OBI's Advancing & Expanding

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Chairman & CEO

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Safe Harbor Statement

This presentation contains certain forward-looking statements.

These forward-looking statements may be identified by words such as 'believes,' 'expects,' 'anticipates,' 'projects,' 'intends,' 'should,' 'seeks,' 'estimates,' 'future,' or similar expressions or by discussion of, among other things, strategy, goals, plans, or intentions. Various factors may cause actual results to differ materially in the future from those reflected in forward-looking statements contained in this presentation, among others:

1. Pricing and product initiatives of competitors
2. Legislative and regulatory developments and economic conditions
3. Delay or inability in obtaining regulatory approvals or bringing products to market
4. Fluctuations in currency exchange rates and general financial market conditions
5. Uncertainties in the discovery, development, or marketing of new products or new uses of existing products, including without limitation negative results of clinical trials or research projects, unexpected side effects of pipeline or marketed products
6. Increased government pricing pressures
7. Interruptions in production
8. Loss of or inability to obtain adequate protection for intellectual property rights
9. Litigation
10. Loss of key executives or other employees
11. Adverse publicity and news coverage

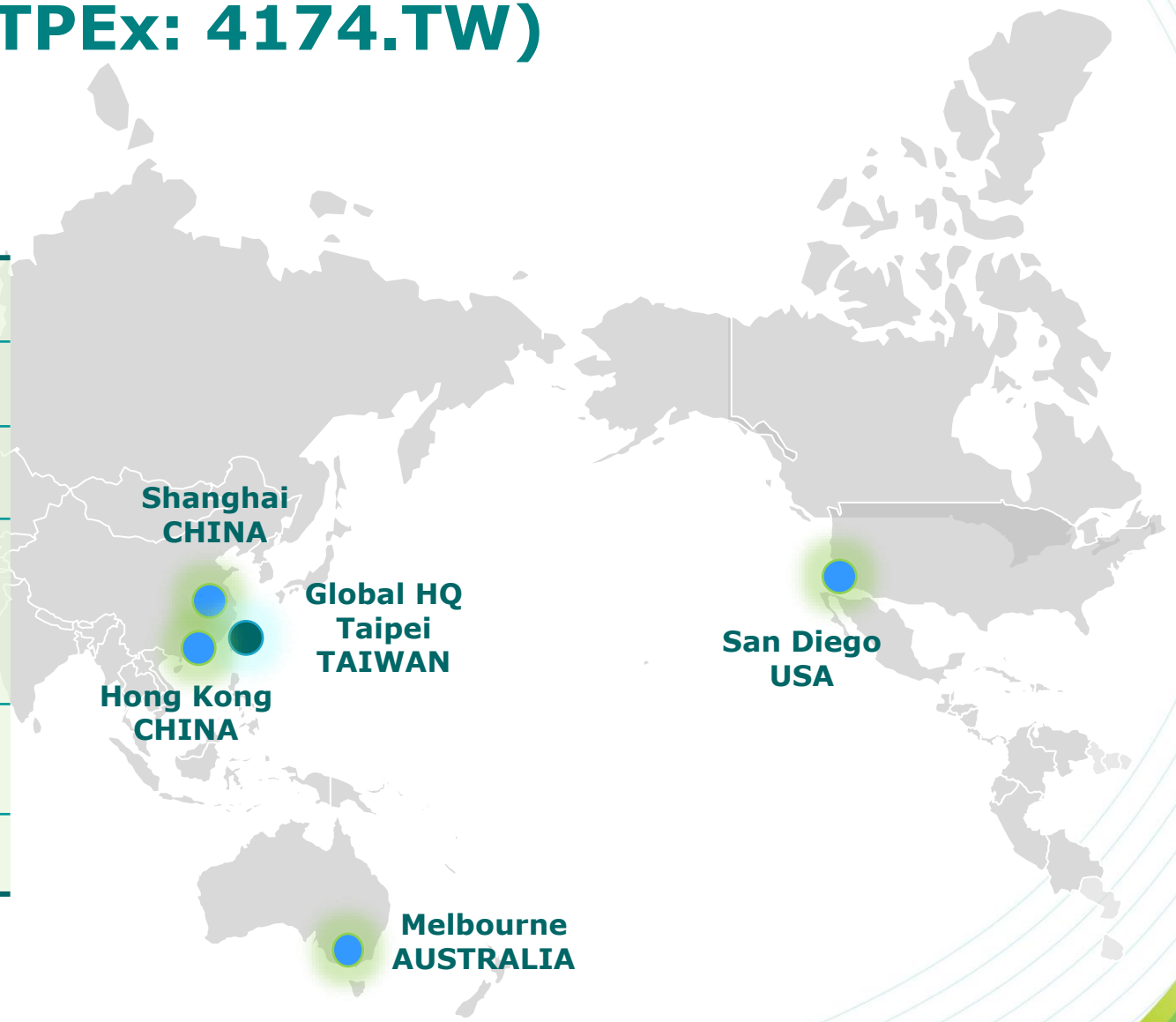
OBI Pharma cautions that this foregoing list of factors is not exhaustive. There may also be other risks that management is unable to predict at this time that may cause actual results to differ materially from those in forward-looking statements. **You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date on which they are made. OBI undertakes no obligation to update publicly or revise any forward-looking statements.**

Any statements regarding earnings growth is not a profit forecast and should not be interpreted to mean that OBI's earnings or earnings per share for this year or any subsequent period will necessarily match or exceed published earnings or earnings per share forecasts of OBI Pharma, Inc.

OBI Pharma, Inc. (TPEx: 4174.TW)

www.obipharma.com

Founded:	**April 29, 2002**
IPOon TPEx:	**March 23, 2015**
Market Cap Nov 5, ’ 21:	**~US$73M ~(NT$22B)**
Fund Raised in 2013:	**~US$50M (~NT$1.5B)**
Fund Raised at IPO:	**~US$207M (~NT$6.2B)**
Fund Raised in 2019:	**~US$67M (~NT$2B)**
NetCash on Hand: (Sep 30, ’ 21 ; parent company only)	**~US$57M (~NT$1.7B)**
Employees:	**121**



OBI data on file

TARGETS: Globo H (+), SSEA-4 (+), AKR1C3 (+), and various other potential targets

OBI Pharma Has Evolved Into an Oncology Company With a Diversified Portfolio of Novel Therapies

mAb: monoclonal antibodies ADC: Antibody Drug Conjugates BiAb: Bi-specific antibodies CAR-T: Chimeric Antigen Receptor T cell

Agenda


Product Lines' Progresses
Affiliated Enterprises
Sustainable development and new layout

OBI Pharma's Diverse Cancer Pipeline

PRODUCT	TYPE	TARGET	CANCER	PRE-CLINICAL	PHASE 1	PHASE 2	PHASE 3
Adagloxad Simolenin	Vaccine	Globo H	Breast (TNBC)	GLORIA Global Phase 3 TNBC Study			
OBI-888	mAb	Globo H	Multiple Cancers				
OBI-999	ADC	Globo H	Multiple Cancers				
OBI-3424	Prodrug	AKR1C3	Multiple Cancers				
OBI-833	Vaccine	Globo H	Multiple Cancers				
OBI-866	Vaccine	SSEA-4	Multiple Cancers				

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GLORIA

Adagloxad Simolenin（OBI-822）

First-in-Class Active Immunotherapy
Stimulating Globo H Antibodies

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Adagloxad Simolenin Global Phase III Trial

Design

- Randomized
- Open-label
- Standard of care as the control

Population

- Patients with High-Risk, Early-Stage Globo H-Positive Triple-Negative Breast Cancer

Objective

- Primary endpoint:

  IDFS (Invasive disease-free survival)

Current progress

- Enrolling sites: USA, Taiwan, Hong Kong, Australia, Ukraine, Russia, Korea, China, S. Africa.
- Pending sites: Brazil, Mexico, Peru, Germany, Poland, Spain.

OBI-888

First-in-Class Monoclonal Antibody Targeting
Tumor Expression of Globo H

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OBI-888 Phase II Study, Cohort Expansion

- OBI-888 monotherapy at 20 mg/kg weekly
- Advanced cancer; no effective SOC available; measurable disease; ECOG 0-1
- Patient tumor sample must have an H score of Globo H ≥ 100 in an FDA IDE-approved assay (NeoGenomics)
- H0 5%; H1 25%; alpha 0.05%; power 90%; ≥1/9; ≥4/30

Phase II Study Centers

- 6 sites in the US
- 3 sites in Taiwan

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- *The basket cohort includes any solid tumor type other than those included in Cohorts 1-4.
- A Phase I/II, Open-Label, Dose Escalation and Cohort Expansion Study Evaluating the Safety, Pharmacokinetics (PK), Pharmacodynamics (PD), and Therapeutic Activity of OBI-888 in Patients With Locally Advanced or Metastatic Solid Tumors. ClinicalTrials.gov Identifier: NCT03573544

OBI-999

Antibody-Drug Conjugate (ADC)Targeting Tumor Expression of Globo H

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OBI-999 Phase II Study, Cohort Expansion

- OBI-999 monotherapy at 1.2 mg/kg on Day 1 of a 21-day cycle
- Advanced cancer; no effective SOC available; measurable disease; ECOG 0-1
- Patient tumor sample must have an H score of Globo H ≥ 100 in an FDA IDE-approved assay (NeoGenomics)
- H0 10%; H1 25%; one-sided alpha of 0.12, 72% power; ≥1/9; ≥4/19

Phase II Study Centers

- 7 sites in the US
- 4 sites in Taiwan

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- IDE, Investigational Device Exemption.
- Clinicaltrials.gov. A Phase 1/2, Open-Label, Dose-Escalation and Cohort-Expansion Study Evaluating the Safety, Pharmacokinetics, and Therapeutic Activity of OBI-999 in Patients With Advanced Solid Tumors. NCT04084366.

OBI-3424

Small Molecule Prodrug Targeting Tumors
Expressing the AKR1C3 Enzyme

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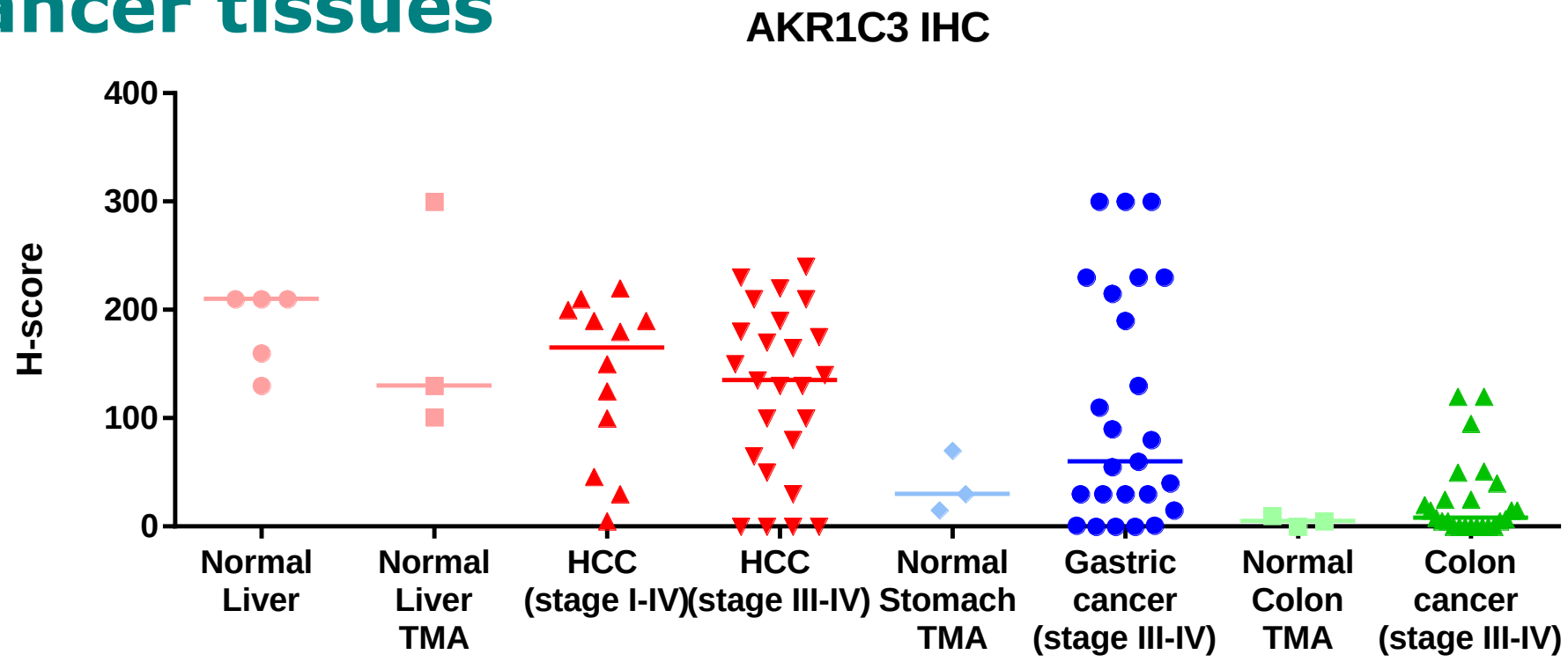
OBI-3424
Survey of AKR1C3 levels in human normal and cancer tissues



Median	210	130	165	135	30	60	5	8
N	5	3	12	25	3	25	3	25

- Immunohistochemistry (IHC) staining assay was used to survey the expression levels in various human tissue types.
- OBI Data on file.

OBI-3424 Phase II Study, Cohort Expansion

Pancreatic Cancer

Basket Cohort*

- OBI-3424 monotherapy at 12 mg/m2 on Day 1 of a 21-day cycle
- Advanced cancer; no effective SOC available; measurable disease; ECOG 0-1
- Patient tumor sample must have an H score of AKR1C3 ≥135 in an IHC Assay (NeoGenomics)
- H_0 10%; H_1 25%; one-sided alpha of 0.08 and 80% Power; ≥2/16; ≥6/31

Phase II Study Centers

- Up to 9 sites in the US

- *The basket cohort includes all other solid cancers other than pancreatic cancer.
- A Phase I/II Study of OBI-3424 in Subjects with Advanced Solid Tumors. ClinicalTrials.gov Identifier: NCT03592264

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OBI-833

New Generation Active Immunotherapy
Stimulating Globo H Antibodies

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OBI-833/821 Phase II Study (Non-small cell lung cancer)

Design

- Randomized
- Open-label
- EGFR TKI therapy as the control

Population

- Patients with Globo H-positive, inoperable, advanced or metastatic NSCLC who have achieved PR or SD after first-line EGFR TKI therapy

Objective

- Primary endpoint: PFS (Progression-free survival)

Current progress

- The IND application will be submitted to Taiwan FDA/MOHW in the near future.

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OBI-833/821 Phase II Investigator-Initiated Trial (Esophageal Cancer)

Design

- Randomized
- Open-label
- Standard of care as the control

Population

- Patients with Globo H-positive, operable, locally advanced esophageal cancer who have high risk for recurrence after surgery

Objective

- Primary endpoint: RFS (Recurrence-free survival)

Current progress

- The IND application was approved by Taiwan FDA/MOHW in October 2021.

OBI-866

SSEA-4 targeting therapeutic cancer vaccine

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OBI-866 Phase I Study

Design

- Open-label

Population

- Patients with advanced/ metastatic cancers of the ovary, kidney, brain, pancreas, breast or lung

Objective

- To evaluate safety, tolerability, immunogenicity and preliminary efficacy

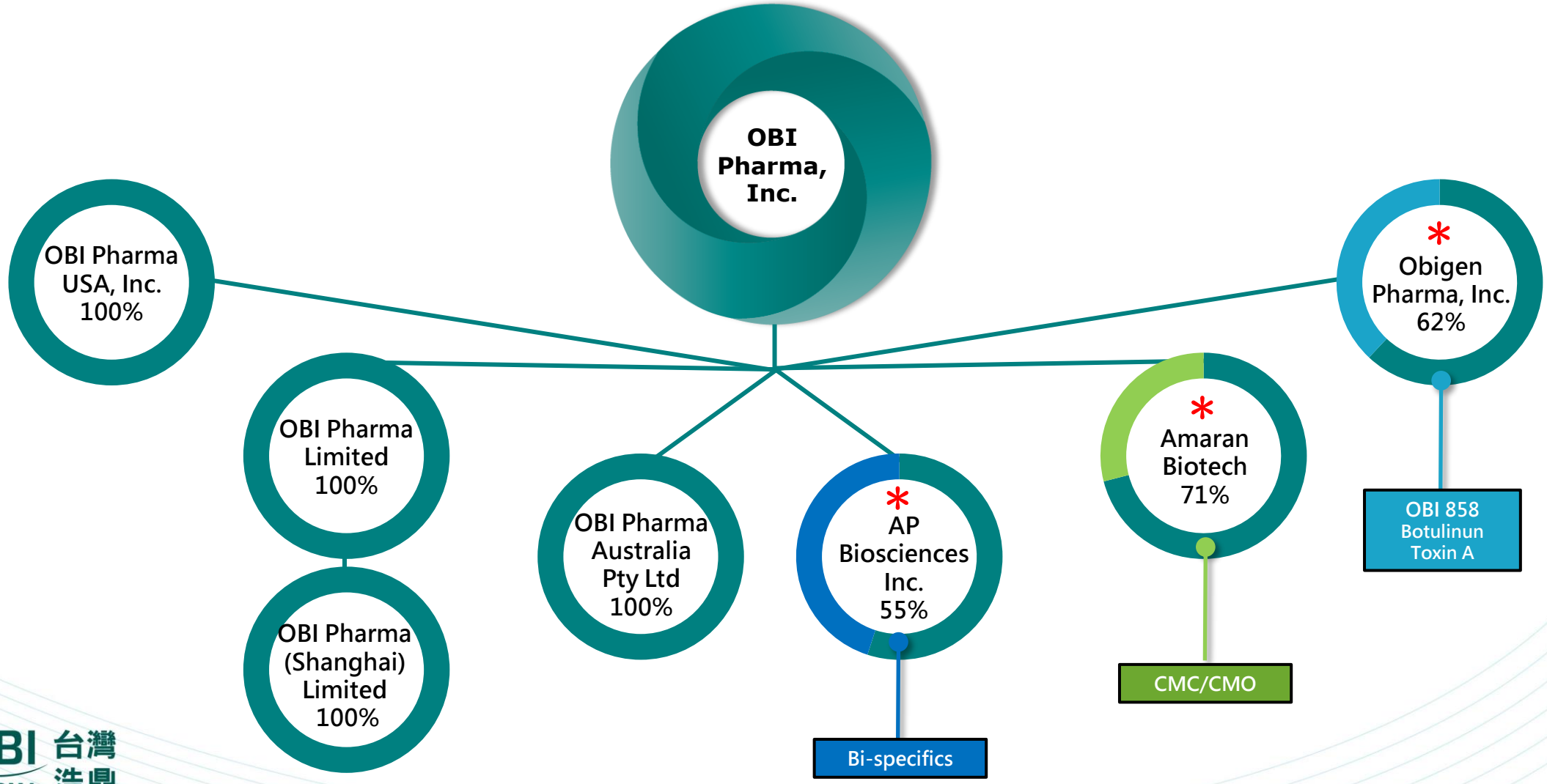
Current progress

- This phase 1 trial was started on Aug 25, 2020 and is actively enrolling subjects.
- The patent for OBI-866 was approved in Taiwan in October 2021.

Agenda


Product Lines' Progresses
Affiliated Enterprises
Sustainable development and new layout

OBI Pharma Affiliated Enterprises(2021) Equity investments (%)



AP Biosciences, Inc.

Developing antibody and protein drugs with an integrated technology platform designed by ourselves.

APBio bispecific antibody development timeline

PRODUCT	Format	Application	2021	2022	2023	2024	2025	2026	2027	2028	Development Partner
IBI302	Bi-functional Fc fusion	wet AMD (macular degeneration) DME (Diabetic Macular Edema)	PII (efficacy)			PIII (pivotal)					Innovent Biologics (world-wide)
AP505	Bi-specific antibody fusion	Targeted Immuno-oncology	CLD/TK/ Tox/IND		PI/II (safety/efficacy)			PIII (pivotal)			Tasly Biopharma (China only)
AP201	Bi-specific antibody	Dual Immuno-oncology	CLD/TK/ Tox/IND		PI/II (safety/efficacy)			PIII (pivotal)			Tasly Biopharma (China only)
AP203	T-cube bsAb	Dual Immuno-oncology	CLD/TK/ Tox/IND		PI/II (safety/efficacy)			PIII (pivotal)			In-house
AP601	T-cube bsAb	Targeted immuno-oncology	Discovery	CLD/TK/Tox/IND		PI/II (safety/efficacy)			PIII (pivotal)		In-house
AP402	T-cube bsAb	Targeted immuno-oncology	Discovery & engineering		CLD/TK/Tox/IND		PI/II (safety/efficacy)			PIII (pivotal)	In-house

AP505: IND-filing (for US/TW) expected by end of Q2, 2022; APBio will be conducting clinical trials for outside China market
AP203: IND filing expected by end of Q2, 2022; APBio will be conducting clinical trials for global market
T-cube bsAb: Target-dependent, Teff/Treg-modulating bispecific antibody

AP203 (PD-L1 x CD137 Bispecific Antibody)

- killing PD-L1-expressing cancer cells through localized activation of T cells

Mechanism of Action

For PD-L1-dependent activation of CD137 on cytotoxic & memory T cells in the tumor microenvironment, and to bridge the activated T cells to the cancer cells for efficient killing without induction of cytokine storm.

Indications

For PD-L1-expressing locally, advanced or metastatic non-small cell lung cancer, head and neck squamous cell carcinoma & triple negative breast cancer.

Clinical Study Design

A multi-center, open, single-arm phase I/II clinical trial will be started in 2022, to determine the maximum tolerated dose (MTD) and phase II recommended dose (RP2D) of AP203, for evaluation of safety & efficacy.

AP505 (PD-L1 x VEGF Bispecific Antibody)

- activates T cells while inhibiting angiogenesis with one single antibody

Mechanism of Action

To activate T cells through blocking of PD-1/L1, and to promote lymphocyte infiltration into the tumor through inhibition of VEGF pathway, to enhance tumor toxic effect in the tumor microenvironment.

Indications

For locally, advanced or metastatic non-small cell lung cancer & hepatocellular carcinoma

Clinical Study Design

A multi-center, open, single-arm phase I/II clinical trial will be started in 2022, to determine the maximum tolerated dose (MTD) and phase II recommended dose (RP2D) of AP505, for evaluation of safety & efficacy for NSCLC and liver cancer

Amaran Biotech

A contract manufacturing company established in 2010 to provide quality solutions in drug process development, analytical services and cGMP manufacturing of high-value biopharmaceuticals.

Business Plan - Milestones

2013-2017	2018-2021	2022-2025	2025-2026
First Phase DS Plant Set-up	**Second Phase Inj Plant Set-up**	**Third Phase Inj Plant CDMO**	**Fourth Phase Inj Plant Expansion**

1. API facility
2. Analytical Lab

PIC/S GMP Taiwan FDA

3. Purification Suite for Protein and Natural Product
4. Drug Product Facility
5. Robotic Fill Finish Facility

6. 2nd Fill Line
7. Lyophilization Module

- OBI Carbohydrate Vaccine DS Production & Testing

Adagloxad Simolenin, OBI-833, OBI-866

- Adjuvant Global Marketing

CRODA

- Analytical and Stability Study Services
- Injectable production for Clinical Trials and Commercial purpose
- Authority Inspection
- Global Commercial Supply for Injectables and Adjuvant

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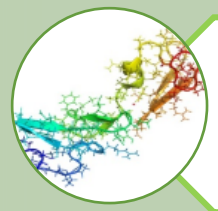
Specialty Biopharma CDMO

Biopharmaceutical Substance and Natural Product
Enzymatic Carbohydrate Synthesis, Small-molecular-protein Conjugation, Isolation, Purification, Lyophilization



Vaccine Adjuvant
High quality plant-derived immunological adjuvant

Analytical Testing for Product Release and Stability
Potency, Chemical, Microbial and Biological

Aseptic Fill & Finish for Vial, Syringe, Cartridge
Gloveless and Robotic Isolated System

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Adjuvant Business Potential Partnership with Croda

Technology
Purification Process Development

Market Penetration
Global Sales Team

Collaboration
Major Player

Commercial Supply
Scalable

2018 2021 2023 2025

Adjuvant QS-21 Global Marketing

CRODA

Croda International; Funded 1925
FTSE100; 4,300 employees in 37 countries
Revenue 2020: £1.39B (+0.9% Y/Y)

2018 Acquisition

Brenntag Biosector; Funded 1939

BILL & MELINDA GATES foundation
-mAbs Therapeutics, Inc.
Enesi Pharma
SANOFI
sinovac

Commercial volume for one product would be in the 100's of grams annually

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Obigen Pharma, Inc.

Novel botulinum toxin for cosmetic and medical applications

OBI-858 Product Executive Summary

OBI-858 : Best-in-class Botulinum Type A toxin Product

Plant Construction

- Drug substance and product located in Taiwan Hsinchu biomedical park and Tainan science park
- A State-of-the-art PIC/s cGMP facility with high potency products
- Dedicated space and isolator-based manufacturing
- Best-in-class fermentation, purification and fill-finish systems

➢ Plant design will meet CDC and cGMP regulations

➢ Drug substance and product plant construction expected to be completed in Q2 and Q3 2022

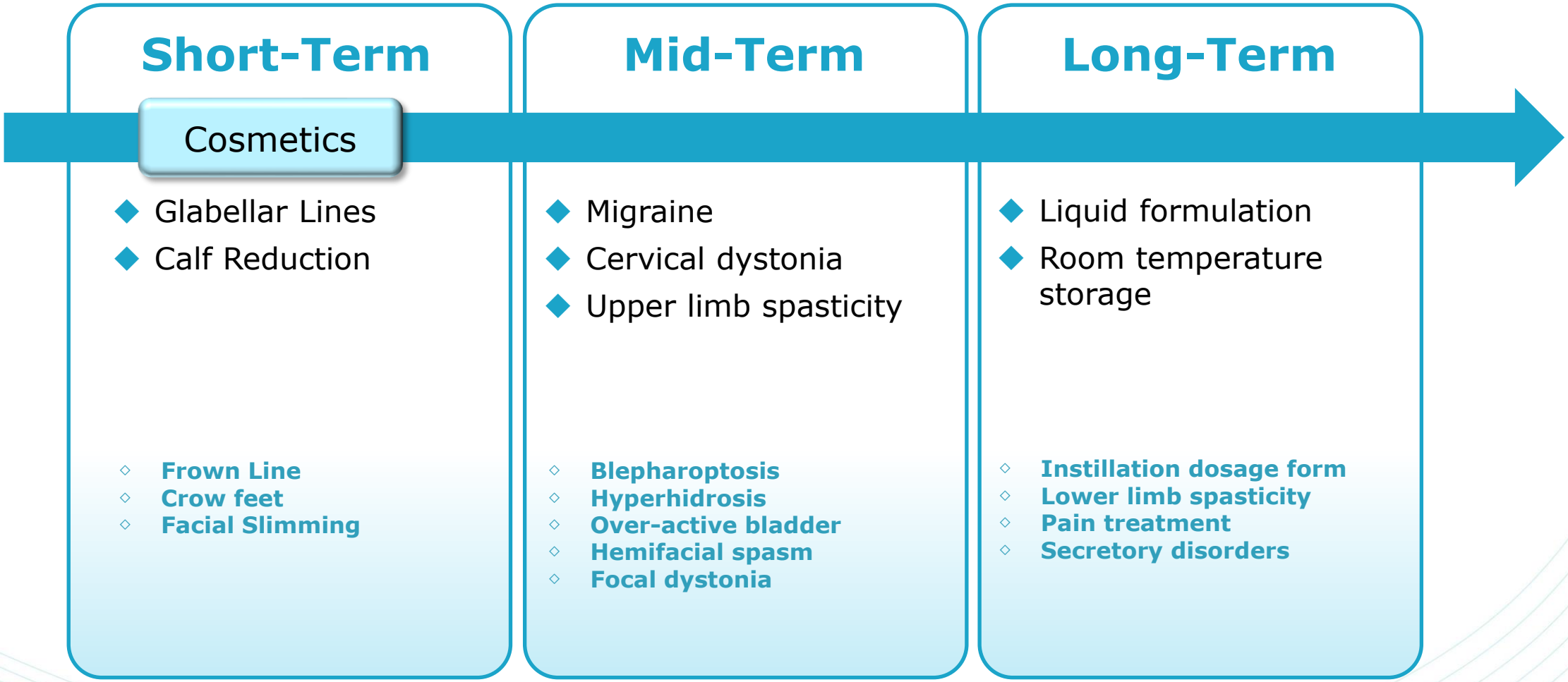
➢ The new plant will supply clinical trials materials and commercial products

Phase I Clinical Study

- OBI-858-001 is a single injection, open label, dose escalation study
- To evaluate the safety, tolerability and preliminary efficacy of 3 doses (10U, 20U, 30U) of OBI-858 in subjects with moderate to severe glabellar lines
- A total of 12 subjects in each cohort. The safety and efficacy assessments will be conducted for a total of 24 weeks

➢ The study was completed, and clinical trial report will be finalized in December 2021

OBI-858 Product Development Strategy



Agenda

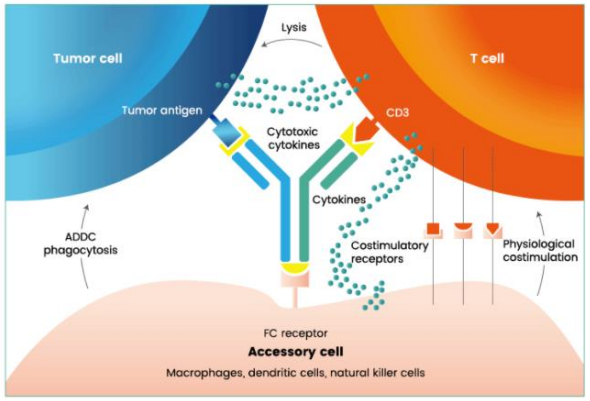

Product Lines' Progresses
Affiliated Enterprises
Sustainable development and new layout

OBI Innovation Base

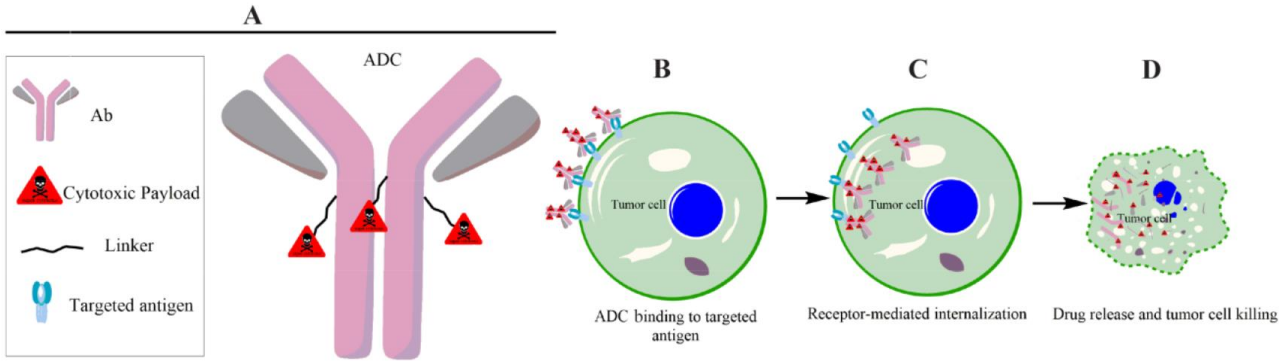
Sustainable development

★Research and develop second-generation products

★Development of new targets

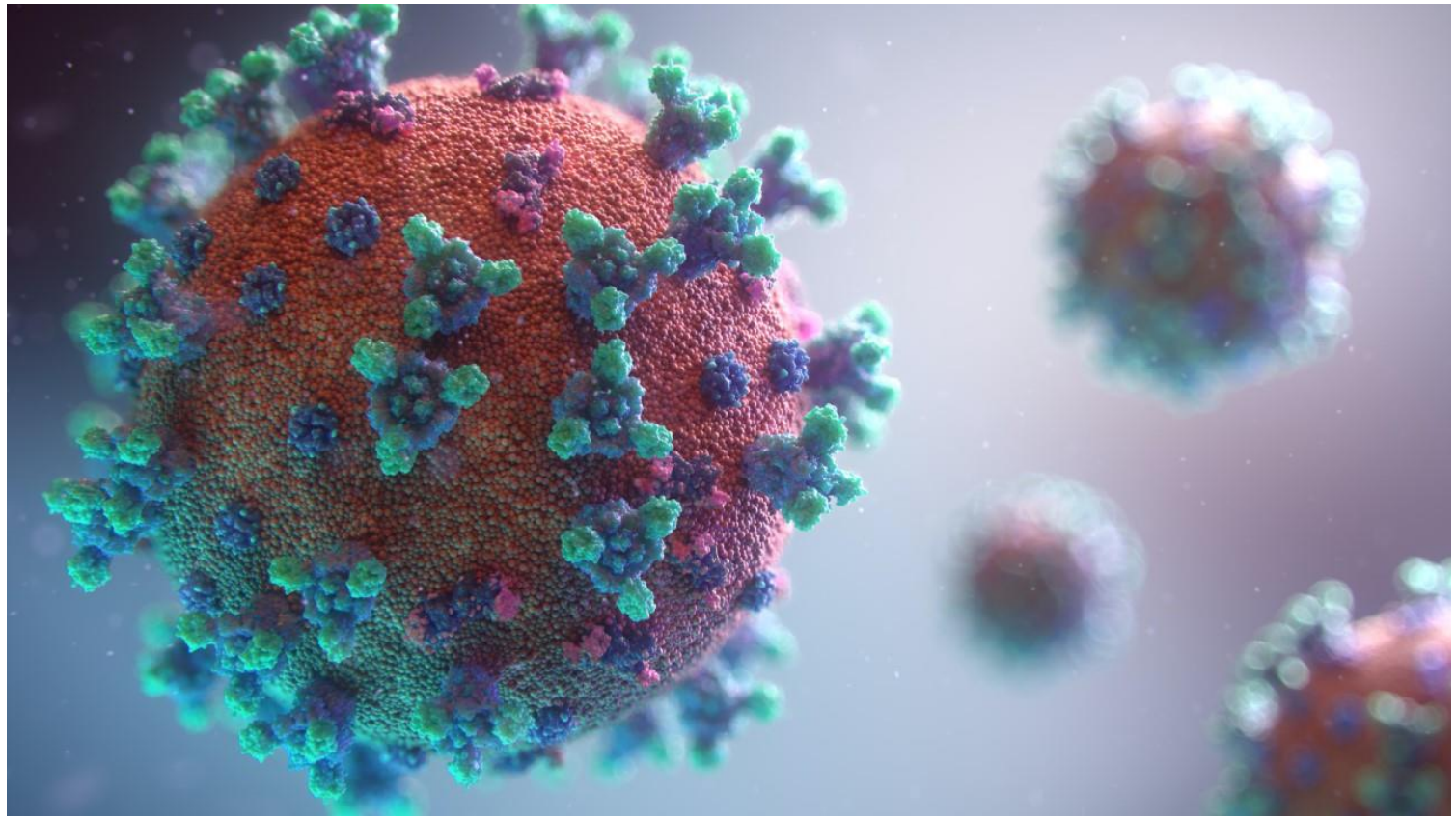


Bispecific Antibody

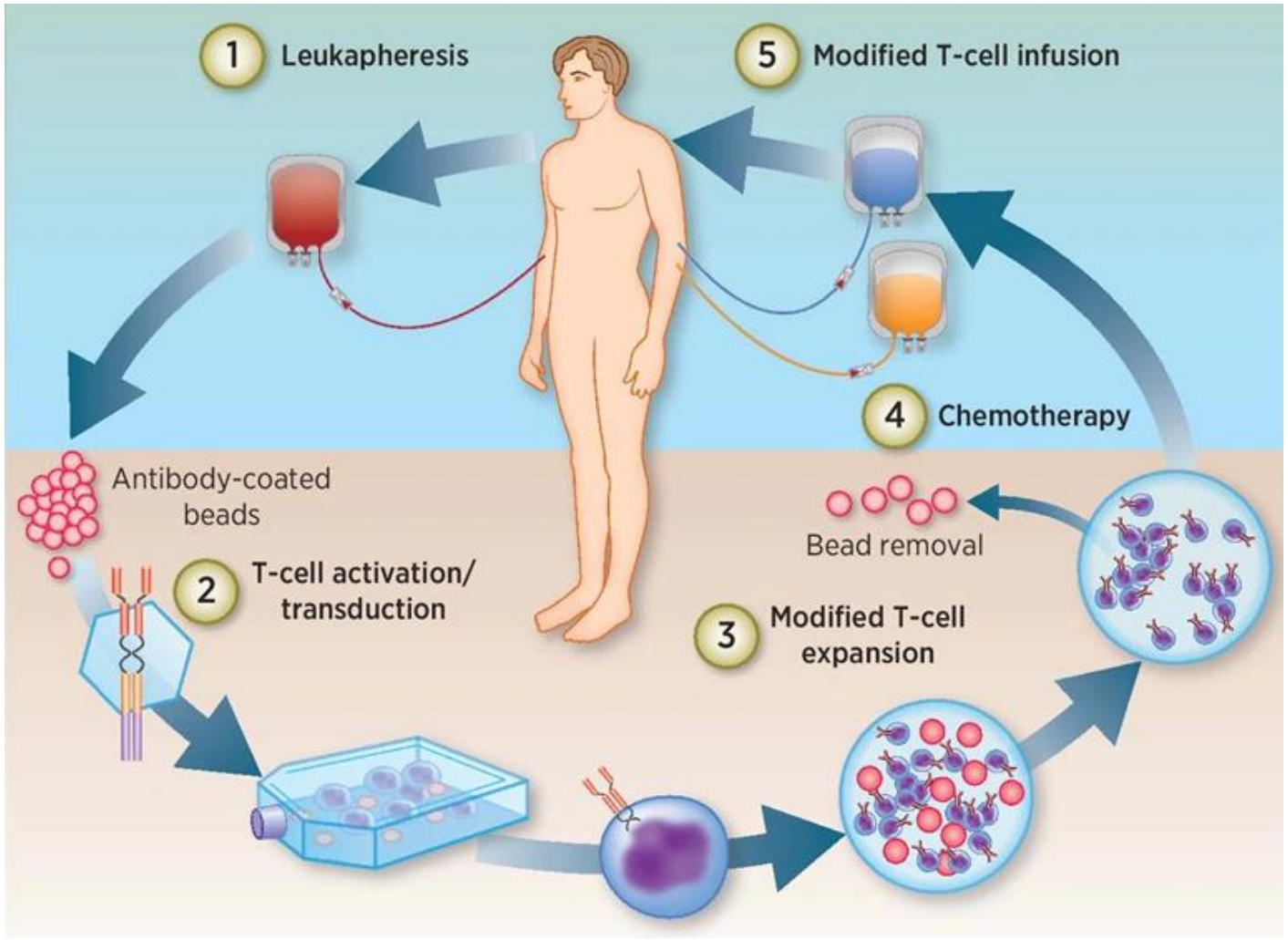


Antibody Drug Conjugate

COVID-19

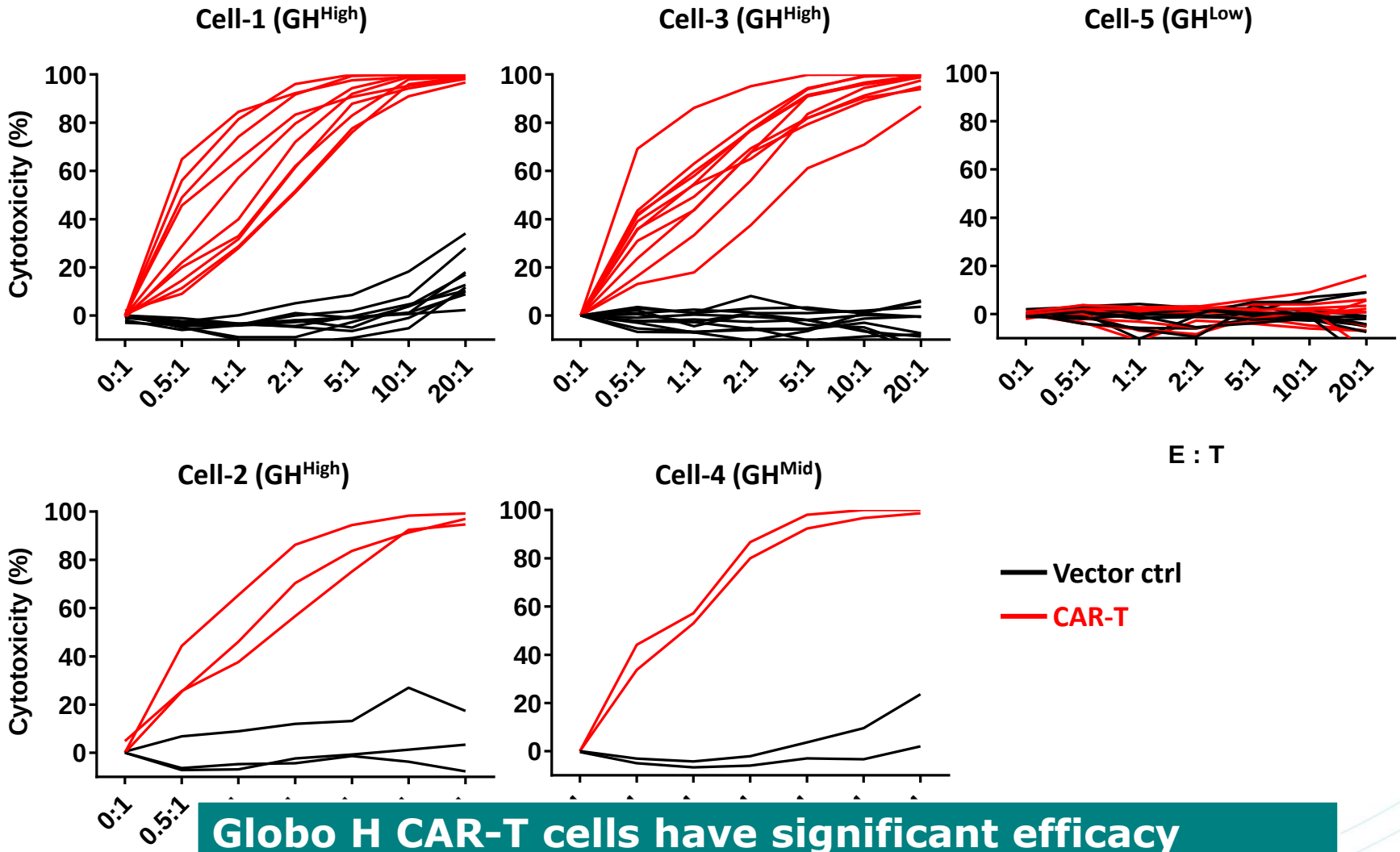


CAR-T



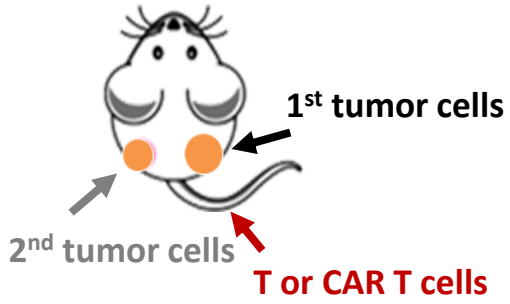
https://askhematologist.com/car-t-cell-therapy/

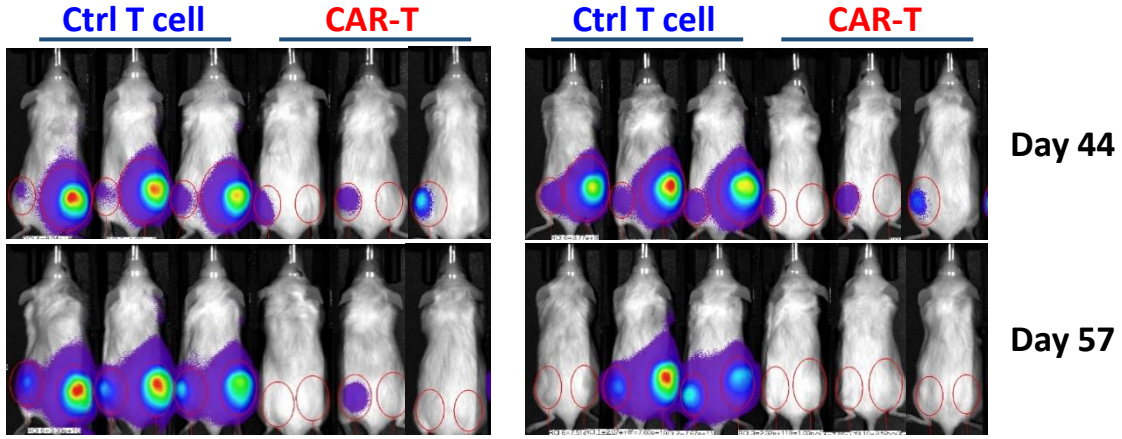
Proof of concept (in vitro results)

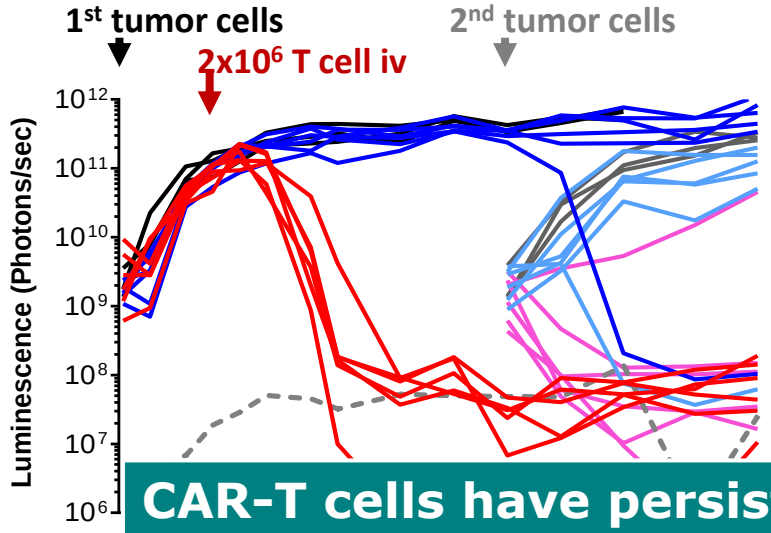


Globo H CAR-T cells have significant efficacy against Globo H-positive tumor cells *in vitro*.

CAR-T cells in tumor model







CAR-T cells have persistent efficacy during 2nd tumor challenge in tumor xenograft model.

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Thank You

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