

Supplement Documents for Financial Results Q1 FY12/19

May 13, 2019



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

Chiome Bioscience Inc.



1. Overview of Q1 FY12/19 “Financial results”

2. Overview of Q1 FY12/19 “Operation highlights”

Appendix. Corporate information



Overview of Q1 FY12/19 “Financial results”

Financial results: Profit and Loss

4



(JPY mn)

	Q1 FY2018	1Q FY2019	Increase (decrease)	
Net sales	45	63	18	
Drug Discovery & Development	0	0	0	
Drug Discovery Support	45	63	18	• Growth in transactions with Chugai Pharmaceutical Group and Ono Pharmaceutical.
COS/SGA	348	490	142	
R&D Expense	205	363	157	• Investment in preclinical studies and manufacturing of drug substance of CBA-1205.
Other costs	143	127	(15)	
Operating Loss	(302)	(426)	(123)	
Ordinary Loss	(300)	(432)	(131)	
Net Loss	(301)	(430)	(129)	



(JPY mn)

	As of Dec. 31, 2018	As of Mar. 31, 2019
Current assets	2,609	3,047
(Cash on hand in banks)	2,328	2,776
Non-current assets	221	219
Total assets	2,831	3,266
Current Liabilities	113	177
Non-current liabilities	41	41
Total liabilities	154	218
Total net assets	2,676	3,048
Total liabilities and net assets	2,831	3,266



Overview of Q1 FY12/19 “Operation highlights”



Drug Discovery and Development Business

To discover and develop novel antibody drugs in-house or in collaboration with a partner up to late pre-clinical stage which enables to prepare data package for IND or early clinical stage in therapeutic areas where high unmet medical needs exist. The drug candidates will be out-licensed to pharmaceutical company under appropriate financial conditions such like upfront, milestone, and royalty payments etc.

Drug Discovery Support business

To provide “fee-for-service” to pharmaceutical and diagnostics company, and academia to support their research works. Main line of this business is 1) to generate a monoclonal antibody for their targets by our proprietary platform, and 2) to express, culture, and purify proteins including antigen and antibody.



Out-Licensed Product

Code	Target	Therapeutic Area	Basic research, Drug Discovery	Preclinical Study	Clinical Trials	Partner
ADCT-701 (LIV-1205 ADC)	DLK-1	Oncology /ADC	Plan initiation of P-1 late 2019			

Pipelines

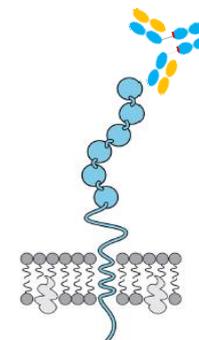
Project	Target	Therapeutic Area	Basic research, Drug Discovery	Preclinical Study	Clinical Trials	Status
CBA-1205 (ADCC enhanced)	DLK-1	Oncology	Plan initiation of P-1 2020/2021			Developing in-house
CBA-1535 (Tribody™)	5T4×CD3 ×5T4	Oncology	CMO and CRO selection is proceeding			Newly acquired Dec.2018
LIV-2008 /2008b	TROP-2	Oncology	Under evaluation by several pharma			Licensing opportunity
BMAA	SEMA3A	DME, Others	Under evaluation by SemaThera			 SemaThera (Exclusive option agreement)
Discovery PJ (5)	Undisclosed	Oncology infectious/ rare diseases	Preclinical data package for out-licensing			—



CBA-1205 (Humanized afucosylated anti-DLK1 antibody)

First in class

- ✓ **Preparation for a clinical study is on track**
 - The establishment of Master Cell Bank which produce antibody with enhanced ADCC activity has completed.
 - CMC works are proceeding to meet the regulatory requirements before entering into a clinical study.
 - Phase 1 study is scheduled to initiate after 2020.
- ✓ **Poster presentation at the American Association for Cancer Research (AACR) Annual Meeting 2019**



Title:

CBA-1205, a novel glycoengineered humanized antibody targeting DLK-1 exhibits potent anti-tumor activity in DLK-1 expressing tumor xenograft models

Highlight:

CBA-1205 which is a novel glycoengineered humanized antibody exhibited potent and specific anti-tumor activity in multiple DLK-1 expressing cancer models *in vitro* and *in vivo*. Importantly, CBA-1205 treatment (10 mg/kg dosage) resulted in tumor regression in all mice and 4 complete tumor elimination out of 8 mice was observed. The results suggest CBA-1205 could be a novel treatment option for DLK-1 expressing cancer such as HCC.



CBA-1535 (Humanized anti 5T4/WAIF1 antibody, multi-specific antibody)

✓ CMO&CRO selection is proceeding

- CMO and CRO selection towards clinical development.
- We expect to submit an Investigational New Drug Application (IND) in the second half of 2021.

Origin:

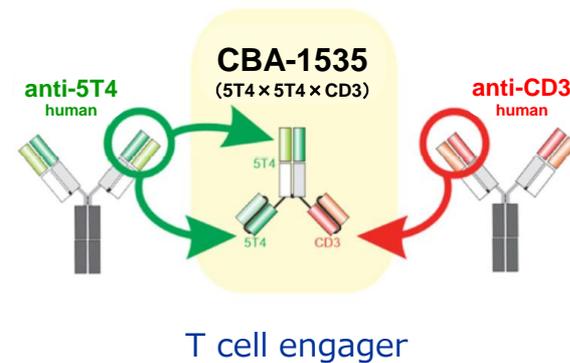
CBA-1535 is a T-cell engager, trispecific antibody, directed against the 5T4/WAIF1 tumor antigen, a protein found on many different solid tumors and is thought to contribute to the spread of cancer cells. Tb535H recruits the patient's T-cells –killer cells of the immune-system – and directs them to attack tumors. This highly targeted approach uses the patient's own immune system to fight cancer.

Therapeutic Area:

Malignant mesothelioma, small cell lung cancer, non small cell lung cancer, TNBC etc.

Expectation:

First-in-class therapeutic antibody with tri-specific format





BMAA (Humanized anti-Semphorin3A antibody)

First in class

- ✓ Being evaluated by SemaThera Inc. which will decide whether or not to exercise the option right during the evaluation period specified in the Agreement*

*Chiome has granted SemaThera Inc. an exclusive option right to obtain a worldwide exclusive license to develop the antibody as a therapeutic and/or diagnostic agent for diabetic macular edema and other diabetic complications including non-ophthalmic diseases.



- ✓ **Research study by Niigata University using Chiome's anti-Semaphorin 3A antibody has been published on Scientific Reports**

Title :

Semaphorin 3A Inhibits Nerve Regeneration During Early Stage after Inferior Alveolar Nerve Transection (<https://www.nature.com/articles/s41598-018-37819-6>)

Conclusion :

This in vivo study demonstrated that transection of IAN (Inferior Alveolar Nerve) induced simultaneous expression of Semaphorin 3A and neuropilin on PO (Post Operative) day 1 at the central side of the injured IAN. A local administration of a Semaphorin 3A-antibody to the injury lesion facilitated regeneration and caused an increase in number of DiI-labeled neurons in the trigeminal ganglion. Therefore, Semaphorin 3A-neuropilin signaling is possibly activated at the early stage of peripheral nerve regeneration after IAN transection, leading to inhibition of injured nerve regeneration and affecting neuroma formation.

H. Kanemaru et.al., Scientific Reports (2019) 9:4245



LIV-2008 (Humanized anti-TROP2 antibody)

- ✓ **Licensing activities**
 - Being evaluated for in-licensing by several pharmaceutical companies.
- ✓ **Poster presentation at the AACR Annual Meeting 2019**
 - The Jikei University School of Medicine presented the results of collaborative research related to LIV-2008 at AACR.

Title :

TROP2-targeted photoimmunotherapy in experimental human pancreatic cancer

Highlight :

TROP-2 is a tumor associated antigen expressing many types of solid tumor. Near-infrared photoimmunotherapy (NIR-PIT) is a newly developed cancer therapy. In this study, humanized anti-TROP-2 antibody was conjugated with a photosensitive dye, IR700 (TROP-2-IR700). TROP-2-IR700-targeted PIT exerts an antitumor effect against TROP-2 positive pancreatic cancer, both in vitro and in vivo, and could be a promising therapeutic option for human pancreatic cancer.



Conduct business with pharmaceutical companies, etc.

- ✓ **Net sales steady increased (an increase of 40% year on year)**
 - ✓ Transactions with Ono Pharmaceutical has been steady grew.
 - ✓ Provided antibody generation and custom protein services to pharmaceutical companies, research institutions, and universities.
 - ✓ Continue to strive for expanding new accounts by offering high quality service and for improving our technologies.

<Key business accounts>





Financing

➤ Series 14th Subscription Rights to Shares

✓ Status of Exercise(as of end of April 2019)

Total number of shares exercised	4,833,000 shares (75.2% of total rights)
Total value exercised	1,057 million JPY

✓ Use of funds

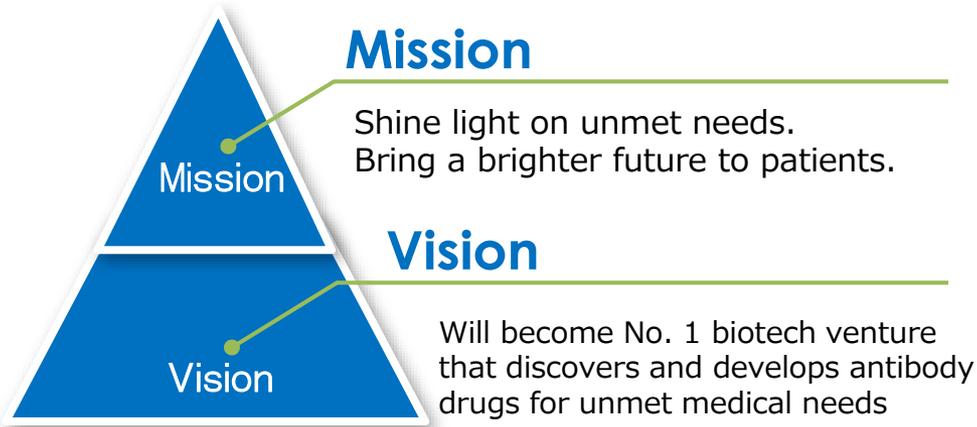
Use of funds	Cost(million JPY)	Scheduled period of spending
① Pre-IND submission and early-phase clinical trials for CBA-1535	1,200	Apr.2019~ Dec.2021
② Expansion and licensing-in of new pipelines	282	Jun.2019~ Dec.2020



Appendix. Corporate information



Biotech company dedicating to satisfy unmet medical needs



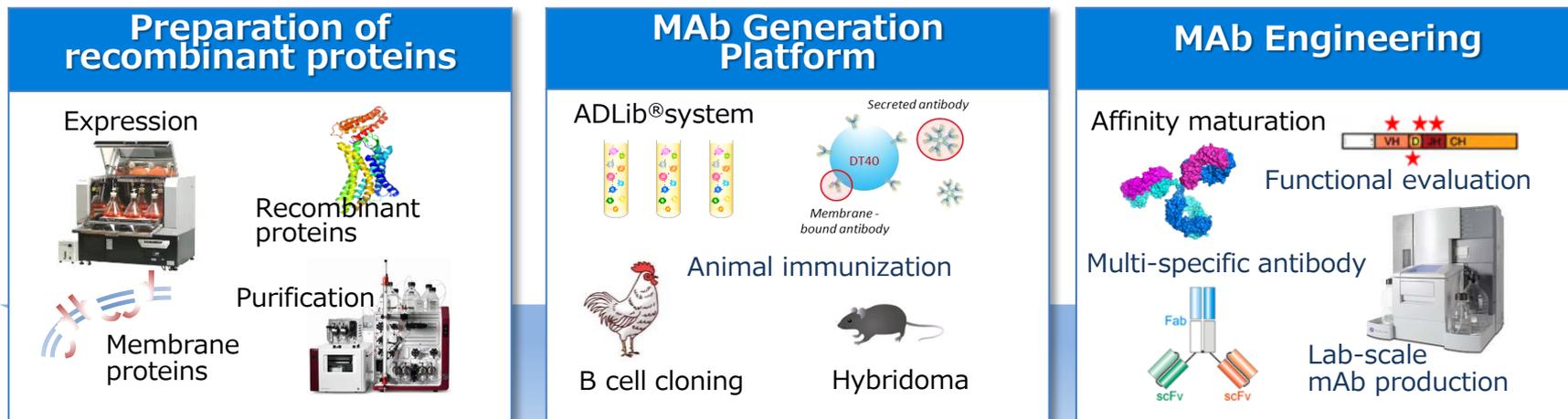
Management principle

- 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.

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- **Founded:**
February 2005
 - **Listed on the stock exchange:**
Dec.2011
(Tokyo Stock Exchange Mothers Section)
 - **President, Chief Executive Officer:**
Shigeru Kobayashi, M.E.
 - **Location :**
<Head Office and Research Laboratories>
3-12-1Honmachi, Shibuya-ku, Tokyo
<Drug Discovery Laboratories>
907 Nogawa, Miyamae-ku, Kawasaki-city,
Kanagawa
 - **Number of Employees :**
50 (As of March 31,2019)
 - **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.



Technology Platform (Chiome's mAb Discovery Engine)



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.

This enables us to contribute in

Drug Discovery and Development

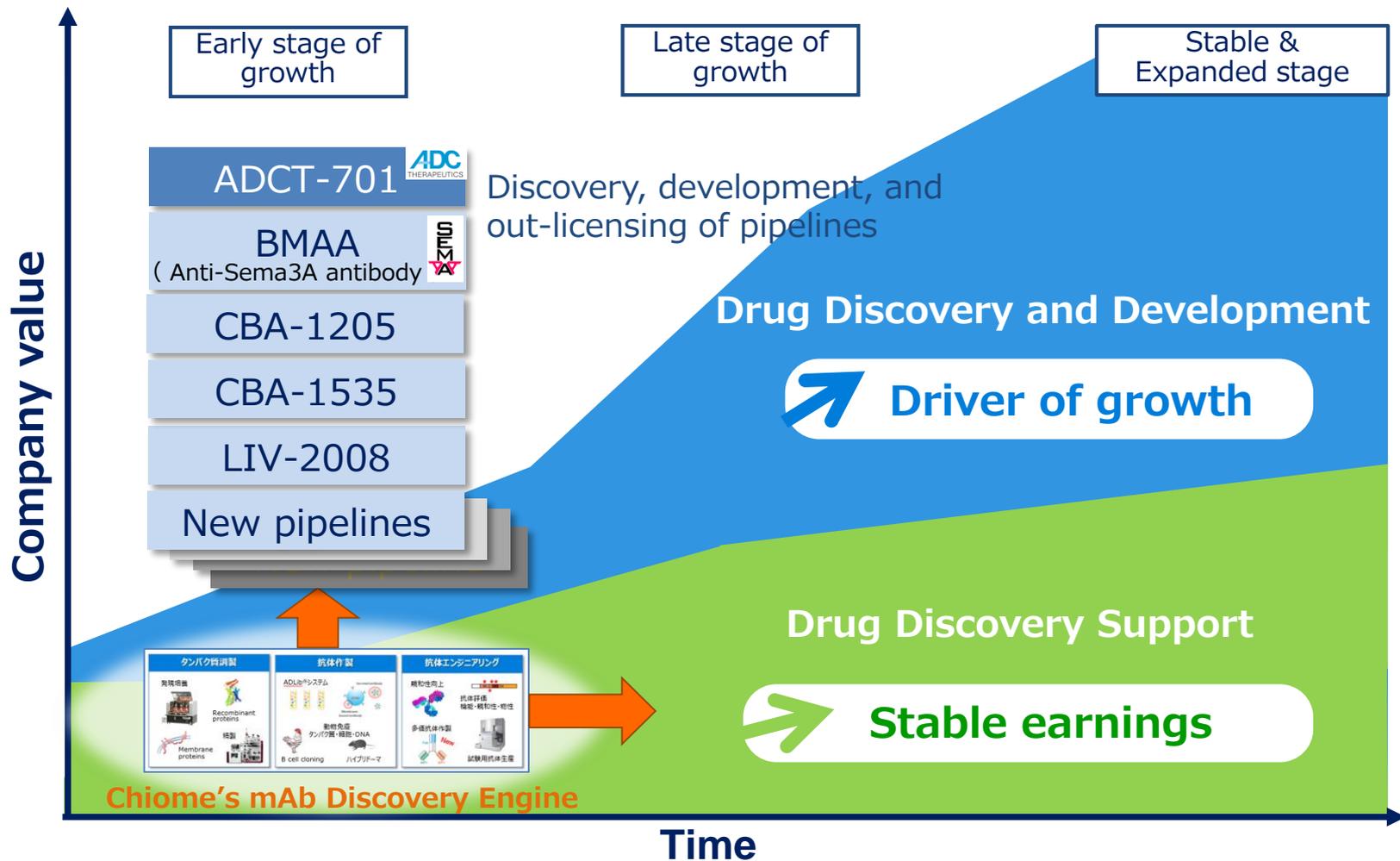
Development of therapeutic drug and diagnostic agent

Drug Discovery Support

Contract service for drug discovery



Core technology will sustain continuous development of therapeutic antibody while offering higher quality of service





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.
- Risks and uncertainties include general industry and market conditions, and general domestic and international economic conditions such as interest rate and currency exchange fluctuations.
- The Company disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.