

Supplementary Information for Financial Results FY12/23

Feb. 13, 2024



To accelerate drug discovery and development of mAb
for therapeutics to overcome current medical unmet-needs

Chiome Bioscience Inc.



- 1. Overview of FY12/23 “Financial results”**
- 2. Overview of FY12/23 “Operation highlights”**

Appendix.

Corporate information

Pipeline information



Overview of FY12/23 “Financial results”

Financial results: Profit and Loss



(JPY in millions)

	FY2022	FY2023	Increase (decrease)	Main reasons for increase / decrease
Net sales	630	682	51	
Drug Discovery & Development	-	-	-	
Drug Discovery Support	630	682	51	The number of transactions and projects is steadily increasing
COS/SGA	1,889	1,887	(1)	
R&D Expense	1,135	1,051	(83)	CMC-related cost for CBA-1535 was recorded in FY2022
Other costs	753	835	81	Increase in sales cost due to business growth in drug discovery support business
Operating Loss	(1,258)	(1,205)	53	
Ordinary Loss	(1,243)	(1,217)	26	
Net Loss	(1,242)	(1,220)	22	

Financial results: Balance Sheet



(JPY in millions)

	As of Dec. 31, 2022	As of Dec. 31, 2023
Current assets	2,092	1,629
(Cash on hand in banks)	1,727	1,325
(Other current assets)	364	303
Non-current assets	123	122
Total assets	2,215	1,751
Current Liabilities	370	539
Non-current liabilities	54	54
Total liabilities	424	593
Total net assets	1,790	1,157
Total liabilities and net assets	2,215	1,751

Financial results: Cash Flows



(JPY in millions)

	FY2022	FY2023
Cash flows from operating activities	(1,191)	(1,069) *1
Cash flows from investing activities	-	0
Cash flows from financing activities	1,127	667
Net increase (decrease) in cash and cash equivalents	(63)	(401)
Cash and cash equivalents as of the beginning of the year	1,790	1,727
Cash and cash equivalents as of the end of the year	1,727	1,325

*1 Cash flows from operating activities

Expenses includes clinical development costs for CBA-1205 and CBA-1535, research costs for drug discovery, and SGA expenses.



Overview of FY12/23 “Operation highlights”



1 PR(Partial Response) was confirmed in hepatocellular carcinoma in the second part of CBA-1205 Phase 1 study.

SD (stable disease) assessment with tumor shrinkage in a Malignant Melanoma patient from the first part of CBA-1205 Phase 1 study, has been lasting for more than 30 months.

*Final analysis results yet to be completed.

Promoting PCDC out-licensing activities targeting overseas pharmaceutical companies who already own ADC technology.

Increased trading in the drug discovery support business, resulting in net sales of ¥682 million in FY12/2023

(compared to the forecast: 106%, to the previous: 108%, increased for 5 consecutive years)

New entrustment agreement with Takeda Pharmaceutical Company Limited Responsible for technical support/antibody generation using ADLib® system

(concluded February 13, 2024)



Drug Discovery and Development – Pipeline

CBA-1205	<ul style="list-style-type: none">✓ 1 PR(Partial Response: tumor shrinkage of 30% or more) was confirmed in hepatocellular carcinoma in the second part of the study.✓ SD (stable disease) assessment with tumor shrinkage in a Malignant Melanoma patient from the first part of CBA-1205 Phase I study, has been lasting for more than 30 months. Dosing is still ongoing.✓ Due to the high tolerability of the study drug being confirmed in the first part and several long-term dosing cases, additional study drugs were manufactured and now available.
CBA-1535	<ul style="list-style-type: none">✓ The safety and efficacy are being evaluated with dose escalation for patients with solid tumors.✓ The second part is rescheduled to open after obtaining the efficacy signals in the first part (expected to be in 2024)
PCDC	<ul style="list-style-type: none">✓ Promoting out-licensing activities targeting overseas pharmaceutical companies who already own ADC technology.

Pipeline - Out-Licensed programs

ADCT-701	<ul style="list-style-type: none">✓ IND submission completed for Phase I clinical studies.✓ NCI is conducting the clinical study for paediatric neuroendocrine cancer
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Drug Discovery Support Business

Deals with pharmaceutical companies	<ul style="list-style-type: none">✓ Net sales of ¥682 million in FY12/2023 (106% of forecast, 108% year-on-year)✓ Entrustment agreements with domestic pharmaceutical companies and a diagnostic drug company, as well as an individual agreement with National Research and Development Agency. Transactions under the agreements are expected to contribute to earnings in fiscal year 2024 and beyond.✓ A new entrustment agreement has been concluded with Takeda for the purpose of providing prompt research support for the generation of antibodies.
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Drug Discovery and Development - Pipeline



Out-Licensed Product

Code	Target	Therapeutic Area	Basic research, Drug Discovery	Preclinical Study	Phase 1	Partner
ADCT-701 (LIV-1205 ADC)	DLK-1	Oncology /ADC				2017.9~

In-house developed product

★ **First in class**

★★ **World first drug discovery modality moving into clinical phase**

Code	Target	Therapeutic Area	Basic research, Drug Discovery	Preclinical Study	Phase 1	Status
★ CBA-1205 (ADCC enhanced)	DLK-1	Oncology				Phase 1
★★ CBA-1535 (Tribody™)	5T4×CD3×5T4	Oncology				Phase 1

License candidate and drug discovery project

Code	Target	Therapeutic Area	Basic research, Drug Discovery	Preclinical Study	Phase 1	Status
★ PCDC	CDCP1	Oncology/ADC				Licensing opportunity
PTRY	5T4×CD3×PD-L1	Oncology				Data is being obtained to prepare to stage up to clinical stage
BMAA	SEMA3A	undisclosed				Licensing opportunity
LIV-2008 /2008b	TROP-2	Oncology				Licensing opportunity
PFKR	CX3CR1	Autoimmune disease				Out-licensing activities to begin in Q4
New PXL	CXCR1/2/3/5	Oncology				Out-licensing activities to begin in Q4
Discovery PJ/ Drug discovery research	Undisclosed	Oncology, Ophthalmology, etc.				—

ADCT-701 Out-Licensed



ADCT-701* (Humanized anti-DLK1 antibody ADC)

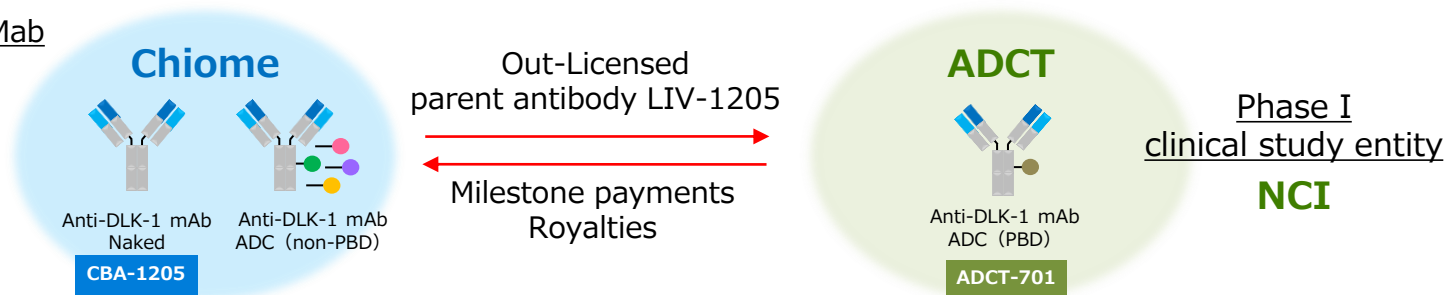


Therapeutic Area	Liver cancer, lung cancer, neuroblastoma etc.
Origin	An Antibody Drug Conjugate (ADC) form of LIV-1205 that was licensed out to Switzerland-based ADC Therapeutics SA in September 2017.
Patent	Granted in Japan, US, EU, China etc. (Humanized anti-DLK1 antibody)

- ADCT-701 is an antibody-drug conjugate of the antibody LIV-1205 developed by Chiome and PBD* (*Pyrrolobenzodiazepine : Drug with anti-tumor properties)
- IND submission completed for Phase I in the USA. The clinical study entity has transferred to National Cancer Institute (NCI) in the USA and preparation for the clinical study for paediatric neuroendocrine is in progress.

[Antibody Drug Conjugate ADCT-701 in Neuroendocrine Tumors and Carcinomas - Full Text View - ClinicalTrials.gov](#)

Rights of Anti-DLK1 Mab

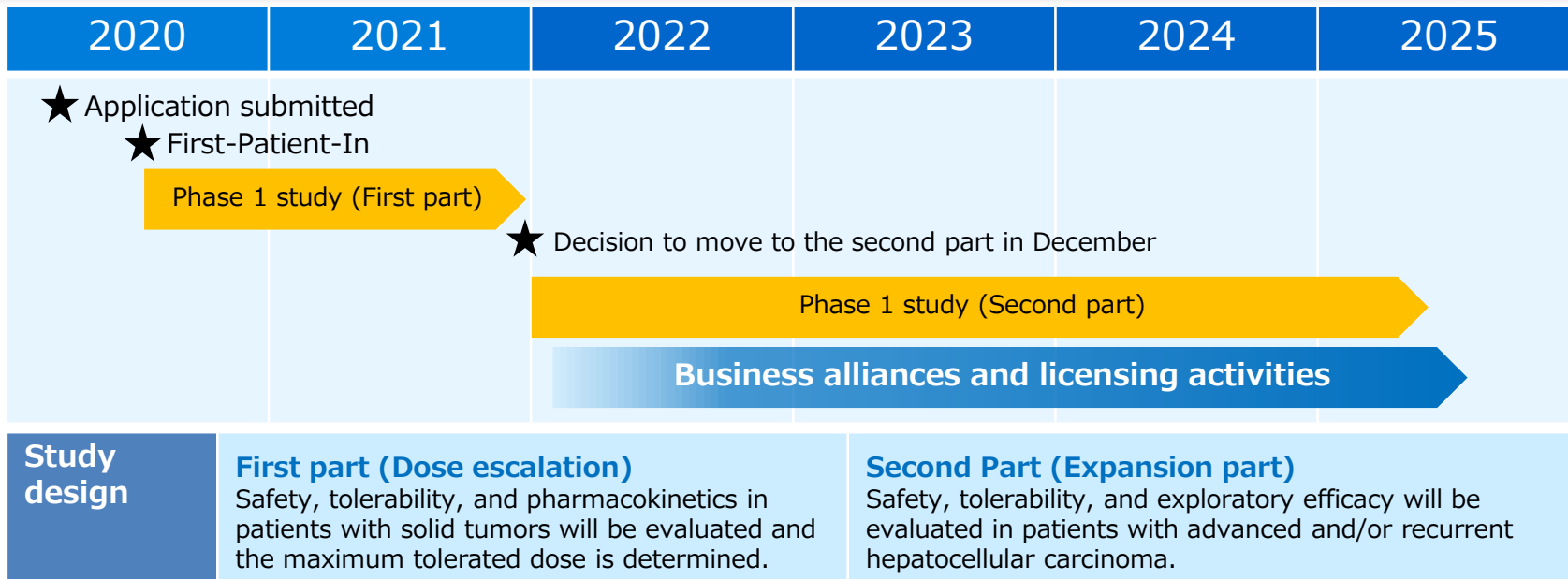


Chiome has right to develop ADCs other than PBD, and it opened up the possibility of strategic development of anti-DLK-1 antibody.

CBA-1205 Phase 1 study



Confirmation of 1 PR in HCC patient (preliminary report)
Additional manufacturing of study drugs to respond to long term dosing cases is complete



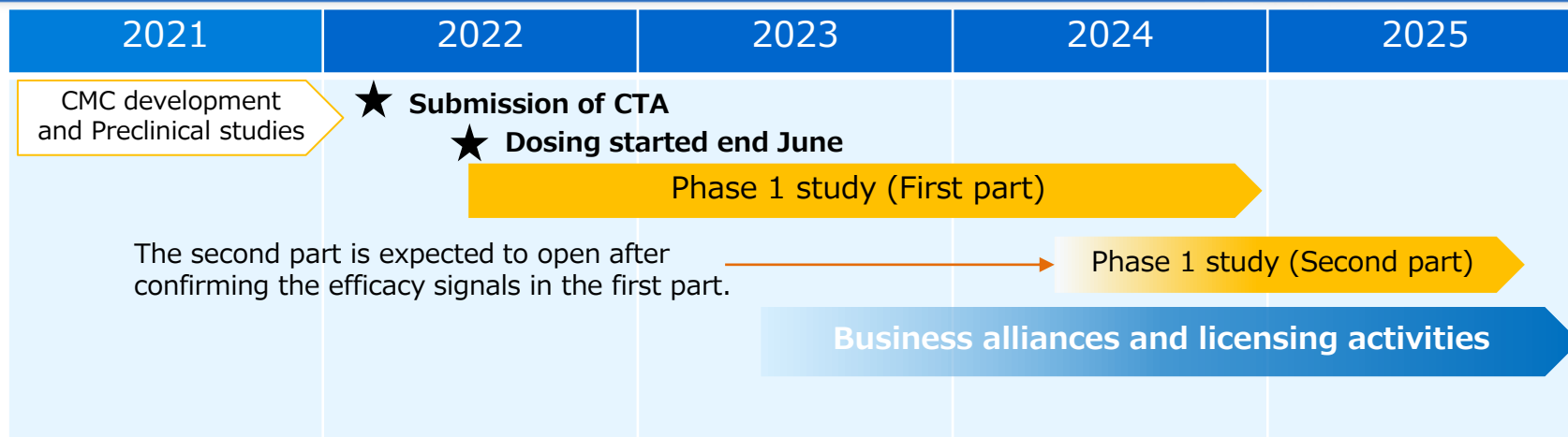
- No serious adverse event reported
- SD (stable disease) assessment with tumor shrinkage in a Malignant Melanoma patient from the first part of CBA-1205 Phase I study, has been lasting for more than 30 months. Dosing is still ongoing.

- 1 PR(Partial Response: tumor shrinkage of 30% or more) was confirmed in hepatocellular carcinoma in the second part of the study.
- Manufacturing 2nd batch of study drugs to secure longer-term dosing cases.
- Analyzing the scientific relationship between PR cases and the dosing of the study drug to verify its therapeutic potential.
- Amended the enrollment criteria in the second part and extended the study period (no change in the out-licensing schedule)

CBA-1535 Phase 1 study



The first part of CBA-1535 Phase I study is in progress



Study design

First part (single agent)

Target: Solid cancer patients

- Starting to administer a low dose in increments to find the maximum dose that can be safely administered.
- Evaluate initial drug efficacy signals

Second part (combined use with cancer immunotherapy drugs)

Target: Solid cancer patients

- Administer the dose that was confirmed to be safe in the first part in increments.
- Find the maximum dose that can be safely administered when combined with cancer immunotherapy drugs (IOs)
- Evaluate early drug efficacy signals when combined

Aims of this development plan

- This study is designed to confirm if CBA-1535 satisfies clinical needs such like safety and efficacy in the fastest manner by adopting combination use of IO in Phase 1
- Confirmation of safety in this study as a T Cell engager will be a milestone for Tribody™ platform.



First in class

PCDC (humanized anti-CDCP1 antibody for antibody drug conjugate)

Origin	Humanized anti-CDCP1 antibody discovered by Chiome's proprietary antibody technologies.
Therapeutic Area	Solid tumors (lung, colorectal, pancreatic, breast, ovarian etc.)
Expectation	CDCP1 is a First-in-class therapeutic target highly expressed in broad range of solid tumors, including standard-of-care resistant cases. High efficacy and safety expected from binding and toxicological profiles of the antibody.
Patent	"ANTI-CDCP1 ANTIBODY" : The international patent application is filed under the PCT.

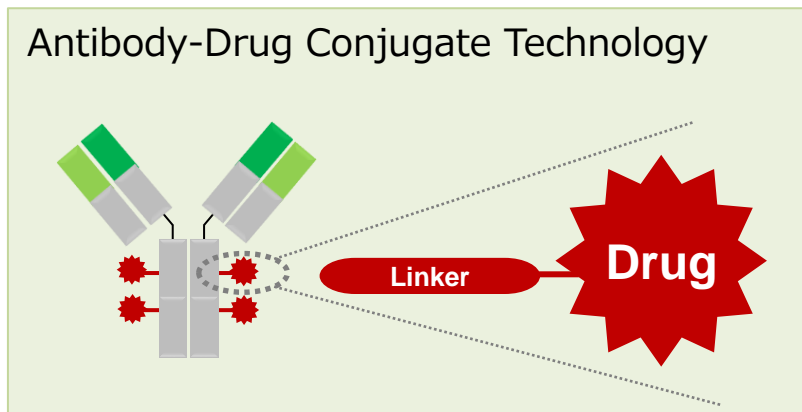
- Promoting out-licensing activities, mainly in the field of ADC
- Pharmacological data of animal model drug efficacy using amanitin has been added to out-licensing data packages.

Out-licensing strategy/target

1. Pharmaceutical companies seeking for ADC pipeline.
2. Pharmaceutical companies already own ADC technology to apply for a novel antibody.

As the needs for an antibody to build up a new ADC by applying their own ADC technology are in higher demand, we will prioritize our out-licensing activities with companies in 2.

Promoting out-licensing activities to overseas pharmaceutical companies at present



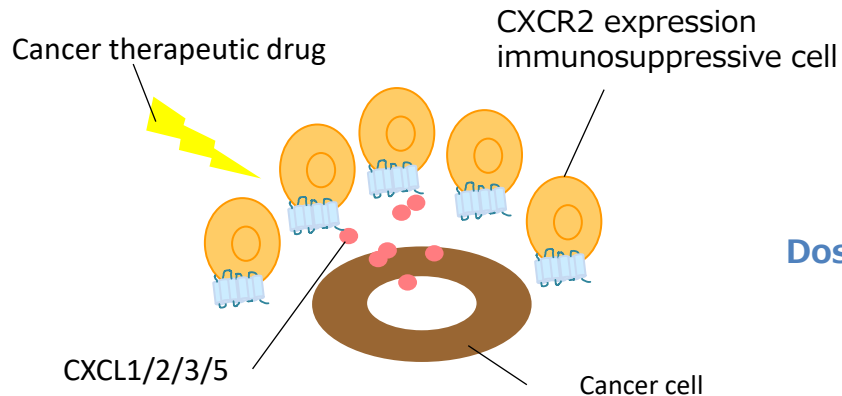
PXLR New Pipeline



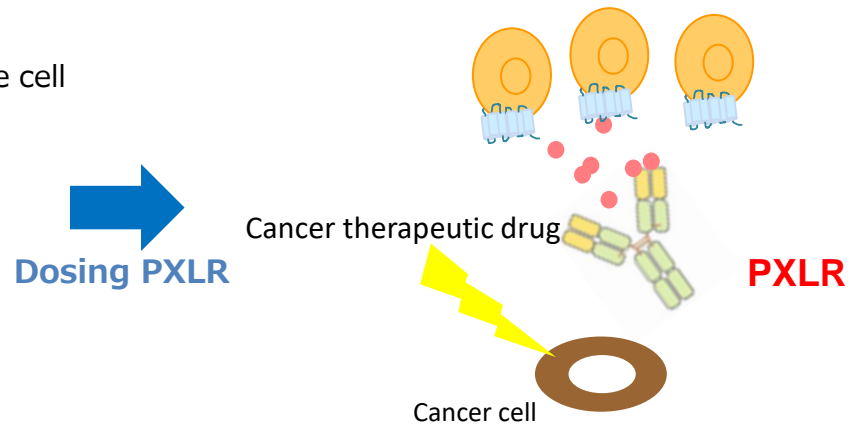
PXLR (humanized anti-CXCL1/2/3/5 antibody) Target molecules: CXCL1/2/3/5

Origin	Functional inhibitory antibody for CXCL1/2/3/5, chemoattractant of CXCR2 expressing cell. Cancer therapeutic antibody that improves drug-resistant cancer microenvironment
Therapeutic area	Solid tumors (gastric, breast, ovarian etc.)
Expectation	Cancer cells express CXCL1/2/3/5 and attract immunosuppressor cells that cause the drug-resistant environment. Dosing PXLR antibody will reduce immunosuppressor cells. It is expected to overcome drug-resistance and inhibit the recurrence of cancers.
Patent	Patent application completed.
Joint development partner(s)	Osaka Metropolitan University

Drug resistant environment



Weakening of drug-resistant environment



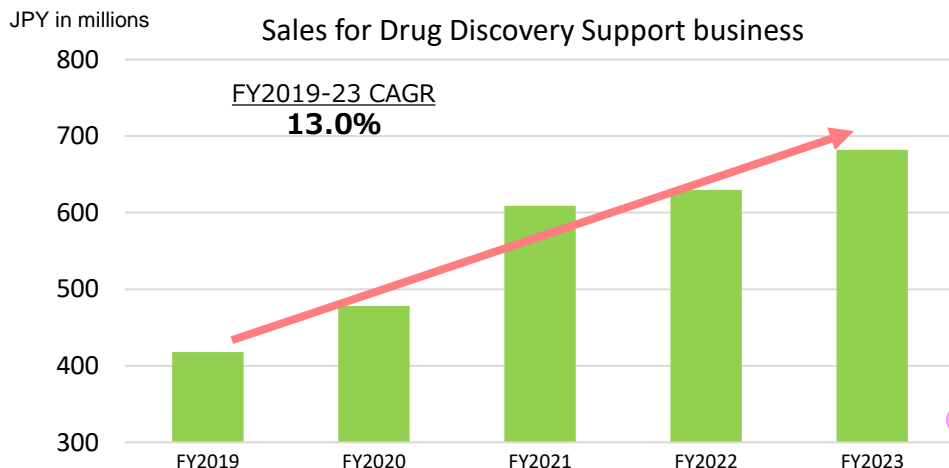
CXCL1/2/3/5 is a ligand of CXCR2, G-protein-coupled receptor (GPCR), and is involved in various tumorigenesis and formation processes. Cancer cells attract immunosuppressive cells with CXCL1/2/3/5 and create a drug-resistant environment. PXLR weakens drug resistant ability of cancer cells by binding to CXCL1/2/3/5.

Drug Discovery Support business



Sales increase in contracted services

- Net sales for FY12/2023: ¥682 million
- Transactions with existing clients are steadily growing as they highly evaluate our antibody generation technologies and services.
- Entrustment agreements with a major domestic pharmaceutical company and a diagnostic drug company were concluded. In addition, a business agreement with Takeda Pharmaceutical Company Limited which had been worked on a spot base is developed into a new entrustment agreement.
- Forecast net sales of ¥720 million in the drug discovery support business in FY12/2024



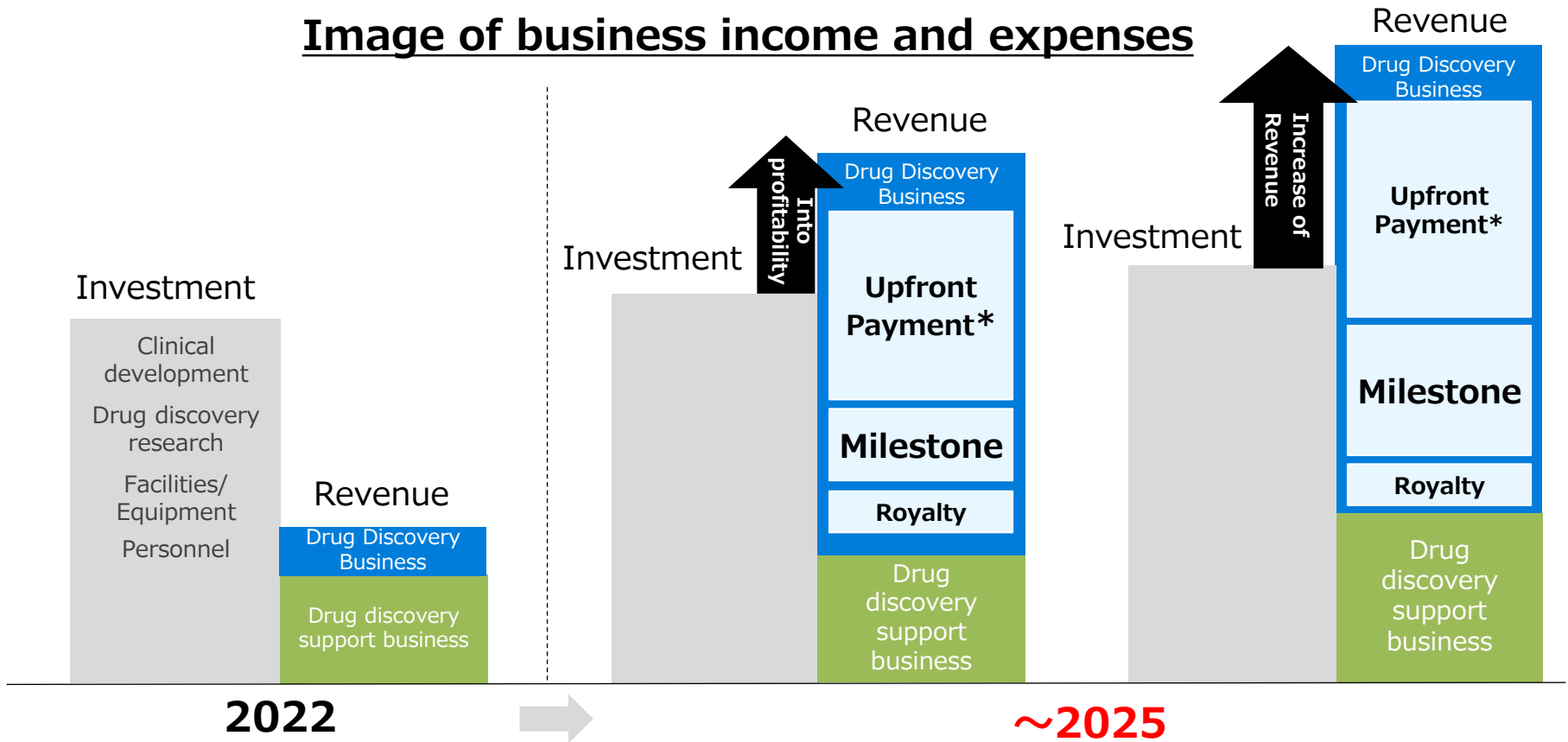
Major clients	Contract date
Chugai Pharmaceutical Co., Ltd.	Jun. 2011
Chugai Pharmabody Research Pte. Ltd	Aug. 2012
Mitsubishi Tanabe Pharma Co., Ltd. TANABE RESEARCH Laboratories U.S.A., Inc.	Dec. 2016
Ono Pharmaceutical Co., Ltd.	Oct. 2018
Kyowa Kirin Co., Ltd.	Jul. 2019
New Takeda Pharmaceutical Co., Ltd.	Feb. 2024

Image of transitioning to profitability



Transition from **investment phase** to **revenue phase** by out-licensing in-house products

Image of business income and expenses



*On assumption of out-licensing either CBA-1205, CBA-1535 or PCDC. On assumption of out-licensing agreement with milestone income

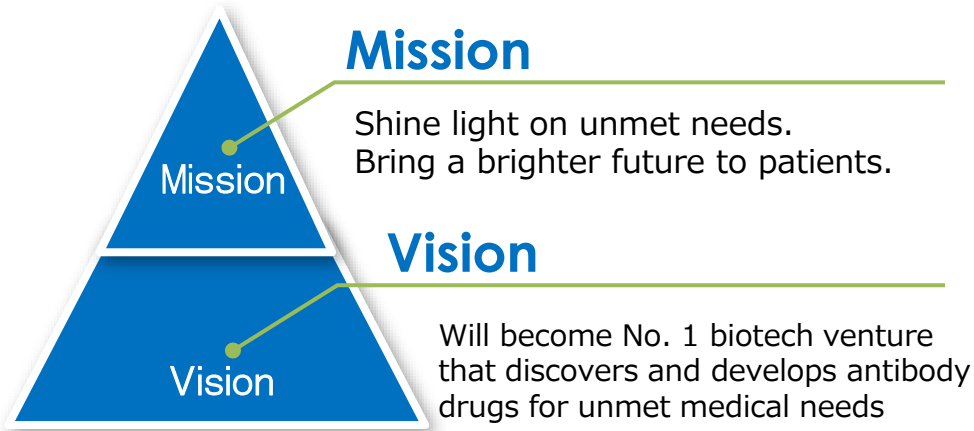
At the time of publication of this material, the actual out-licensing agreement terms and conditions, such as licensees and various amounts, have not yet been determined. This material was created to show the profitable image of our company.



Appendix. Corporate information



Biotech company dedicating to satisfy unmet medical needs



Management principle

- Place the highest priority on sound management and credibility and aim to become a corporation that grows with society.
- With creativity and science, develop therapeutic drugs for unmet medical needs, and contribute to the health of patients.
- Achieve successive product pipelines and improvement of corporate value through collaboration with external institutions.

- **Founded:**
February 2005
- **Listed on the stock exchange:**
Dec.2011
(Tokyo Stock Exchange Growth Section)



- **President and Chief Executive Officer:**
Shigeru Kobayashi, M.E.
- **Location :**
<Head Office and Research Laboratories>
3-12-1Honmachi, Shibuya-ku, Tokyo
<Drug Discovery Laboratories>
2-13-3 Nogawahonchou, Miyamae-ku,
Kawasaki-city, Kanagawa
- **Number of Employees :**
68 (As of Dec. 31, 2023)
- **Business :**
Chiome Bioscience (4583.T), is a public company leveraging a proprietary monoclonal antibody generating technology, for drug discovery and development, as well as providing drug discovery supports.



Drug Discovery and Development Business

This is business to obtain revenues such as upfront, milestone, and royalty payments relating to out-licensing of patents of pipeline product and drug candidates, and also, income from collaborative research. It drives our future growth.

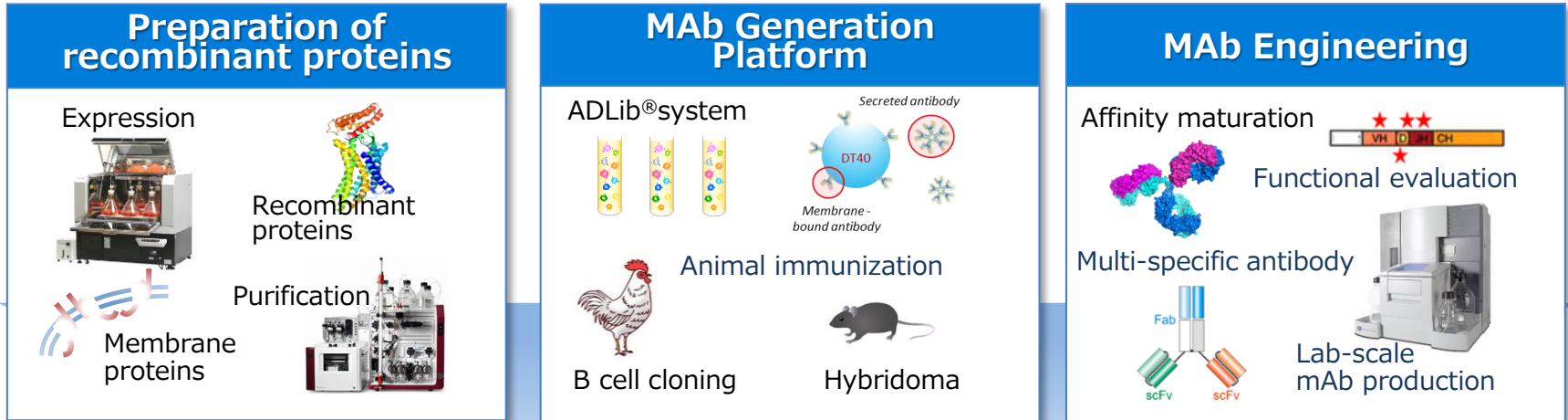
Drug Discovery Support business

This is business to obtain revenues from antibody generation service by using platform technology that Chiome possesses to support drug discovery research at pharmaceutical companies, or for diagnostic and research purposes at academia or institutes on fee-for-service scheme. It secures constant revenue stream.

Core competence for developing business



Technology Platform (Chiome's mAb Discovery Engine)



Advantage

Chiome possesses antibody platforms including its proprietary technology, and extensive know-hows and experiences in protein/antibody engineering to streamline the process of drug discovery.

Leveraging technology platforms to promote both Drug Discovery and Drug Discovery Support Businesses to Generate Sustainable Profits

Drug Discovery and Development

Development of therapeutic drug and diagnostic agent

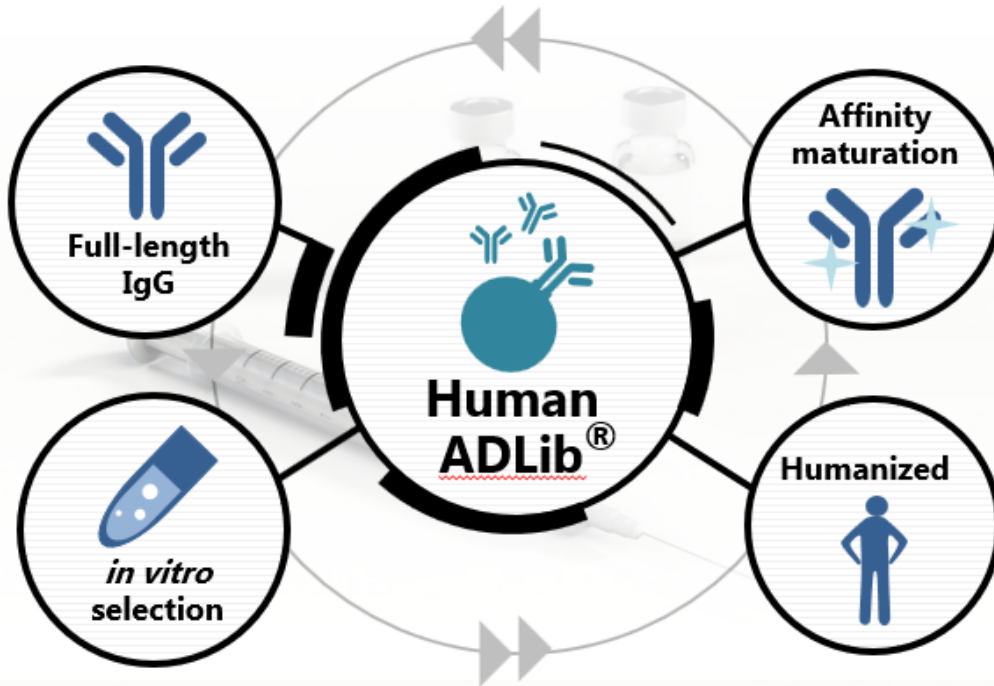
Drug Discovery Support

Contract service for drug discovery

Core technology : ADLib[®] System



One-stop-order platform for antibody drug discovery



The ADLib[®] system offers a platform library with unique array space that adds seamless Affinity maturation function.

It is a one stop order drug discovery and research tool that can complete all the steps necessary for antibody drug discovery such as selection, full-length IgG expression, humanization, and affinity maturation on 1 platform.

The usefulness of the technology in antibody drug discovery and development of the human ADLib system was published in [Cellular & Molecular Immunology].

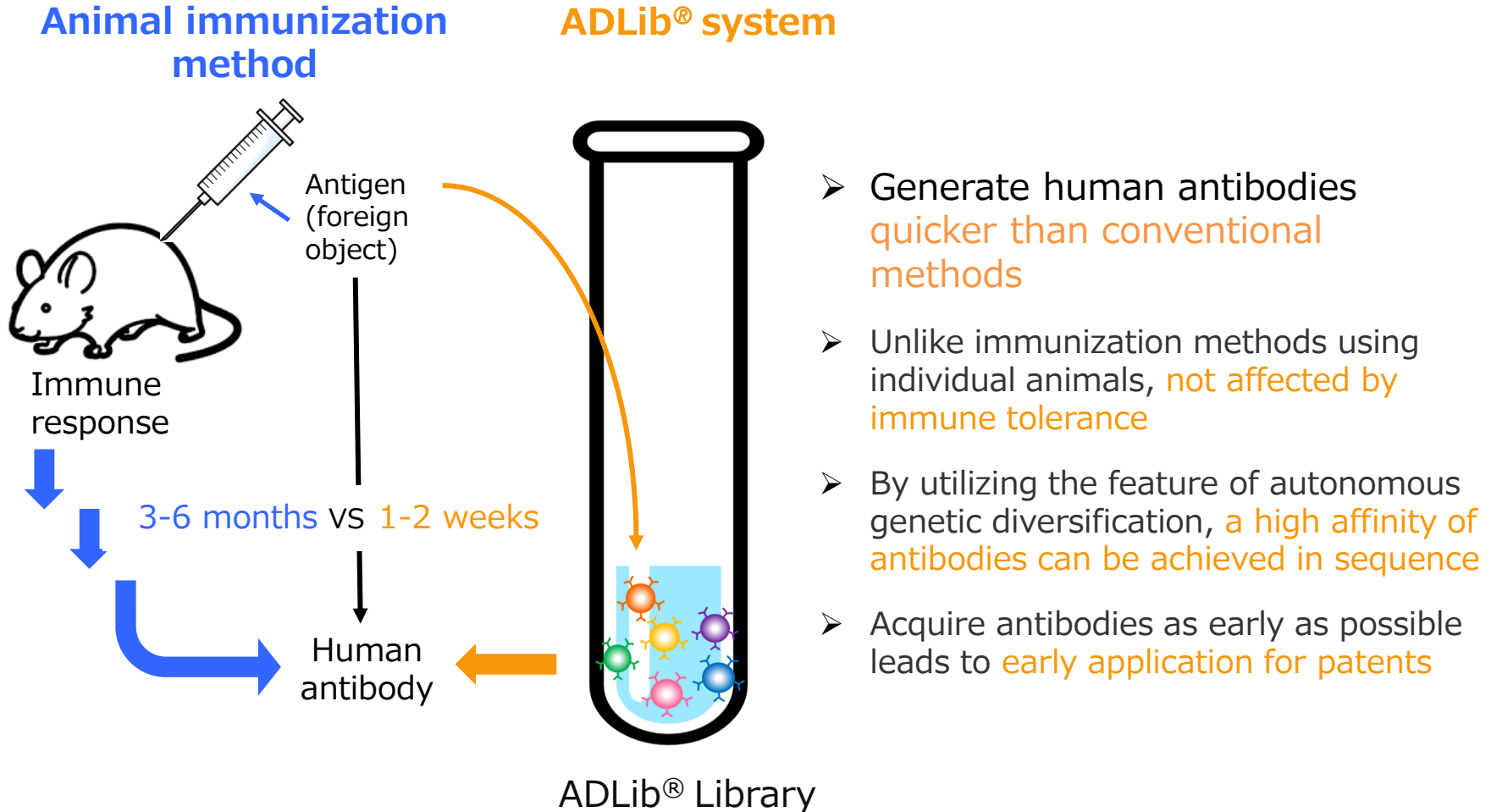
(Collaborative research results with the Department of Life Sciences,
Graduate School of Arts and Sciences, The University of Tokyo)

Title: Streamlined human antibody generation and optimization by exploiting designed immunoglobulin loci in a B cell line
(<https://www.nature.com/articles/s41423-020-0440-9>)

Core technology that support 2 businesses: ADLib[®] System



Generating method of human antibodies in cultured cells (in vitro) without living organisms (animals)



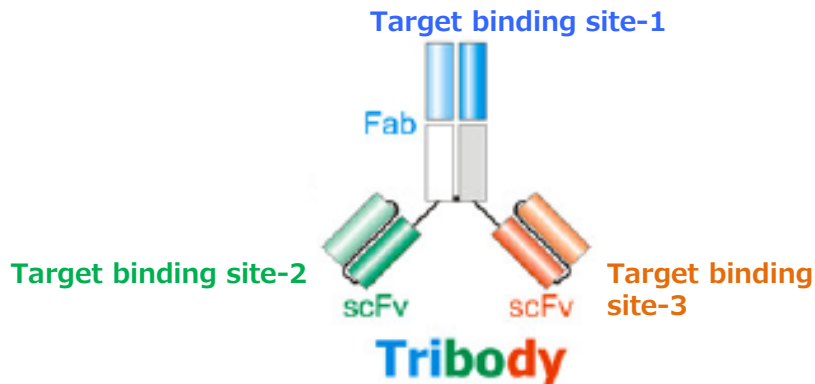
Core Technology: Tribody™ (Multispecific Antibody Production Technology)



Technology that enables the generation of multi-specific antibodies, each molecule has three binding sites.

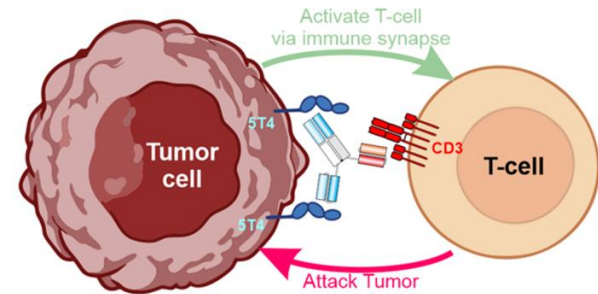
What is Tribody™

There are three different antigen binding sites in one molecule, and this makes it possible to combine different functions.



Example of drug candidate substance creation using Tribody™

Example of utilization in our in-house product (CBA-1535)

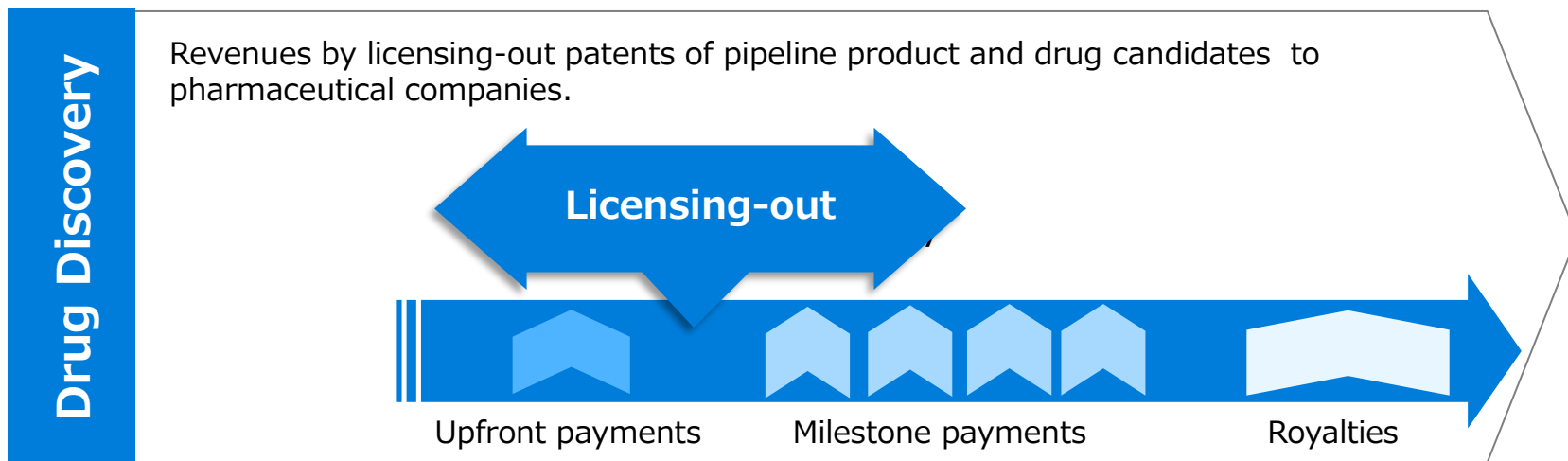
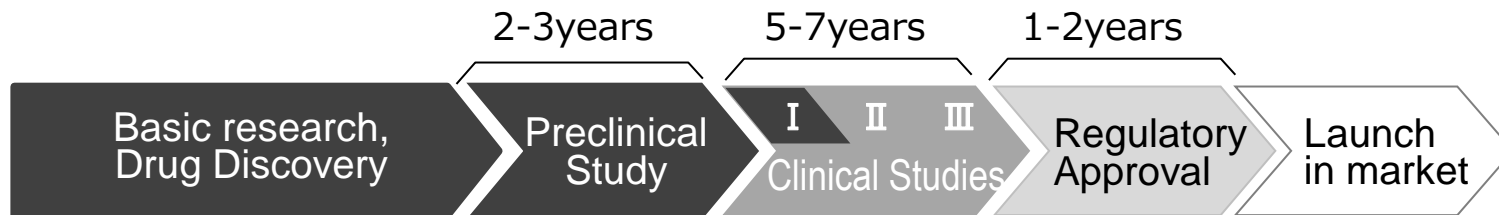


Two hands firmly hold the **target** and pull the **cancer-attacking cells** close to the cancer cell with a third hand

Various applications are possible depending on the target/binding method.



Drug development process and Chiome's revenue model

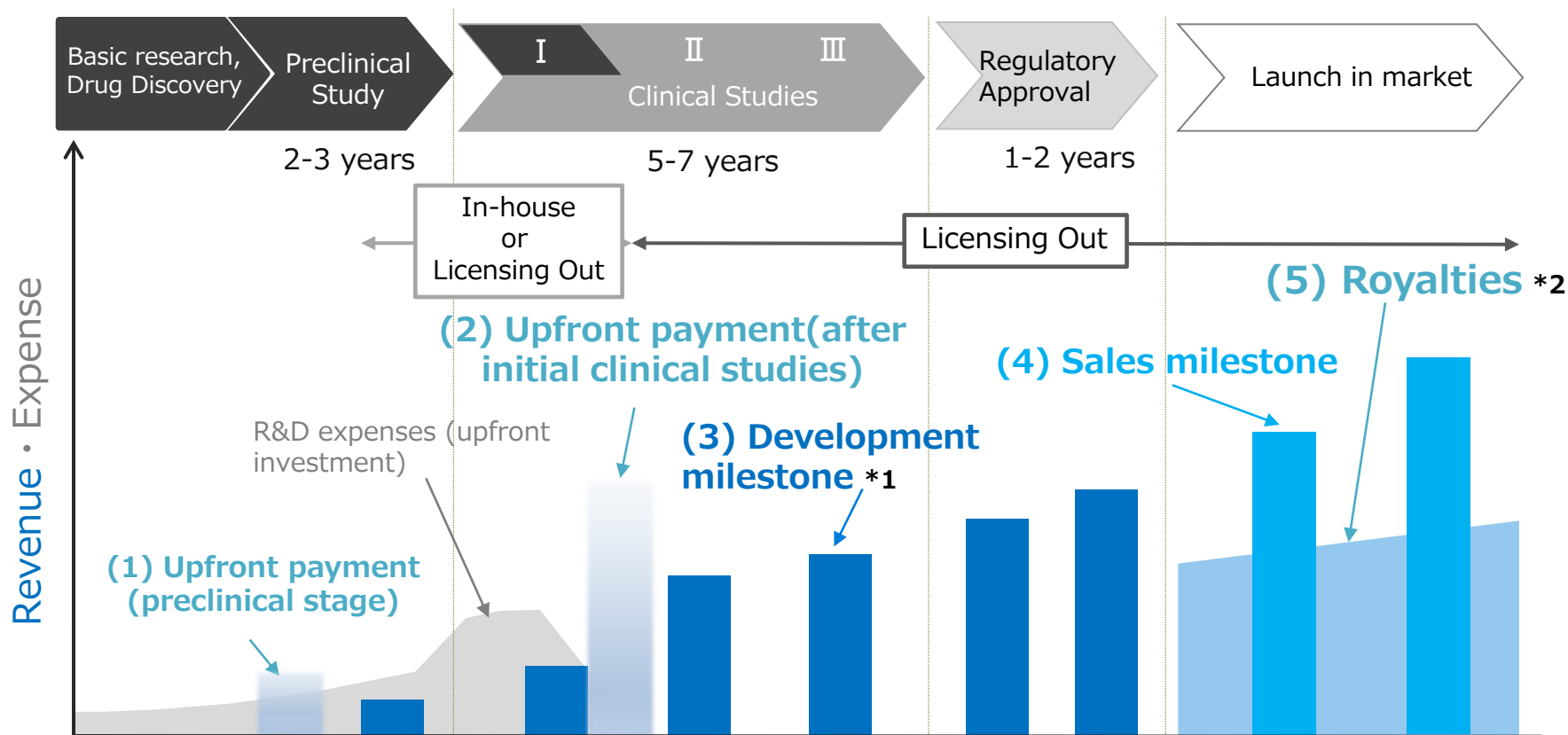


Major clients (DDS)	Contract date
Chugai Pharmaceutical Co., Ltd.	Jun. 2011
Chugai Pharmabody Research Pte. Ltd	Aug. 2012
Mitsubishi Tanabe Pharma Co., Ltd. TANABE RESEARCH Laboratories U.S.A., Inc.	Dec. 2016
Ono Pharmaceutical Co., Ltd.	Oct. 2018
Kyowa Kirin Co., Ltd.	Jul. 2019
Takeda Pharmaceutical Co., Ltd.	Feb. 2024

General image of revenue in the drug discovery business



As the stage progresses, the amount received in each milestone increases.



The above is the image of earnings to explain the Pharmaceutical Licensing Agreement. The actual agreements may vary in terms of the upfront payment, milestone stages and number/amounts of milestones, and royalty rate for each contract.

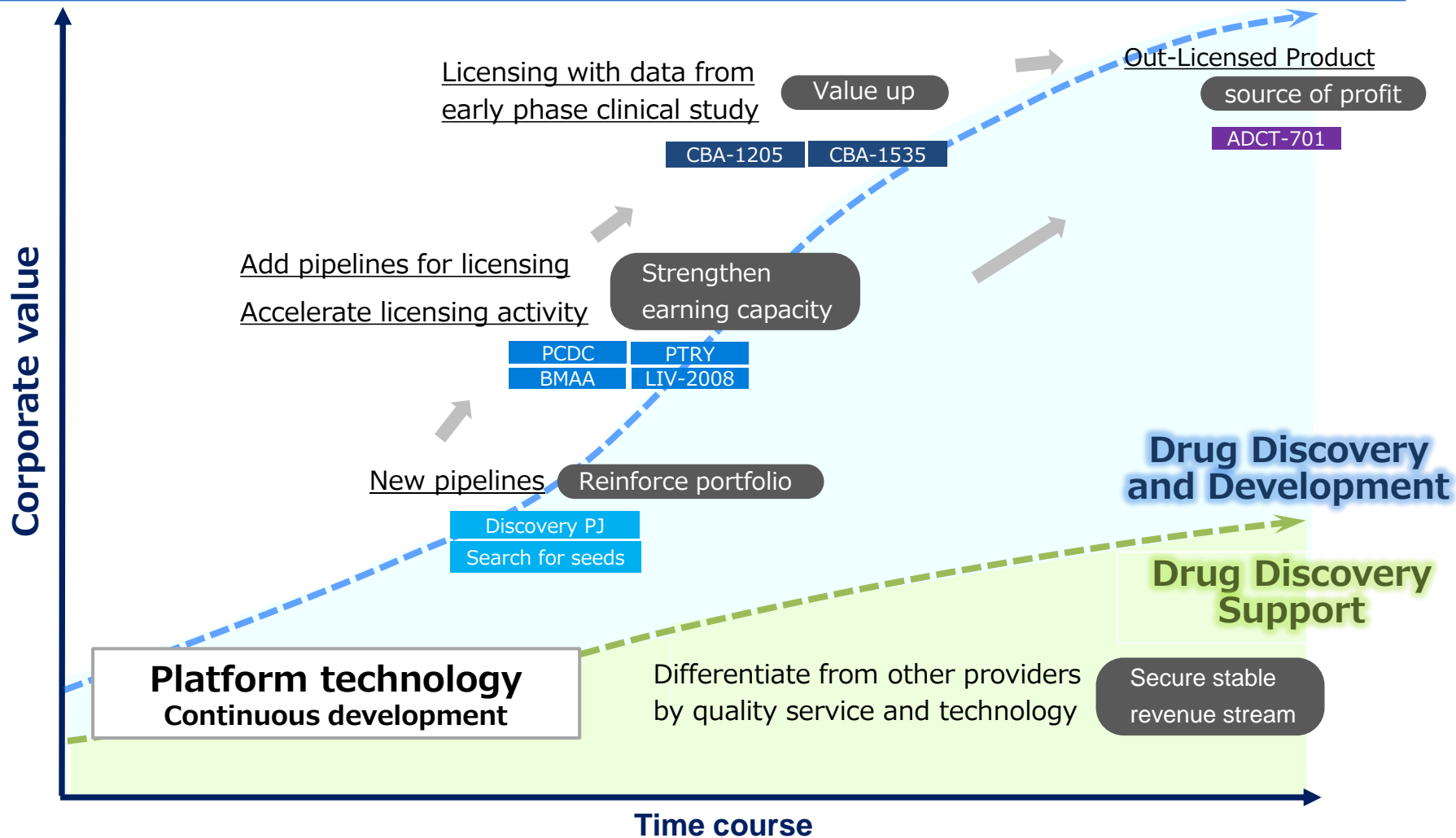
*1 Milestone: Income received by the licensee at each milestone after out-licensing through the progress of clinical studies and others.

*2 Royalty: Income received as a percentage of the sales amount after a product is sold (launched)

Business strategy for the future growth



Create candidate of innovative antibody drugs for unmet medical needs and pay maximum efforts to increase the corporate value by developing and licensing highly valuable antibodies.

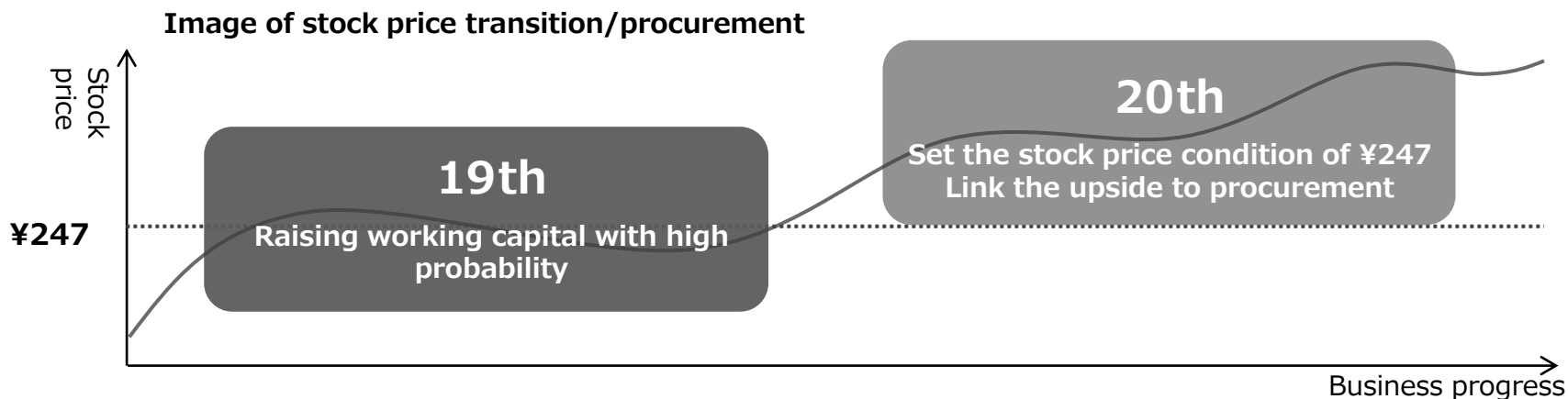


Financing Scheme



Fundraising through 19th/20th Stock Acquisition Rights

Scheme to link the upside realised from successful out-licensing agreements and business progress to procurement



	19	20
Number		
Allottees	Growth Capital	Barclays Bank PLC
Number of Dilutive Shares	6,456,000 shares	3,228,000 shares
Estimated Amount to be Financed	¥1.12 billion	¥0.79 billion
Dilution Rate	13.3%	6.7%

Use of funds

1. R&D expenses for incubating new out-licensing candidates following PCDC
2. Working capital for promoting steady negotiation of out-licensing our drug discovery pipelines
3. CMC expenses to build a Master Cell Bank to prepare for clinical studies of Tribody™ drug discovery (PTRY)
4. Capital investment for expanding laboratories, expanding and replacing research equipment, etc.



Appendix. Pipeline information



CBA-1205 (Humanized afucosylated anti-DLK1 antibody)

First in class

Origin	A humanized antibody generated by hybridoma technology in Livtech which Chiome acquired in 2015.
ADCC	GlymaxX (ProBioGen)
Therapeutic Area	Liver cancer, lung cancer, neuroblastoma etc.
Expectation	First-in-class therapeutic antibody targeting intractable cancers. Providing new therapeutics for highly malignant tumors that are without effective therapeutic drugs including hepatocellular carcinoma.
Patent	Granted in Japan, US, Europe, China etc.

Phase I clinical study

First part: Evaluate the safety in patients

- **No serious adverse reaction reported.**
- **SD (stable disease) evaluation with tumor shrinkage has been continued in a patient with Melanoma and the continuous dosing period has exceeded more than 30 months. Dosing is still ongoing.**

Second part: Evaluate the safety and efficacy of the drug in patients with hepatocellular carcinoma.

- **One PR(Partial Response) case has been confirmed and longer duration of response is expected.**

CBA-1205 First part of Phase 1 study (Safety)



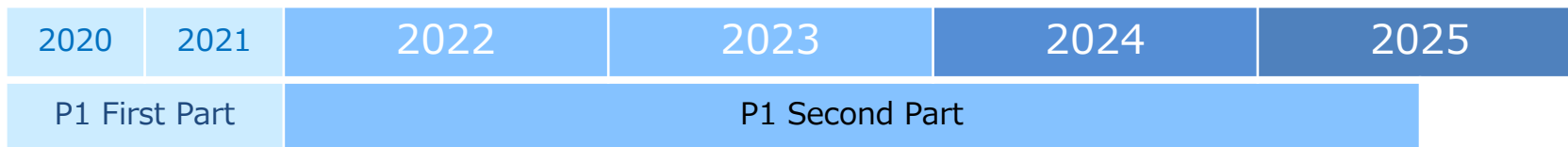
No toxicity of Grade 3 or higher were observed
High level of safety was confirmed

CBA-1205 Related Adverse Events

Adverse Events (AE)	Dose (mg/kg)							Total (n=22)
	0.1	0.3	1	3	10	20	30	
	(n=3)	(n=3)	(n=3)	(n=4)	(n=3)	(n=3)	(n=3)	
Patients with CBA-1205 Related AEs	1	0	2	3	1	2	3	12
Grade 1-2	1	0	2	3	1	2	3	12
≥ Grade 3	0	0	0	0	0	0	0	0
Dose Limiting Toxicity	0	0	0	0	0	0	0	0
Serious Adverse Events	0	0	0	0	0	0	0	0
Death	0	0	0	0	0	0	0	0
Treatment Discontinuation	0	0	0	0	0	0	0	0

Only Grade 1 (mild) or Grade 2 (moderate) study drug related adverse events were reported at each dose. No Grade 3 (severe or medically significant but not immediately life-threatening) or higher serious toxicity findings were reported. No adverse reactions that would have stopped dosing were reported, and the high safety of CBA-1205 was confirmed.

CBA-1205 Out-licensing plan



Targeted time frame for out-licensing

Out-licensing candidates: 2 different types



Possible points for evaluation and consideration

- | | |
|---|--|
| <ul style="list-style-type: none"> ➤ 1st-in-class (original drug) ➤ High safety in humans ➤ Patents granted in major regions ➤ Manufacturing method established, information for clinical studies in place | <ul style="list-style-type: none"> ➤ The response rate in patients ➤ Biomarker ➤ Comparison with other drugs, advantages ➤ Expansion of cancer types, business possibilities |
|---|--|

Upfront payment

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Upfront payment

- Promote out-licensing activities, while conducting Phase 1 second part
- Aiming to maximize upfront payment in licensing deal by obtaining multiple PR cases in HCC patients

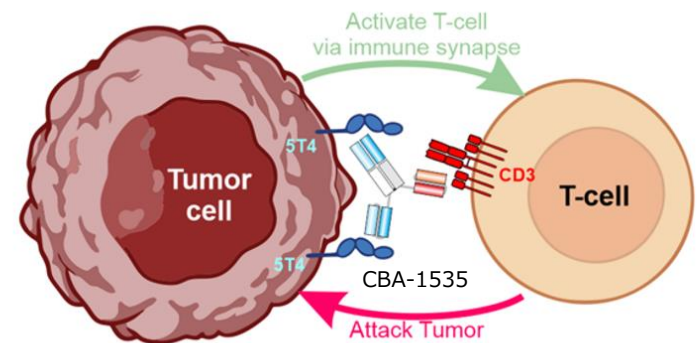


CBA-1535 (Humanized anti 5T4 & CD3 trispecific antibody)

Origin	CBA-1535 is a T-cell engager, trispecific antibody, directed against the 5T4 tumor antigen, a protein found on various solid tumors and is thought to be involved in metastasis.
Therapeutic Area	Malignant mesothelioma, small cell lung cancer, non small cell lung cancer, TNBC etc.
Expectation	First-in-class therapeutic antibody with trispecific format Offer a new treatment option for a disease which has poor prognosis and where there are only a few effective treatments.
Patent	Granted in Japan, UK, US, China. Pending in Europe etc.

Phase I study: Dosing for patients has started in the first part for safety and initial drug efficacy evaluation.

Study sites: National Cancer Center Hospital
Shizuoka Cancer Center



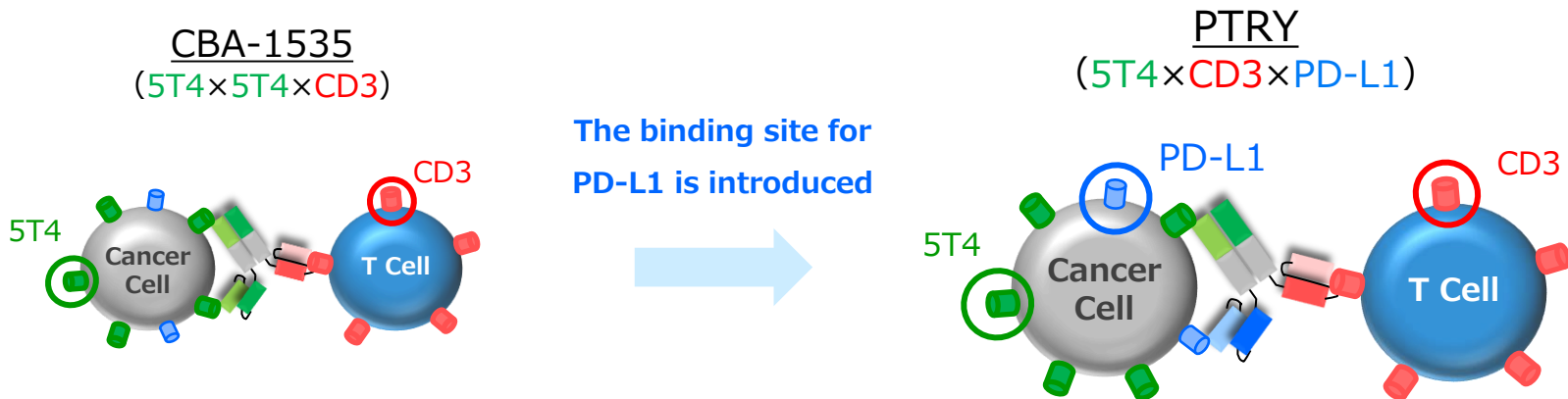
PTRY -drug discovery project-



PTRY (humanized antibody 5T4/CD3/PD-L1 multi-specific antibodies)

Target molecules : 5T4×CD3×PD-L1

Origin	Therapeutic antibodies for cancer treatment using Tribody™ technology consisting of three binding sites. Therapeutic antibodies for cancer treatment targeting antigen-binding sites 1) solid tumor expressing 5T4, 2) T-cell engager CD3, and 3) immune checkpoint inhibitor PD-L1.
Therapeutic Area	Malignant mesothelioma, small cell lung cancer, non-small cell lung cancer, Triple Negative Breast Cancer (TNBC) etc.
Expectation	A new study drug for patients who have not responded adequately to standard cancer immunotherapy. It is also expected to be useful in contributing to the healthcare economy by reducing drug prices.
Patent	Patent application completed



The results of the joint research with Ceinge Biotechnologie Avanzate (“Ceinge”) in Italy were published in an international academic journal, the Journal of Experimental & Clinical Cancer Research.

[Novel tri-specific tribodies induce strong T cell activation and anti-tumor effects in vitro and in vivo | Journal of Experimental & Clinical Cancer Research | Full Text \(biomedcentral.com\)](#)

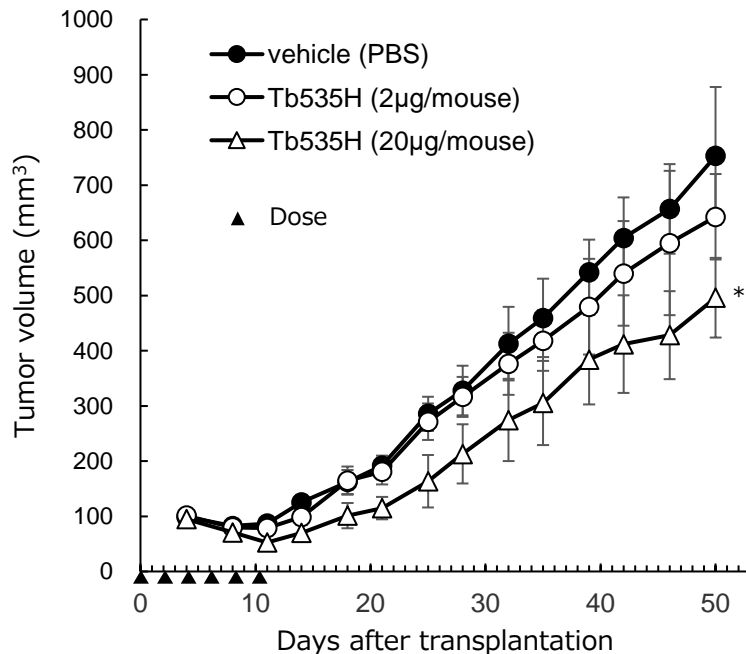
PTRY Efficacy of the drug in vivo



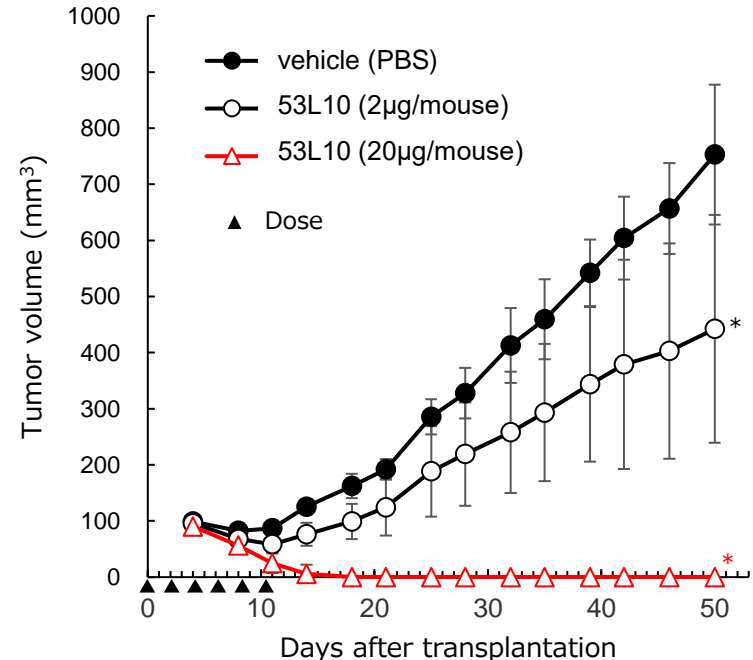
5T4×CD3×PD-L1 demonstrated strong anti-tumor activities

<In vivo drug efficacy data in lung cancer models> Passariello et al. *J Exp Clin Cancer Res* (2022) 41:269

Tb535H = CBA-1535
(5T4×5T4×CD3)



53L10 = PTRY
(5T4×CD3×PD-L1)



Focus on development and out-licensing as a next-generation pipeline of CBA-1535

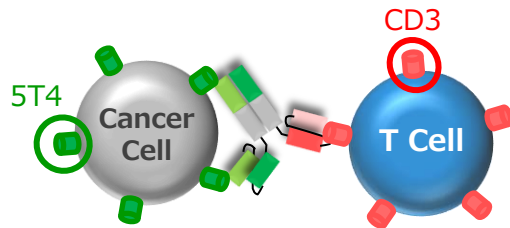
Potential applications for Tribody™



By varying combination of targets and number of binding

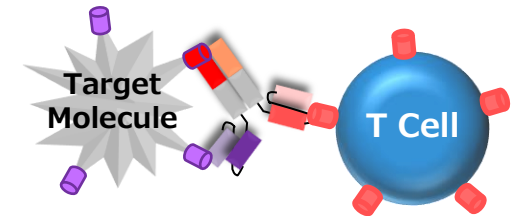
- 1) More effective than normal antibodies are expected
- 2) Co-administration of multiple drugs \Rightarrow single drug administration (merits such as patients' QOL, healthcare economic benefits are expected)

CBA-1535 (currently in Phase 1)

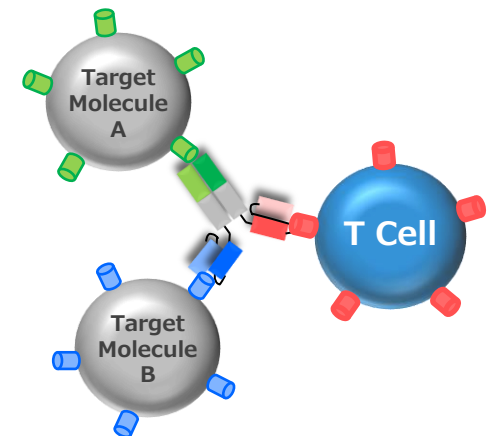
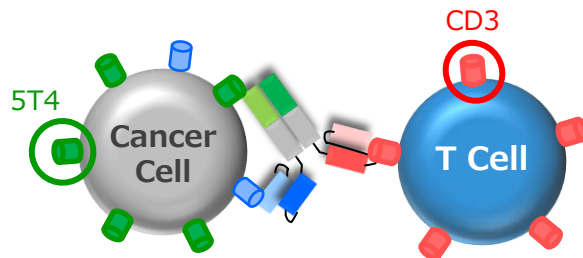


Varying combination of targets and number of binding

Target other than 5T4



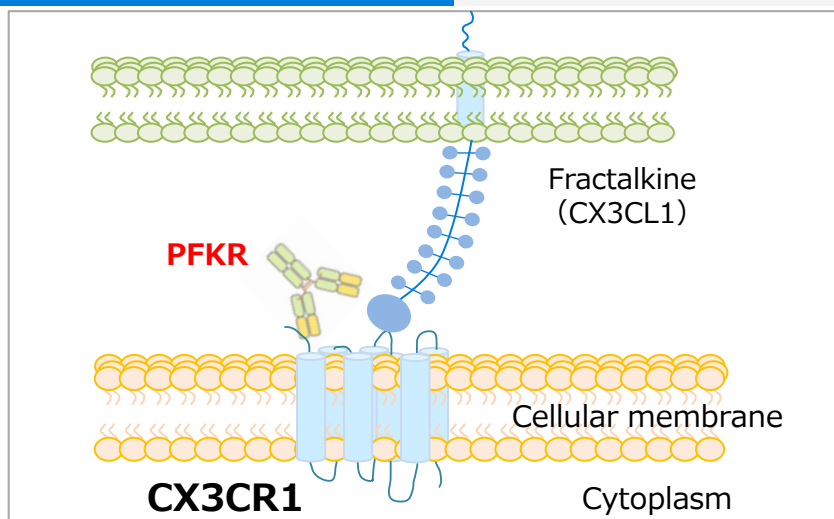
Next generation of CBA-1535





PFKR (humanized anti-CX3CR1 antibody) target molecules: CX3CR1

Origin	Functional inhibitory antibody of Fractalkine (CX3CL1) reporter and a therapeutic antibody that inhibits disease progression of autoimmune neurological diseases, etc.
Therapeutic area	Secondary Progressive Multiple Sclerosis (SPMS), etc.
Expectation	SPMS is an intractable form of multiple sclerosis and is a disease with a need to develop high safety and effective therapeutic agents. By suppressing cytotoxic Eomes-positive CD4+T cells function which are considered directly related to lesions in SPMS (demyelination, neurodegeneration), expected to inhibit the progression of symptoms.
Patent	Patent application completed
Joint development partner(s)	National Center of Neurology and Psychiatry



CX3CR1 is a type of G protein-coupled receptor (GPCR), and its ligand, Fractalkine (CX3CL1), causes the migration of CX3CR1-expressing cells to inflammatory sites.

In cytotoxic Eomes positive CD4+T cells, which are considered directly related to lesions in SPMS (demyelination, neurodegeneration), CX3CR1 is expressed in many.



BMAA (Humanized anti-Semaphorin3A antibody)

Origin	A humanized antibody generated using the ADLib® System. Demonstrated as a selective antibody possessing functional inhibitory activity through collaboration with Professor Yoshio Goshima in Yokohama City University.
Therapeutic Area	Undisclosed
Expectation	To be applied in a wide range of disease areas including inflammatory and CNS diseases which involve SEMA3A. Providing treatment methods for patients who do not respond to traditional therapeutics for diabetic retinopathy, which is the primary medical condition causing loss of sight in adulthood.
Patent	Granted in Japan, US and Europe etc.

- We are promoting joint research with Academia based on the data which we have obtained to date.
- The data obtained so far on Semaphorin 3A and the exploratory research data (Semaphorin family) will be used for future business development activities.



LIV-2008 (Humanized anti-TROP2 antibody)

Therapeutic Area	Breast cancer (TNBC), lung cancer, colorectal cancer etc.
Expectation	LIV-2008 is a humanized monoclonal antibody targeting cell surface antigen "TROP-2" which is overexpressed in breast cancer, colon cancer, lung cancer and several types of solid cancers and is also expected to play a key role against the proliferation of cancer cells.
Patent	Granted in Japan, US, EU, China etc.

The license agreement with Shanghai Henlius Biotech, Inc. terminated as of January 17, 2023.

We have agreed to terminate the license agreement that we entered into with Henlius in January 2021, (granting development, manufacturing, and marketing in China, Taiwan, Hong Kong and Macau, and option rights in the rest of the world). Due to the business strategy decisions, such as the development status of similar products in the market, Henlius decided not to proceed further.

Future plan of this antibody

We are exploring new out-licensing opportunities for this antibody, together with CBA-1205, CBA-1535 and PCDC which we are actively pursuing out-licensing activities.



Shine light on unmet needs.

Bring a brighter future to patients.

**To accelerate drug discovery and development of mAb
for therapeutics to overcome current medical unmet-needs**





- Materials and information provided during this presentation may contain so-called “forward-looking statements.” These statements are based on current expectations, forecasts and assumptions that are subject to risks and uncertainties, which could cause actual outcomes and results to differ materially from these statements.
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