

# Financial Results Q3 FY12/18

Nov 14, 2018



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

**Chiome Bioscience Inc.**

- 1. Overview of Q3 FY12/18 “Financial results”**
- 2. Overview of Q3 FY12/18 “Operation highlights”**

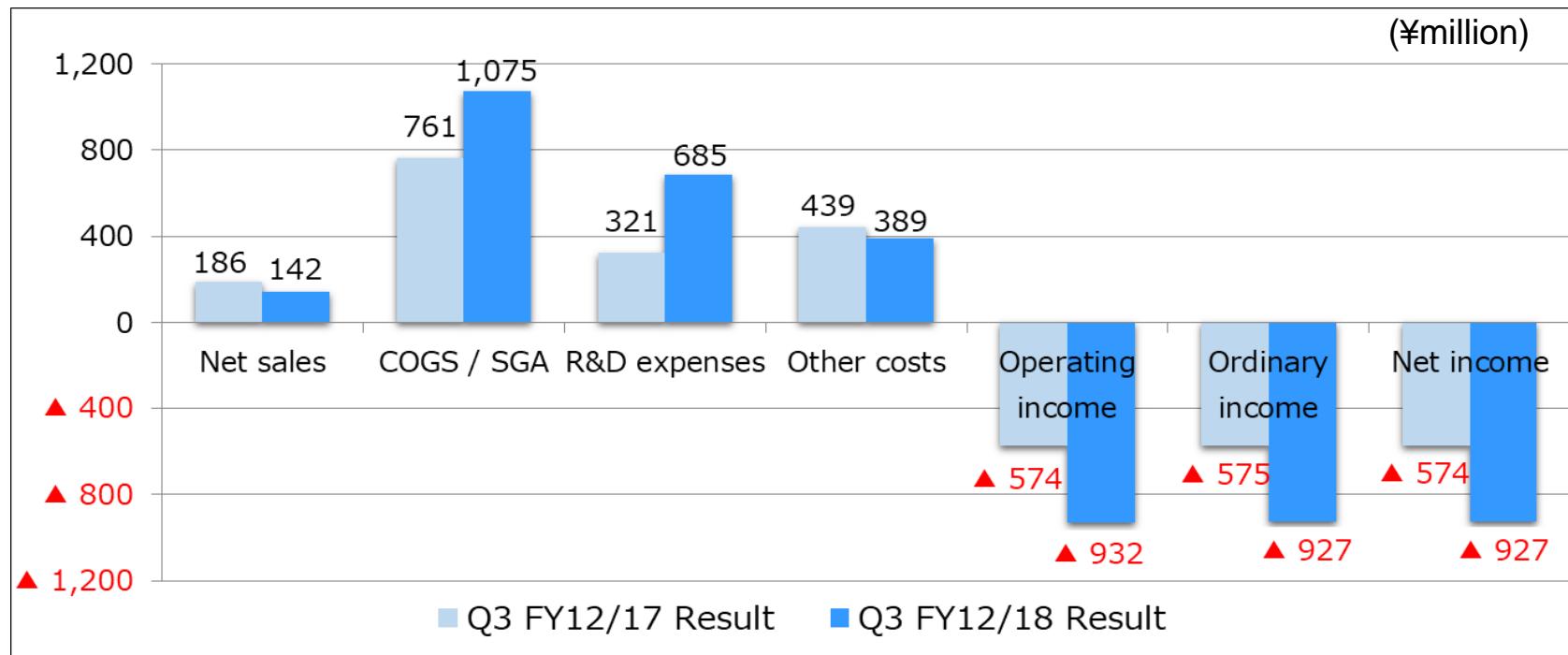
## **Appendix. Corporate information**



## **Overview of Q3 FY12/18 “Financial results”**



# Financial results: Profit and Loss



- Net Sales 142 million yen  
Drug Discovery and Development (DDD): Upfront payment associated with the Option License Agreement with SemaThera Inc.  
Drug Discovery Support (DDS) : Mainly consists of sales from Chugai Pharmaceutical Group.
- R&D expenses 685 million yen  
Expenses of CMC development to manufacture CBA-1205 for clinical development, collaborative research with research institutes for drug discovery and technology development were posted.

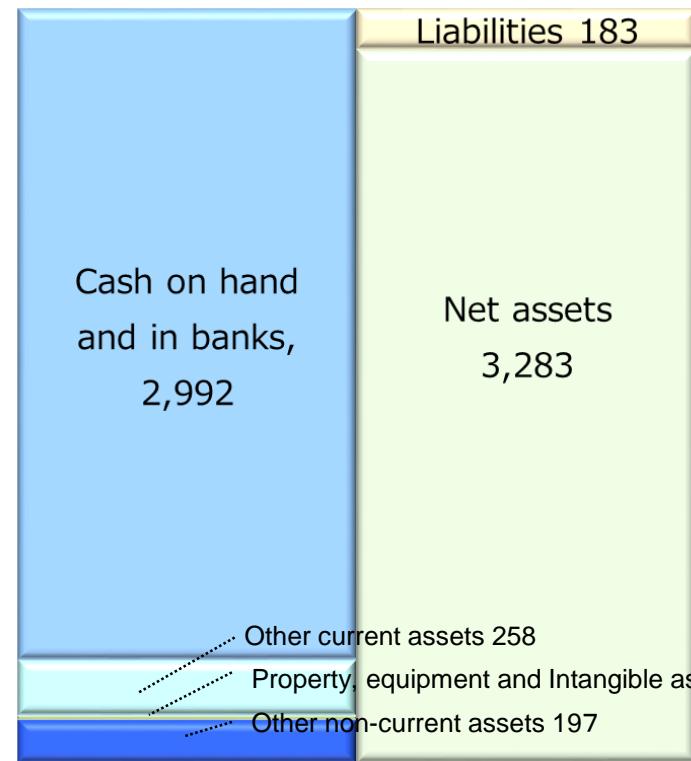


(¥million)

As of December 31, 2017



As of September 30, 2018



# Financial results: Shares

## Completion of financing through third-party allotment

- In relation to the No.13 subscription rights to shares which Chiome issued for Merrill Lynch Japan Securities Co., Ltd., we purchased or redeemed all of the remaining subscription rights to shares.

Number of shares exercised	4,220,000 shares
Number of shares redeemed	1,347,000 shares
Date of redeem	Sep.18 2018

- The cumulative funds procured from this activity were ¥1,777 million
- Secured funds for preparing and implementing initial clinical trial for CBA-1205, an important management task, as well as research funds related to pipeline growth and in-licensing.
- Allotted some of the funds sourced to our investment in Trans Chromosomics, Inc. (2017), as part of investing and implementing M&A in relation to companies with advanced technology or promising seeds of new products.

Use of funds	Cost(million JPY)	Scheduled period od spending
Pre-IND submission and early-phase clinical trials	1,300	Jan.2017~Dec.2019
Expansion and licensing-in of new pipelines	300	Dec.2016~Dec.2018
Investment in/M&A for companies with advanced technologies for synergism	1,294	Oct.2016~Dec.2018



## **Overview of Q3 FY12/18 “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.

- Maintaining and improving our antibody generation capabilities and expanding the drug discovery pipeline
- Putting in place a system for early clinical development

## 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.

- Enhancing outsourced services
- Acquiring new customers

## 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				

## Pipelines

Project	Target	Therapeutic Area	Basic research, Drug Discovery	Preclinical Study	Clinical Trials	Status
CBA-1205 (LIV-1205Naked)	DLK-1	Oncology				Developing in-house
LIV-2008 /2008b	TROP-2	Oncology				Licensing opportunity
BMAA	SEMA3A	DME, Others				SemaThera (Exclusive option agreement)
Discovery PJ (8) *1	Undisclosed	Oncology infectious/ rare diseases				—

\*1 5 joint studies in 8 discovery projects.

## BMAA (Humanized anti-Semphorin3A antibody)

- ✓ Being evaluated by SemaThera Inc under the option agreement\*.
- ✓ SemaThera Inc. will decide whether or not to exercise the option right during an evaluation period specified in the Agreement.
- ✓ Following US, Patent granted in Japan in June 2018 and in Europe in October.

\*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.



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

- ✓ Preclinical development to enter into clinical trials is proceeding on track.
- ✓ Clinical trials are expected to be implemented in the second half of 2019.

\*Chiome granted ADCT a worldwide exclusive license with a right to sublicense, develop, manufacture, and commercialize an ADC format of LIV-1205, which is coded "ADCT-701".



## CBA-1205 (Humanized afucosylated anti-DLK1 antibody)

- ✓ The development of antibody-producing cell line with enhanced ADCC activity using glyco-engineering technology has been completed at ProBioGen AG, our contract manufacturer in Germany.
- ✓ New Clinical Development Department was set up with the aim of carrying out clinical development, and is moving forward with proposals for trial planning and CRO selection.
- ✓ Based on the preclinical testing data and timeline of GMP manufacturing, clinical trials are scheduled after 2020.

## LIV-2008 ( Humanized anti-TROP2 antibody)

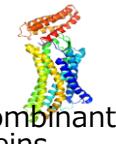
- ✓ LIV-2008b is a humanized monoclonal antibody targeting cell surface antigen "TROP-2" which is overexpressed in breast cancer, colon cancer, lung cancer and several types of solid cancers and also expected to play a key role in the proliferation of cancer cells.
- ✓ The patent was granted in the US in October 2018. (Patents have become effective in a total of five countries, including Japan, the US and China. Patent application has been filed in Europe.)
- ✓ Licensing activities continue based on the pre-clinical testing data obtained thus far.

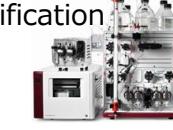
## Discovery projects

- ✓ Expanding pipelines
  - Strengthen internal R&D activities toward novel drug candidates.
  - Implementation of collaborative research projects with domestic research institutions for new drug discovery and development targeting unmet medical needs.  
→ Accelerate pipeline advancement and promote out-licensing by allocating resources to the most promising projects among current ones.
- ✓ Broaden technology portfolios.
  - Implementation of collaborative research projects to enhance technology portfolios for improving drug discovery capability.

< technology portfolios >

### Preparation of recombinant proteins

Expression  Recombinant proteins 

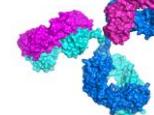
Membrane proteins  Purification 

### MAb Generation Platform

ADLib® system  Secreted antibody  DT40  Membrane-bound antibody 

Animal immunity  B cell cloning  Hybridoma 

### MAb Engineering

Affinity maturation  Function evaluation 

Lab-scale MAb Production 

## Execution of Additional Service Agreement with Ono Pharmaceutical Co., Ltd.

- ✓ Additional Service Agreement with Ono Pharmaceutical Co., Ltd. was concluded on October 1, 2018.
- ✓ The reaction to the business we have carried out under the master agreement for outsourcing services concluded in May 2018 has been positive, resulting in the conclusion of an additional agreement.
- ✓ We have secured research resources within the Company to respond to the needs of Ono Pharmaceutical, with the goal of providing more consistent and timely drug discovery support to this client.

### Services provided under the Agreement

- ✓ Services related to antibody generation, such as preparation of antigens and proteins required for antibody generation
- ✓ Generation of monoclonal antibodies by using Chiome's antibody platform technology, the ADLib® system, and B cell cloning technology

### Ono Pharmaceutical Co., Ltd.

Ono Pharmaceutical Co., Ltd. (Head Office: Osaka, JAPAN) is an R&D-oriented pharmaceutical company engaged in producing innovative drugs. The company has developed Opdivo®, an immune checkpoint inhibitor for cancer treatment. It has been expanding its indications since the first approval in September 2014.

## Conduct business with pharmaceutical companies, etc.

- ✓ Implementation of antibody generation and custom protein services oriented towards academia, research institutions and pharmaceutical companies.

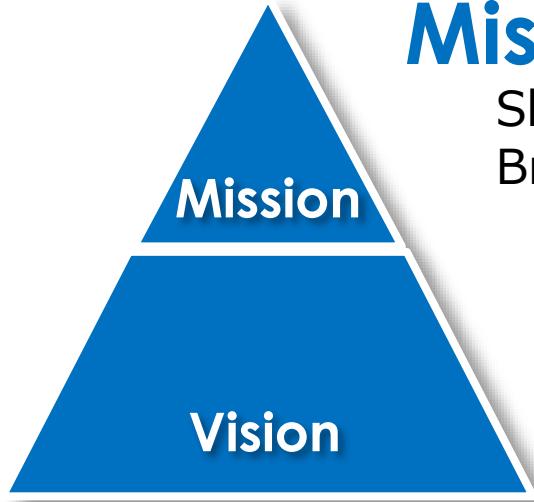
## Efforts to boost sales

- ✓ Began new transactions with major domestic pharmaceutical companies.
- ✓ Marketing activities to acquire new clients.

### <Major business partners>



# Corporate information



## Mission

Shine light on unmet needs.  
Bring a brighter future to patients.

## Vision

Will become No. 1 biotech venture that  
discovers and develops antibody drugs  
for 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.

## Chiome Bioscience

### Drug Discovery & Development

#### Development of therapeutic drug and diagnostic agent

<Focused area>

- Oncology
- Rare diseases
- Designated refractory diseases

Growth

Promote drug development through partnership

### Drug Discovery Support

#### Contract service for drug discovery

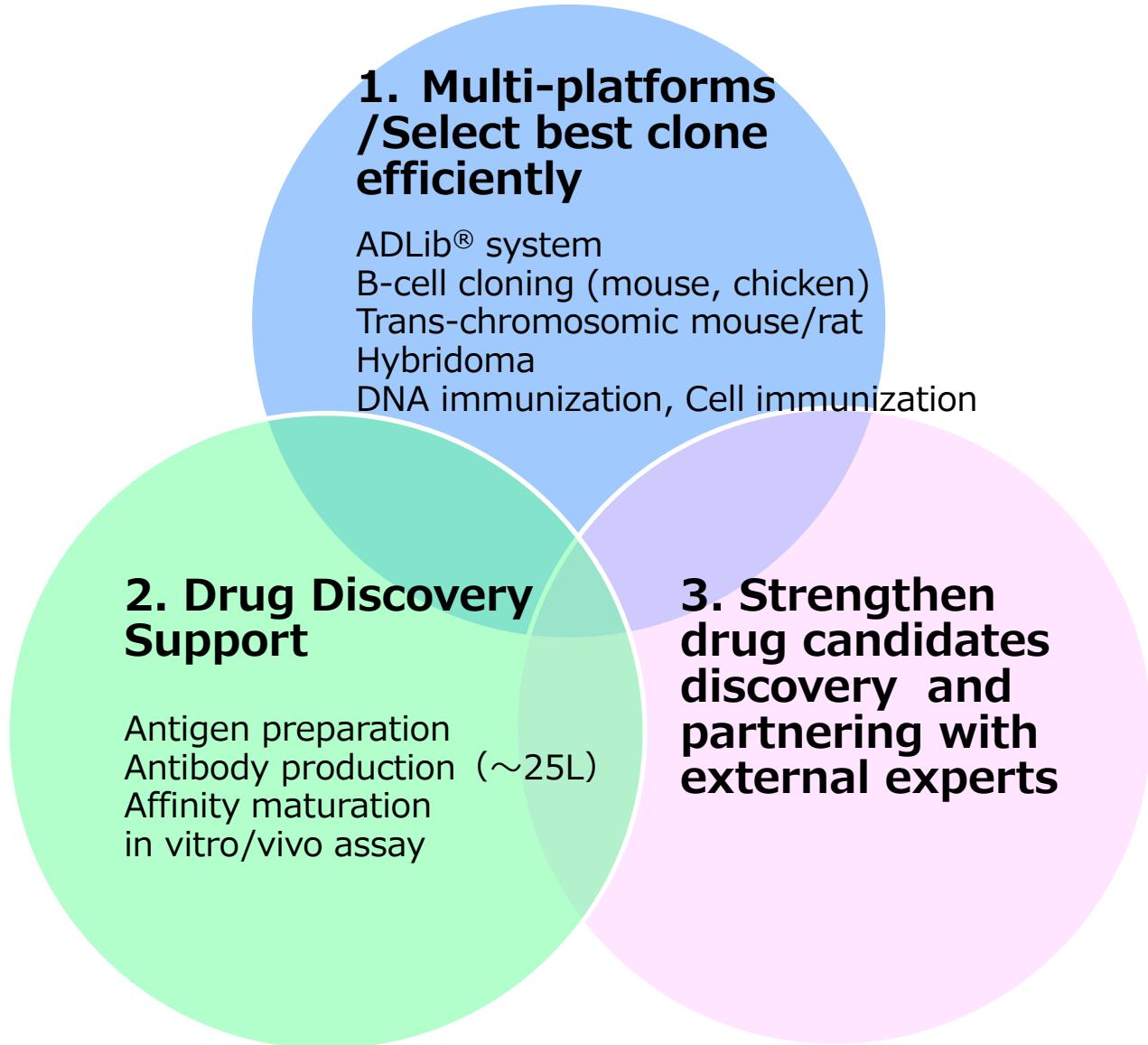
- Antibody generation (ADLib®/B-cell cloning)
- Antigen preparation
- Antibody supply

Continuity

Obtain constant revenue

Make contributions to patients and community by continuously developing therapeutic candidates against unmet medical needs

Shine light on unmet needs. Bring a brighter future to patients.



As of September 30, 2018

Name		Chiome Bioscience Inc.	
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.	
Address	Headquarters, Research Laboratories	Sumitomo-Fudosan Nishi-shinjuku bldg. No.6, 3-12-1 Honmachi, Shibuya-ku, Tokyo 151-0071 Japan TEL:+81-3-6383-3561 (reception)	
	Drug Discovery Laboratories	Teikyo University Biotechnology Research Center 1F 907 Nogawa, Miyamae-ku, Kawasaki-city, Kanagawa 216-0001 Japan	
Date of Establishment		February 8, 2005	
Capital		5,454 million yen (As of September 30,2018)	
Number of Employees		48 (As of September 30,2018)	
Directors and Corporate Auditors		President, Chief Executive Officer Executive Director, Chief Financial Officer, Head of Corporate Planning Officer Executive Director Executive Director Audit & Supervisory Board Member Audit & Supervisory Board Member Audit & Supervisory Board Member	Shigeru Kobayashi, M.E. Arihiko Bijohira Akiyuki Furuya Kunihiro Ohta, Ph.D. Ken-ichiro Saitoh Yasuhiro Tsuji, Ph.D. Nobuo Taguchi
Major shareholder		Miraca Holdings, Inc. Matsui Securities Co. Ltd., Daiwa Securities Co. Ltd.,	



# 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



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- 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.