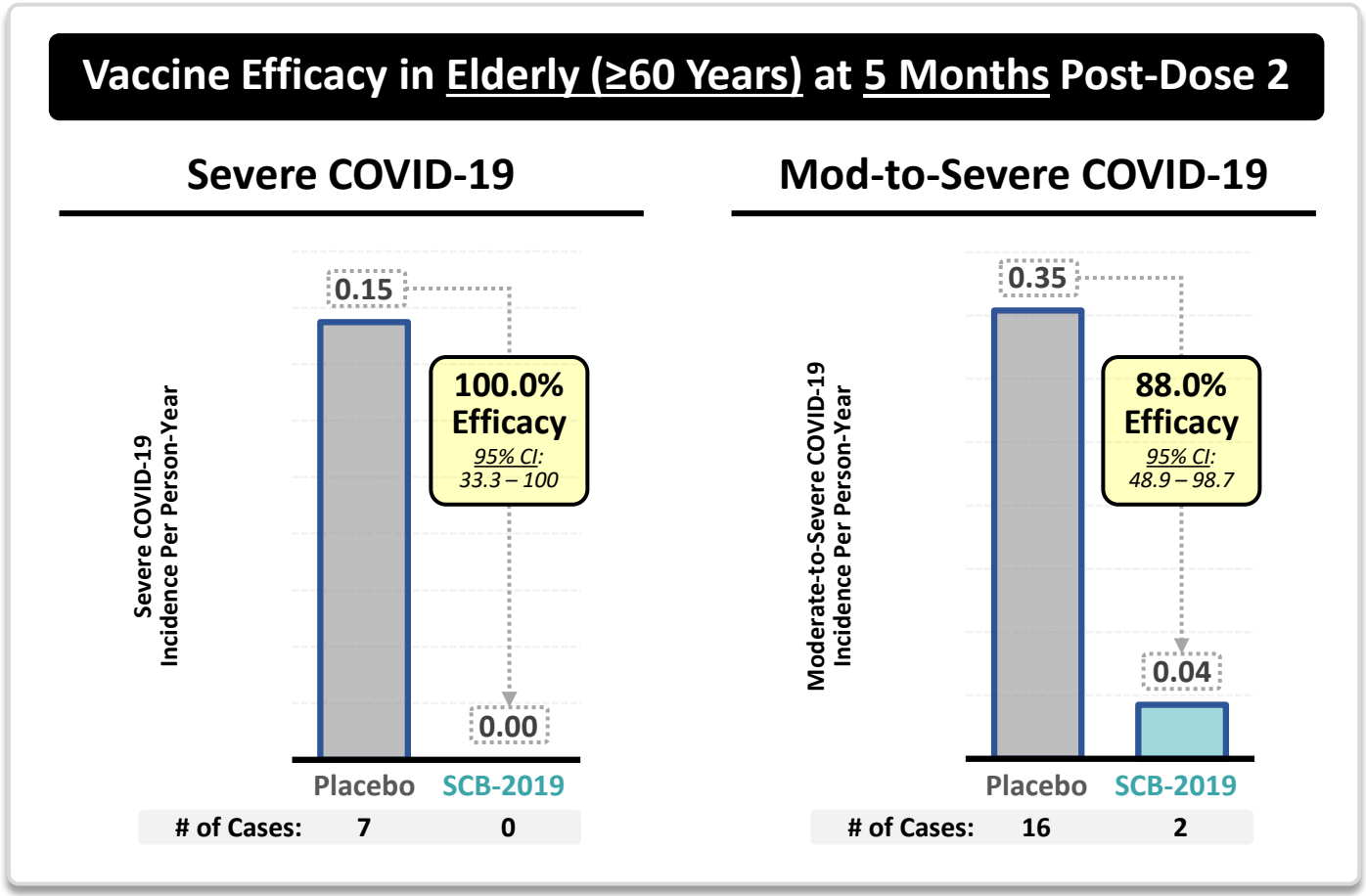
Primary Vaccination: High & Durable Efficacy in Elderly Population

- ✓ 100% efficacy against severe COVID-19 in elderly at 5-months after second dose
- ✓ 88% efficacy against moderate-to-severe COVID-19 in elderly at 5-months after second dose



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 5 months after second dose.

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Primary Vaccination: Potential Best-in-Field Safety Profile

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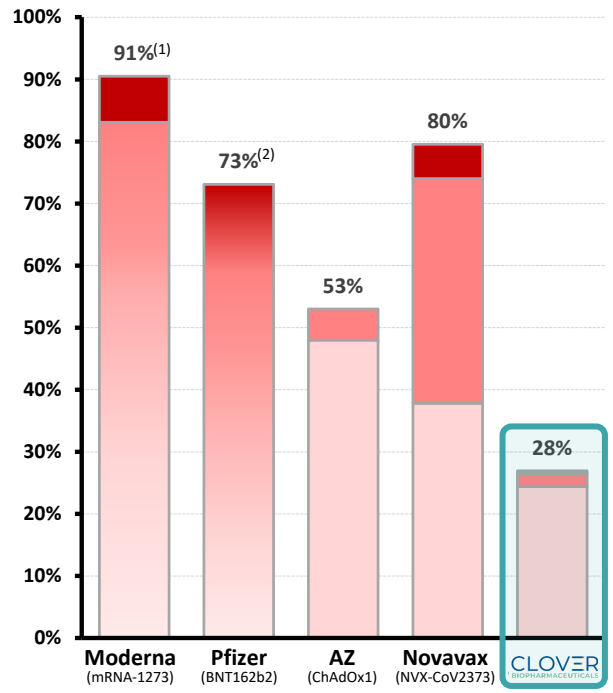
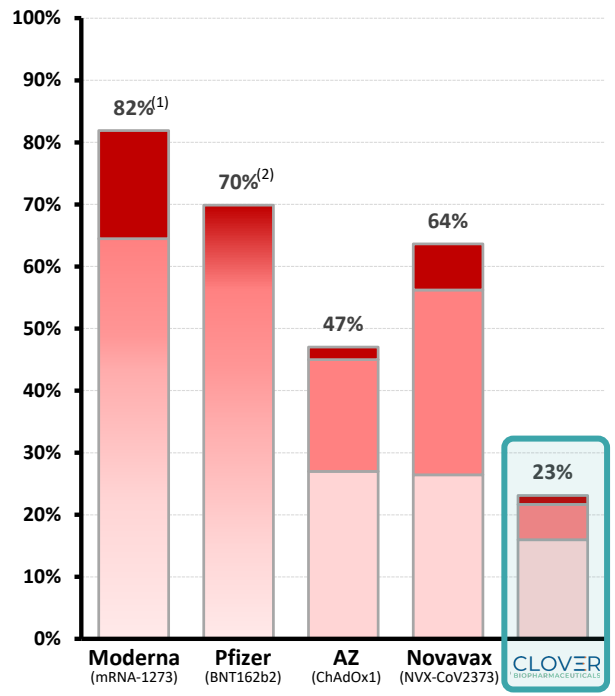
Any LOCAL AEs (After 2nd Dose)
% of Participants



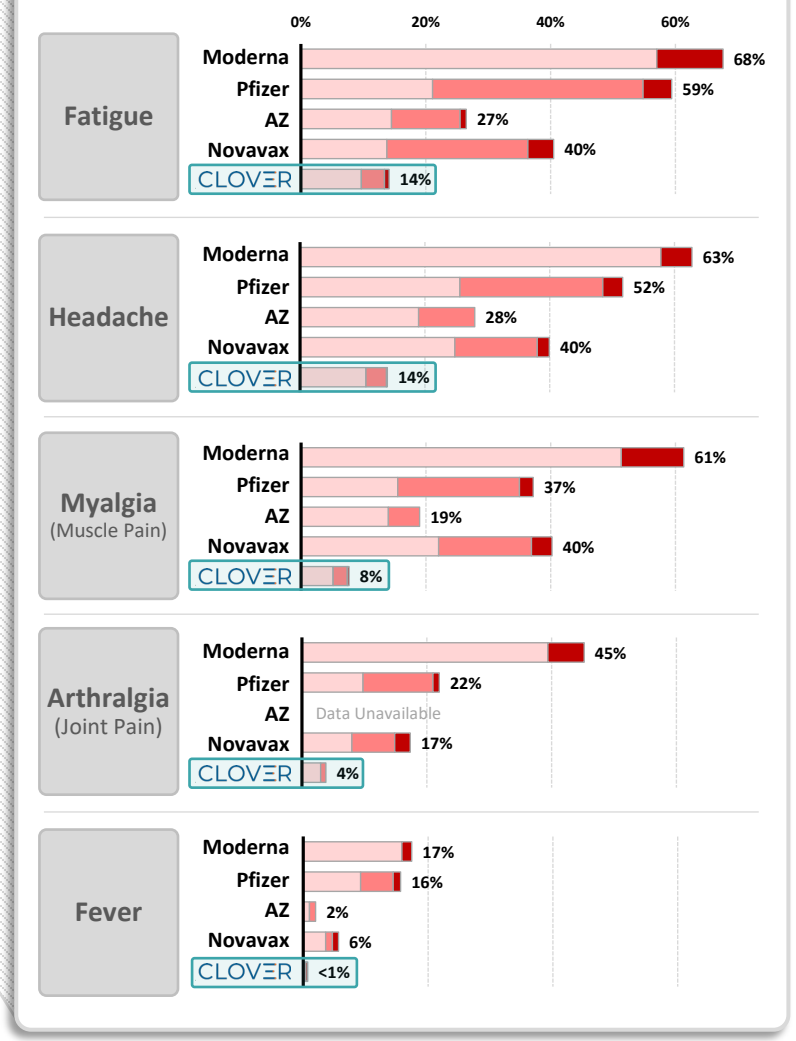
	Moderna (mRNA-1273)	Pfizer (BNT162b2)	AZ (ChAdOx1)	Novavax (NVX-CoV2373)	CLOVER BIOPHARMACEUTICALS
Subject Age (Data):	18-64	≥18	≥18	≥18	≥18
Clinical Trial:	Phase 3	Phase 2/3	Phase 3	Phase 3	Phase 2/3
# Enrolled (Vaccine):	15,208	21,823	21,635	7,020	15,064
Reference:	[1]	[2]	[3]	[4]	--

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



	Moderna (mRNA-1273)	Pfizer (BNT162b2)	AZ (ChAdOx1)	Novavax (NVX-CoV2373)	CLOVER BIOPHARMACEUTICALS
Subject Age (Data):	18-64	≥18	≥18	≥18	≥18
Clinical Trial:	Phase 3	Phase 2/3	Phase 3	Phase 3	Phase 2/3
# Enrolled (Vaccine):	15,208	21,823	21,635	7,020	15,064
Reference:	[1]	[2]	[3]	[4]	--

SYSTEMIC AEs (After 2nd Dose)



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

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.

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Primary Vaccination: Attractive & Differentiated Profile for SCB-2019 Observed in Clinical Studies

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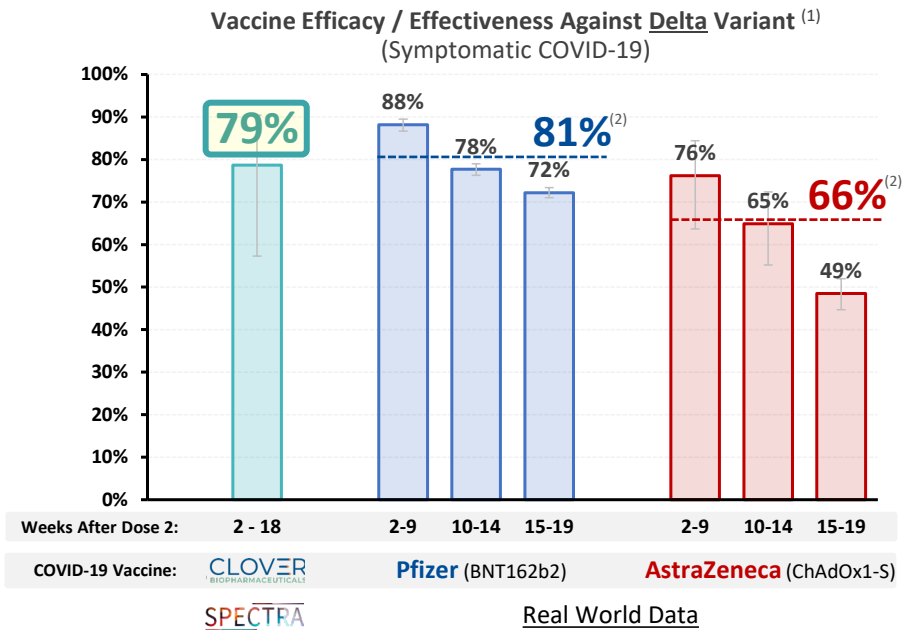
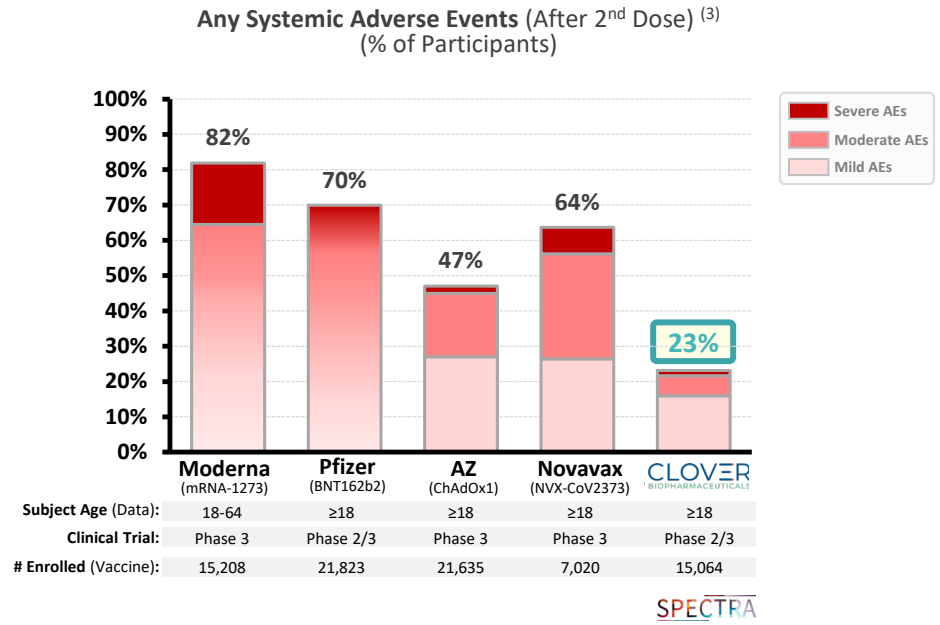
☑ High Efficacy Against COVID-19

Efficacy is Comparable to Top-Tier mRNA Vaccine



☑ Favorable Safety Profile

Low Rates of Adverse Events Observed



☑ Optimal Balance Between High Efficacy & Favorable Safety Profile Demonstrated;

Vaccine is Stable at Standard Refrigerator Temperatures (2-8°C) and Suitable for Distribution & Storage Globally

Notes: **NON HEAD-TO-HEAD COMPARISONS FOR ILLUSTRATIVE PURPOSES ONLY.** Adverse Events (AEs).

(1) SCB-2019 (CpG 1018/Alum) Phase 2/3 SPECTRA vaccine efficacy data. Pfizer (BNT162b2) and AstraZeneca (ChAdOx1-S) vaccine efficacy data from Andrews et al. (2021).

(2) Estimated vaccine efficacy for Weeks 2-19 (based on weighted average vaccine effectiveness results for weeks 2-9, 10-14, and 15-19 respectively).

(3) SCB-2019 (CpG 1018/Alum) Phase 2/3 SPECTRA safety data. Pfizer (BNT162b2) and AstraZeneca (ChAdOx1-S safety data references: Moderna FDA Briefing Document - VRBAC Meeting DEC 17, 2020; Pfizer FDA Briefing Document – VRBAC Meeting DEC 10, 2020; AstraZeneca (DOI: 10.1056/NEJMoa2105290); Novavax (DOI: 10.1056/NEJMoa2107659).

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Universal Booster: Universal COVID-19 Booster Development Plan

August 2022

Universal COVID-19 Booster Vaccine Profile: SCB-2019 (CpG 1018 / Alum) has **attractive profile** (high efficacy + favorable safety) to be **developed as a universal booster**, to be potentially utilized regardless of the vaccine technology used previously for primary vaccination or previous SARS-CoV-2 infection history

SCB-2019 (CpG 1018/Alum) Booster Setting		Universal Booster Development Status	Upcoming Milestones
	Previous SARS-CoV-2 Infection	✓ Positive Phase 2/3 (SPECTRA) Efficacy & Safety Data ✓ Data published in Lancet Infectious Disease	--
Heterologous Booster	Previous CoronaVac Vaccination (Inactivated Vaccine)	▪ Phase 3 3rd Dose initiated in JUN-2022 ▪ Phase 3 4th Dose to initiate in 2H-2022	**Q3-2022:** Initial data **Q4-2022:** Initial data
	Previous AstraZeneca Vaccination (Viral Vector Vaccine)	✓ Positive immunogenicity & safety data reported in Phase 2 study (1) ▪ Phase 3 initiated in JUN-2022	**Q3-2022:** Initial data
	Previous Pfizer Vaccination (mRNA Vaccine)	▪ Phase 3 initiated in JUN-2022	**Q3-2022:** Initial data
Homologous Booster	Previous SCB-2019 Vaccination (Protein-Based Vaccine)	▪ Positive initial Phase 2/3 SPECTRA data with strong boosting response against Omicron	**2H-2022:** Additional immunogenicity & safety data

Universal COVID-19 Booster Development Expected to be Completed in 2022

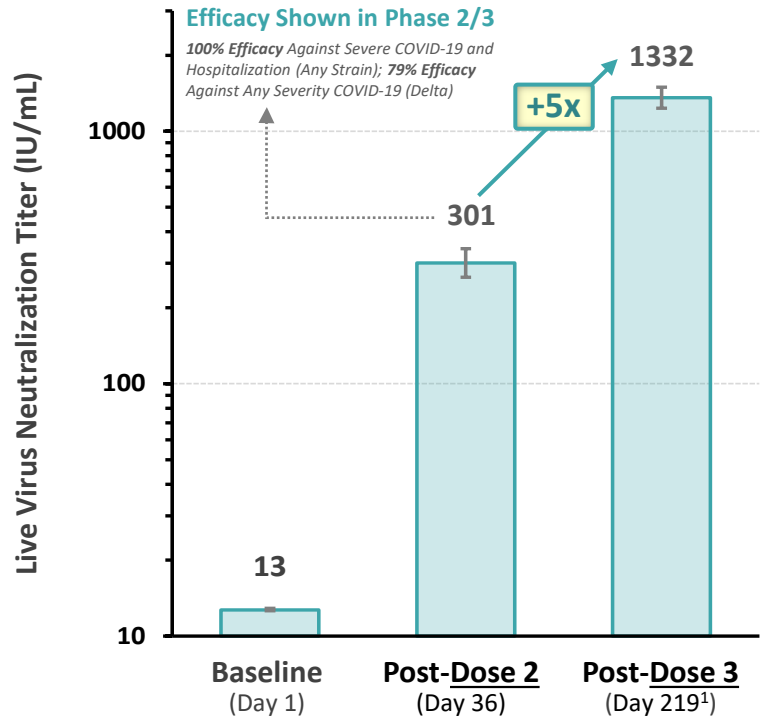
(1) Investigator-led study in Brazil. Trial concluded in 1H-22.

Universal Booster: Homologous Booster for SCB-2019 (CpG 1018/Alum)

August 2022

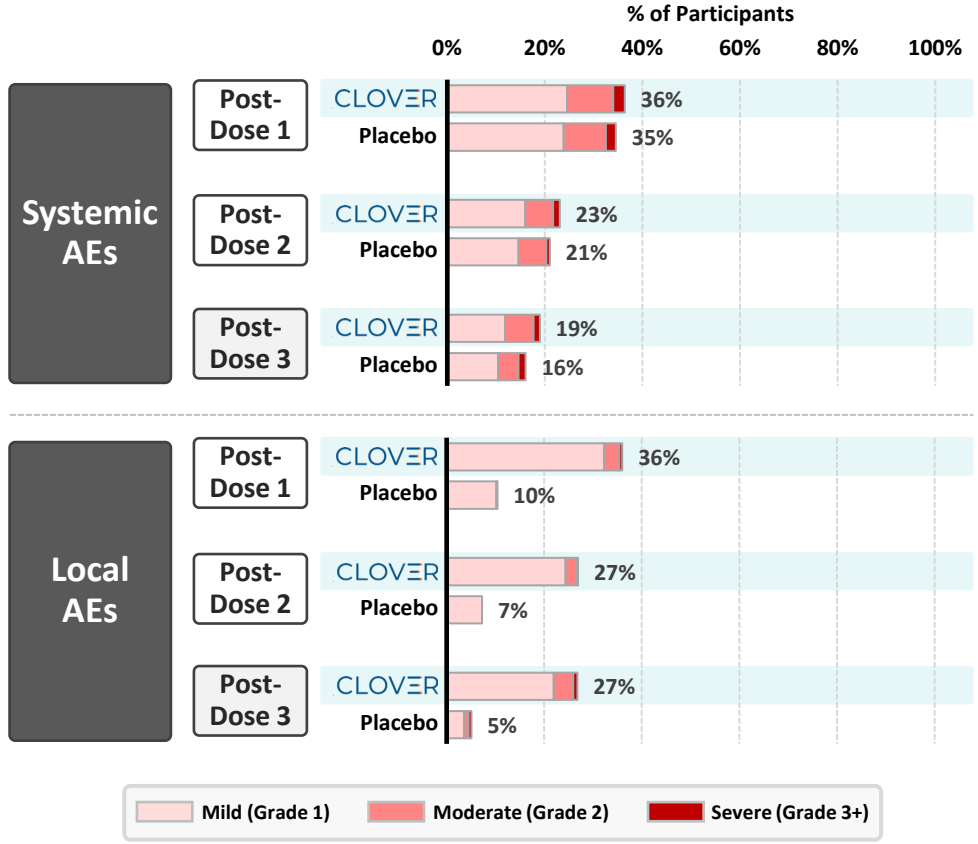
- **Strong Homologous Booster Effect:** ~5x higher neutralizing antibody titers after homologous 3rd dose compared to after 2nd dose
- **Favorable Safety Profile:** Safety profile of 3rd dose is consistent with first 2 doses; majority of AEs observed are mild

Live Virus Neutralization Titers Against *Prototype Strain* (IU/mL)



Additional Cross-Neutralization Data against Omicron Released in Jun-2022

Solicited Adverse Events (AEs)



1.Dose 3 was administered at ~ day 205, and the data collection occurred 14 days Post-Dose 3, approximately day 219 .
Notes: Preliminary data readout from trial enrolling participants receiving SCB-2019 (CpG 1018/Alum) primary vaccination on Days 1 and 21 and a homologous booster dose on Day 184 (N= 256-262 per timepoint tested).
Bars represent Geometric Mean Titers (GMT) ± 95% confidence intervals (95% CI). Validated live virus neutralization assay (VisMederi). Titers expressed as international units/mL (IU/mL) based on WHO international standard sera (WHO IS 20/136).

Universal Booster: Booster in Previously-Infected Individuals

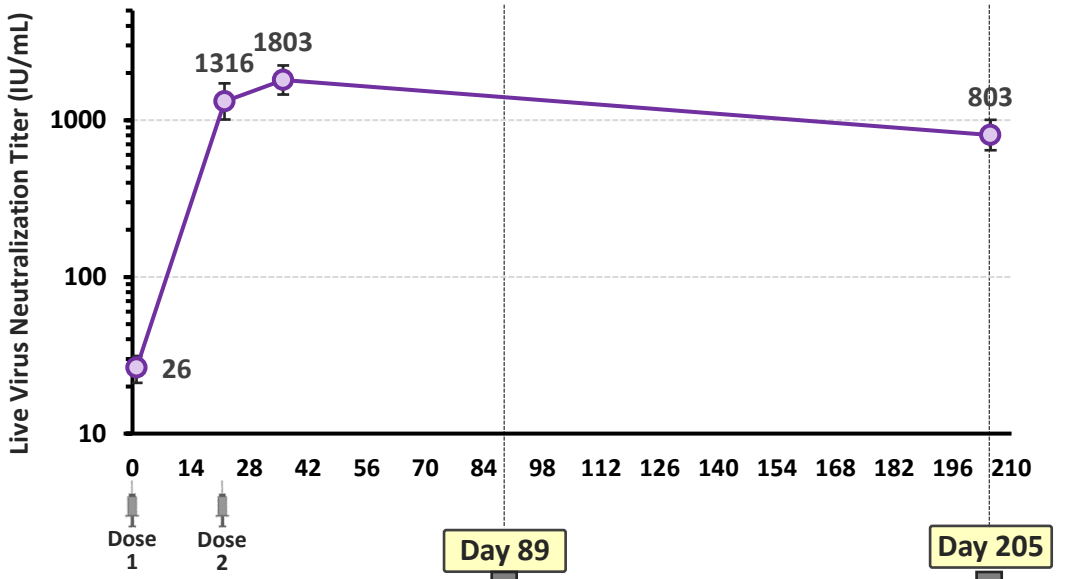
August 2022

- **Durable & Strong Booster Effect:** Rapid increase in neutralizing antibody titers after 1 and 2 doses of SCB-2019 (CpG 1018/Alum)
- **Durable & High Vaccine Efficacy:** No decline in vaccine efficacy observed at 5 months after the second dose

Neutralizing Antibodies (Prototype Strain)

Live Virus Neutralization Titers Against *Prototype Strain* (IU/mL)

In Individuals Previously Infected with SARS-CoV-2 and Boosted with SCB-2019

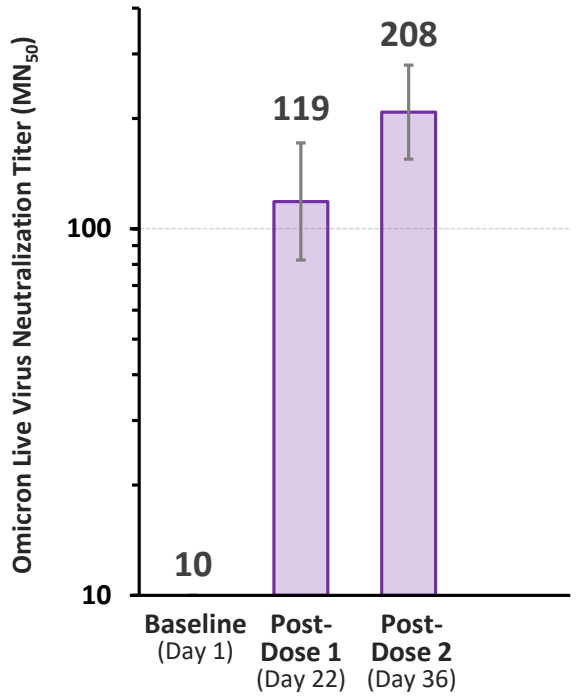


Vaccine Efficacy

COVID-19 Risk Reduction (*Versus Infected But Non-Vaccinated Individuals*):
64.2% Efficacy (95% CI: 26.5, 83.8) → **71.6% Efficacy** (95% CI: 60.2, 80.1)

COVID-19 Risk Reduction (*Versus Non-Infected & Non-Vaccinated Individuals*):
93.8% Efficacy (95% CI: 88.9, 97.0)

Omicron Neutralizing Antibodies (Live Virus Neutralization Titer – MN_{50})



Significant Omicron Neutralizing Antibodies induced by SCB-2019 Booster in Individuals Previously Infected by SARS-CoV-2 (1)

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.
Bars and points represent Geometric Mean Titers (GMT) ± 95% confidence intervals (95% CI). Validated live virus neutralization assays conducted in same laboratory across all strains tested (VisMederi). Titers expressed as international units per mL (IU/mL) for Prototype strain assay and as 50% microneutralization titers (MN50) for Omicron variant assay.
(1) N = 29 samples tested per group.

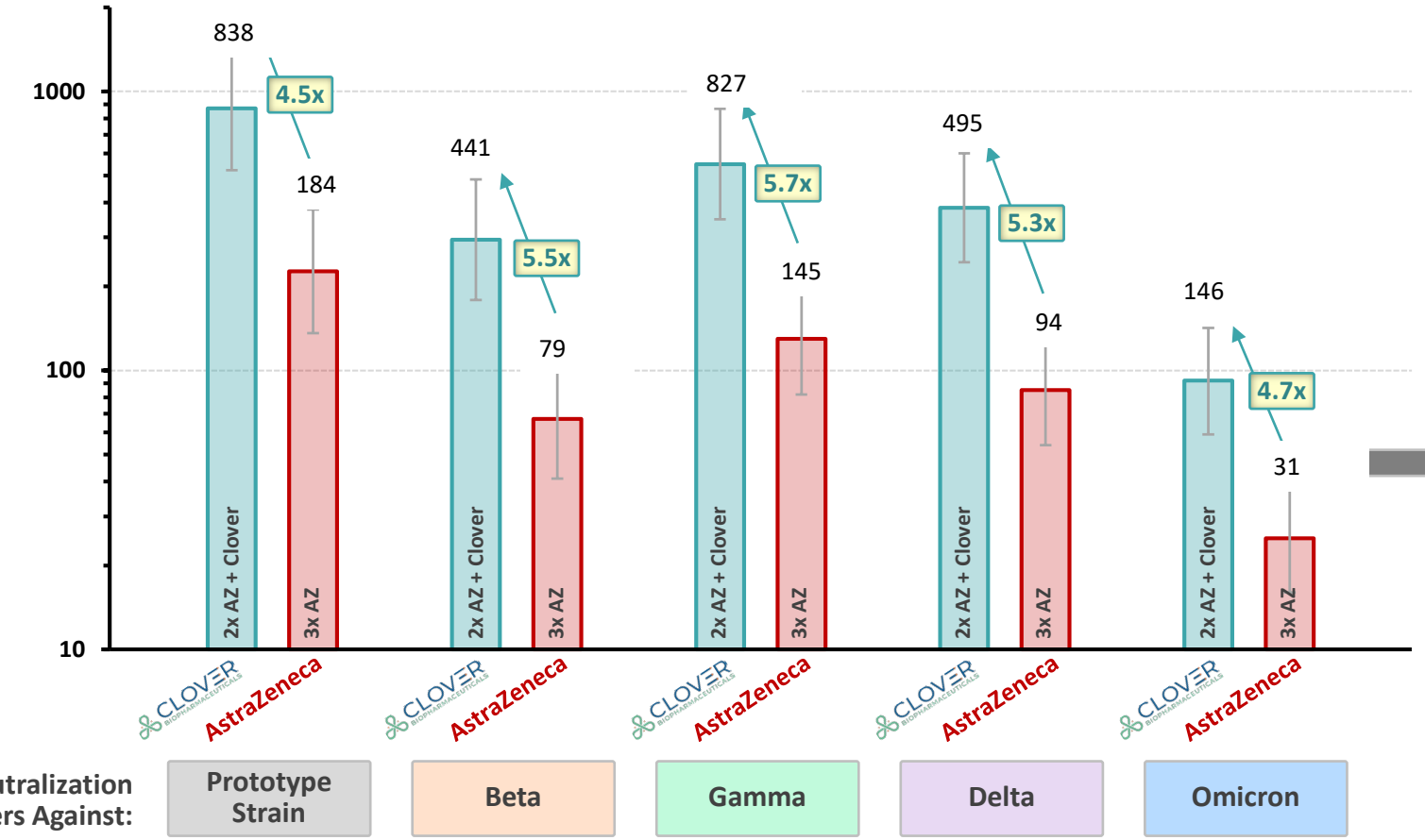
Universal Booster: Heterologous Booster for AstraZeneca Viral-Vectored Vaccine

August 2022

- **Broader & Stronger Immune Response:** Broader spectrum & stronger cross-neutralization compared to AstraZeneca homologous booster
- **>4x higher neutralization across all variants tested, including Omicron**

Live Virus Neutralization Titers at 2-Weeks After Booster Dose (MN_{50})[1]

In Individuals Previously Receiving 2 Doses of AstraZeneca Vaccine And Boosted



AstraZeneca homologous booster demonstrated ~56% vaccine effectiveness against symptomatic COVID-19 caused by Omicron variant [2]

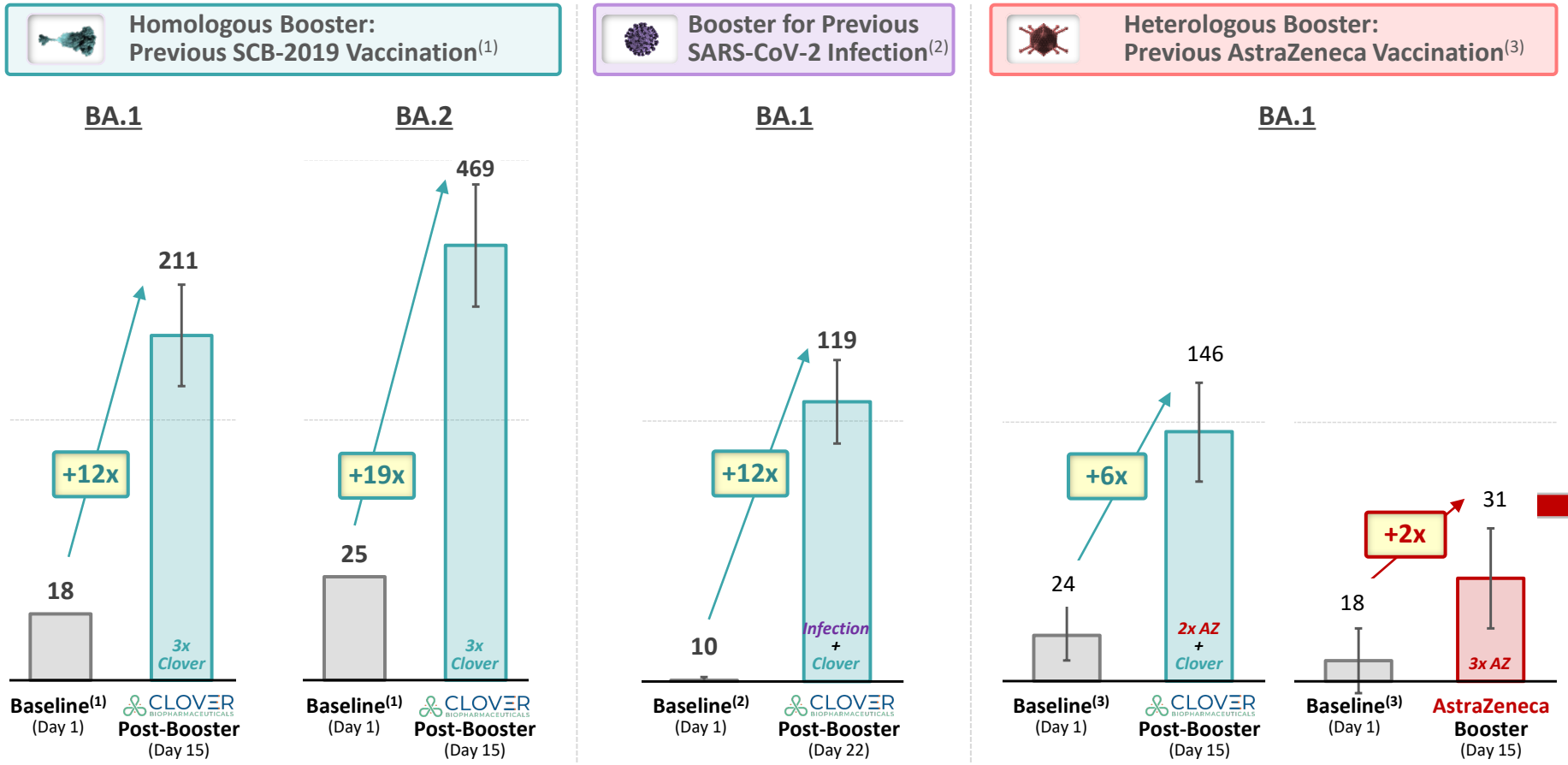
Notes: Final data readout from trial enrolling participants receiving 2 doses of AstraZeneca COVID-19 vaccine ≥6 months prior to enrolling and receiving booster (N=25-27/group).
(1) Bars represent Geometric Mean Titers (GMT) ± 95% confidence intervals (95% CI). Validated live virus neutralization assays conducted in same laboratory across all strains tested (VisMederi). Titers expressed as 50% microneutralization titers (MN50).
(2) Andrews *et al.*, 2022 (DOI: 10.1056/NEJMoa2119451). Effectiveness against symptomatic Omicron infection at 2-4 weeks after booster dose.

Universal Booster: Significant Omicron Neutralizing Antibodies Boosted by SCB-2019

August 2022

Omicron: Rapid & Strong Booster Immune Responses Against Omicron Observed at levels expected to be significantly protective

Live Virus Neutralization Titers Against *Omicron Variant* (MN_{50})



3x Doses AstraZeneca vaccine demonstrated ~56% vaccine effectiveness against COVID-19 caused by Omicron variant (4)

Notes: Bars represent Geometric Mean Concentrations (GMC) ± 95% confidence intervals (95% CI). Same validated Wildtype neutralization assay against the Omicron variant strain of SARS-CoV-2 utilized across all trials shown (VisMederi).
(1) Data from SPECTRA clinical trial in baseline (pre-booster) seronegative participants, who received 2 doses of SCB-2019 (CpG 1018/Alum) ≥6 months prior to booster, and demonstrated at least 2-fold reduction of neutralizing antibodies after primary vaccination.
(2) Baseline seropositivity status (previous SARS-CoV-2 infection status) was determined by the presence of antibodies binding to SARS-CoV-2 Spike (S) protein in Day 1 serum samples (Roche Elecsys® anti-S test).
(3) Final data readout. Enrolled participants receiving 2 doses of AstraZeneca COVID-19 vaccine ≥6 months prior to enrolling and receiving booster.
(4) Andrews et al., 2022 (DOI: 10.1056/NEJMoa2119451).

Global Approach for Regulatory Approval

- **Rolling Regulatory Submissions** are anticipated to be **completed in 2H-2022**, with product launches commencing thereafter upon receiving conditional approvals
  - **China NMPA** submission via Clover Changxing Site
  - **EMA and WHO** submissions via CDMO Site

China

- **NMPA Conditional Approval**

Clover In-House Changxing Manufacturing Site

EU

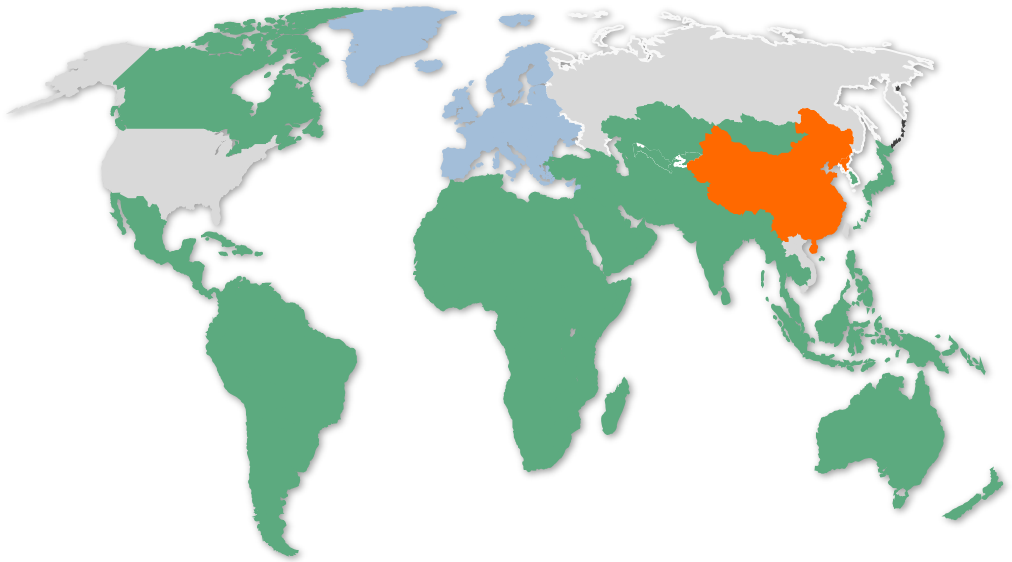
- **EMA Conditional Approval**

CDMO Manufacturing Site (Site has Previously Received EMA/WHO Approvals)

WHO*

- **Emergency Use Listing (EUL)**

CDMO Manufacturing Site Prioritized in 2022 for WHO EUL Submission Process



Clover is also evaluating potential regulatory submissions to specific countries for Emergency Use Authorizations (EUAs) or conditional approvals

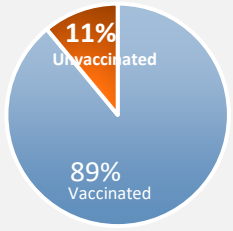
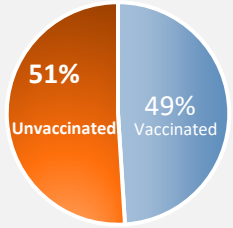
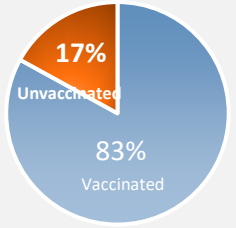
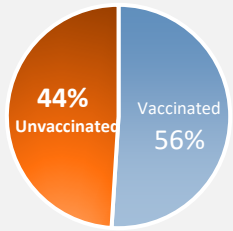
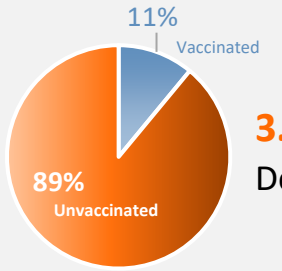
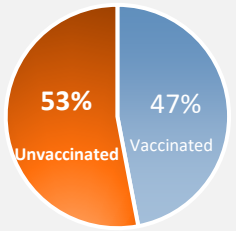
Note: * As of August 2, 2021, there are 194 WHO member states.

Strong Global Demand Persists for SCB-2019 as a Primary & Booster Vaccination

August 2022

- **6.6 Billion+ Dose Demand** in Clover's initial primary markets (**China and LMIC***) across both primary vaccination and booster (3rd dose) settings; continued boosting and/or emergence of new variants to drive further increases in dose demand globally

Clover's Initial Primary Markets

	China	LMIC*	Other Countries	
Primary Vaccination *Still ~50% Unvaccinated Globally*	 **0.2 Billion** Dose Demand	 **2 Billion** Dose Demand	 **0.4 Billion** Dose Demand	**2.6 Billion** Dose Demand
Booster Vaccination *Need for Boosters Accepted Globally*	 **0.6 Billion** ** Dose Demand	 **3.6 Billion** Dose Demand	 **0.8 Billion** Dose Demand	**5 Billion** Dose Demand
	0.8 Billion Dose Demand	**5.6 Billion** Dose Demand	**2.0 Billion** Dose Demand	

Note: Population includes all age groups. *LMICs represents countries defined as low-income economies or as lower-middle-income and low-income economies as defined by The World Bank Group.
**Adjusted for 35.9MM doses of 4th dose booster as reported by China state media citing data from NHC
Sources: https://ourworldindata.org/covid-vaccinations as of 21 Aug 2022 and estimated based on country population.

CLOVER BIOPHARMACEUTICALS

China: Significant Heterologous Booster Market Share for Clover Expected

August 2022

- **3rd Dose Booster Rollout** (in people previously receiving 2 doses of inactivated vaccine) currently at **~56% coverage**
- **4th Dose Booster Rollout** (in people previously receiving 3 doses of inactivated vaccine) expected to peak in **YE-2022/Q1-2023**
  - **Heterologous boosting** expected to comprise majority of 4th doses administered (1)
- **Clover Well-positioned:** Robust universal booster dataset; completion of NMPA submission in **2H-2022**

Effective Boosters Needed to Prevent Severe Outbreaks

Recent Study by Fudan University (published in *Nature Medicine*)(2):

If China Moved Away from Dynamic Zero-COVID Strategy:

>1.55 million	**Projected COVID-19 Deaths**
>110 million	**Projected COVID-19 Cases**
>15.6x	**Projected ICU Capacity Shortage**

Study Indicates Key Mitigation Strategy is Heterologous Boosting
(including with Protein-Based Vaccines)

Clover Booster Data Expected in Timeframe Needed

	China Booster Campaign Status	Clover Phase 3 CoronaVac Booster Data
3rd Dose Rollout (Primarily Inactivated Vaccines)	▪ Started in OCT-2021 ▪ **~56% Coverage(3)**	**Q3:2022**
4th Dose Rollout (Primarily Heterologous Boosting Expected)	▪ **Peak Rollout in YE-2022/Q1-2023**	**Q4:2022**

Note: Population includes all age groups.
(1) Based on data demonstrating 4 doses of inactivated vaccine produces suboptimal immune responses, potentially inferior to 3 doses of inactivated vaccine in some individuals (**DOI: 10.1101/2022.02.19.22271215**).
(2) Projected numbers over a 6-month simulation period (**DOI: 10.1038/s41591-022-01855-7**).
(3) As of Aug 9, 2022 (Sources: https://ourworldindata.org/covid-vaccinations as of Aug 24 2022 and estimated based on country population).

CLOVER BIOPHARMACEUTICALS

Global: Promoting Fair & Equitable Access of COVID-19 Vaccines to Those in Need

Vaccination Rates Remain Low in LMICs…

COVID-19 Vaccination Rates[1] (as of 21-Aug 2022)

High Income Countries	**~79%**
Lower Middle Income Countries	**~63%**
Low Income Countries	**~20%**

- The developing world (**LMICs**) remain **largely unvaccinated and unprotected**
- LMICs are even **further behind** when factoring need for **booster doses**

Clover Proudly Supports Fair & Equitable Access of SCB-2019 (CpG 1018/Alum)

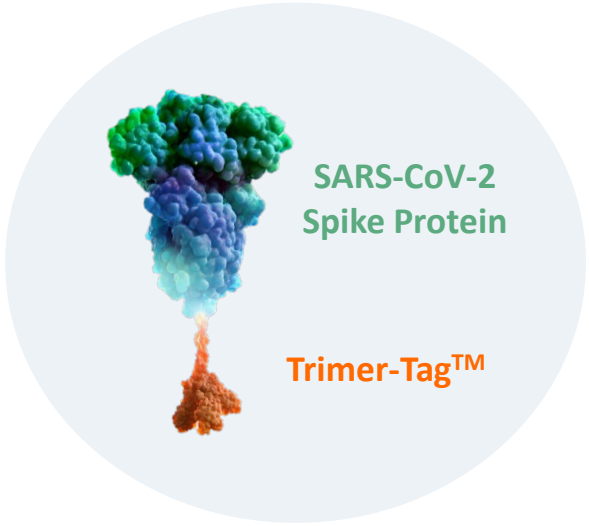
- ✓ **Advanced purchase agreement signed with GAVI** to supply **up to 414 million doses (64 million committed doses)** of SCB-2019 to the **COVAX Facility*** for procurement and global allocation
- ✓ **137 countries (including 92 low- and middle-income countries)** could be eligible for SCB-2019 (CpG 1018/Alum) through COVAX

(1) Data shown for percentage of population who received at least one dose of COVID-19 vaccines. (Share of people who received at least one dose of COVID-19 vaccine (ourworldindata.org)

- COVID-19 Vaccines Global Access, a global initiative aimed at equitable access to COVID-19 vaccines led by UNICEF, GAVI, the Vaccine Alliance, the World Health Organization, the Coalition for Epidemic Preparedness Innovations, and others

Next-Generation COVID-19 Vaccine Strategy

Clover To Utilize ☑ Validated Trimer-Tag™ Platform for Next-Gen COVID-19 Vaccine Development



- ✓ **Validated Platform Technology:** SCB-2019 Phase 2/3 results has validated Trimer-Tag™ approach to COVID-19 vaccine development
- ✓ **Vaccine Efficacy Demonstrated:** Efficacy results from SPECTRA (Ph2/3) study provides basis for future immuno-bridging licensure pathway for second-gen vaccines using Trimer-Tag™
- ✓ **Rapid 'Plug & Play' Development Expected** with more experienced global team & expanded capabilities since 2020

Strain-Change Clinical Proof-of-Concept in 2022:

SCB-2020S (Beta/Prototype Chimeric S-Trimer™) is currently in a Phase 1 clinical trial in South Africa to demonstrate strain-change clinical proof-of-concept for Trimer-Tag™.

Candidate will be evaluated with CpG 1018/Alum as well as Clover's in-house adjuvant CAS-1 (oil-in-water emulsion).

Initial safety & immunogenicity data in **Q4-2022**.

Evaluating Broadly-Protective Candidates (including Bivalent):

Clover is evaluating a **bivalent Omicron + Prototype S-Trimer™ vaccine** as a potentially broadly-protective COVID-19 vaccine candidate.

Initial preclinical results demonstrate proof-of-concept, and advancement of a **multi-valent candidate** to clinical stage is planned.

Numerous Upcoming Milestones for SCB-2019 (CpG 1018/Alum)

Near-Term Commercial Launch

- **2H-2022: Complete regulatory submissions** (China NMPA, EMA, WHO)
- **Global product launches** upon receiving conditional approvals
- **Working Capital Management:** Credit agreement approved by China Merchants Bank for up to US$300 million to support potential working capital needs during commercial launch of SCB-2019*

Upcoming Clinical Data & Trial Initiations

- **SCB-2019 (CpG 1018/Alum) Universal Booster**
  - ❑ **Q3-2022**: Adolescent Phase 2/3 safety & immunogenicity data
  - ❑ **Q3-2022**: Data from Phase 3 heterologous 3rd dose booster trial (CoronaVac™& Comirnaty®)
  - ❑ **Q4-2022**: Data from Phase 3 heterologous 4th dose booster trial (CoronaVac™)
- **SCB-2020S (Beta/Prototype Chimeric S-Trimer™)**
  - ❑ **Q4-2022**: Phase 1 preliminary safety & immunogenicity data

* Drawdown on this agreement is subject to a review of Clover's business condition and changes in Clover's condition may result in early repayment.

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Thank You!