Financial Results FY12/17

Feb 14, 2018

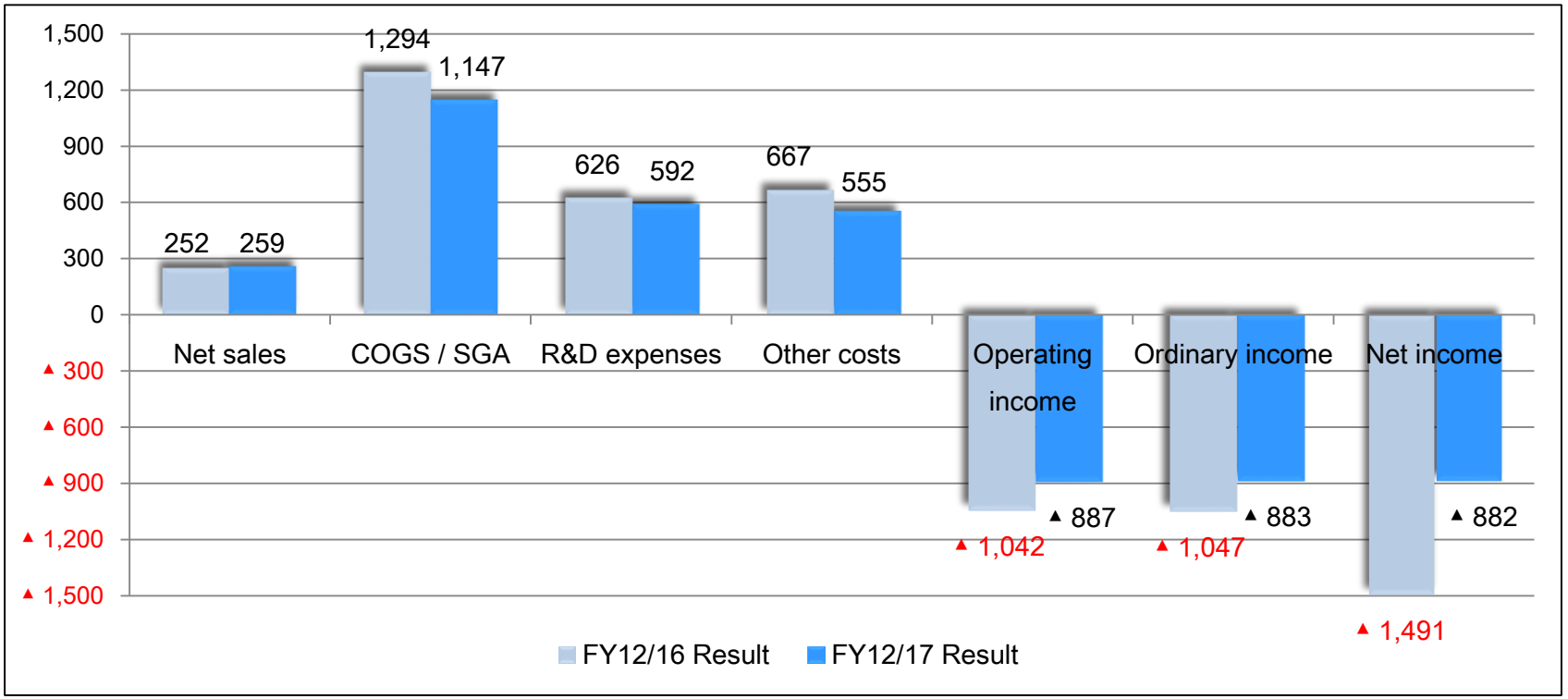
To accelerate drug discovery and development of mAb
for therapeutics to overcome current medical unmet-needs

Chiome Bioscience Inc.

Overview of FY12/17 “Financial results”

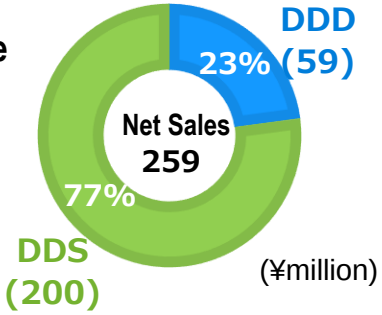
Financial results: Profit and Loss

(¥million)



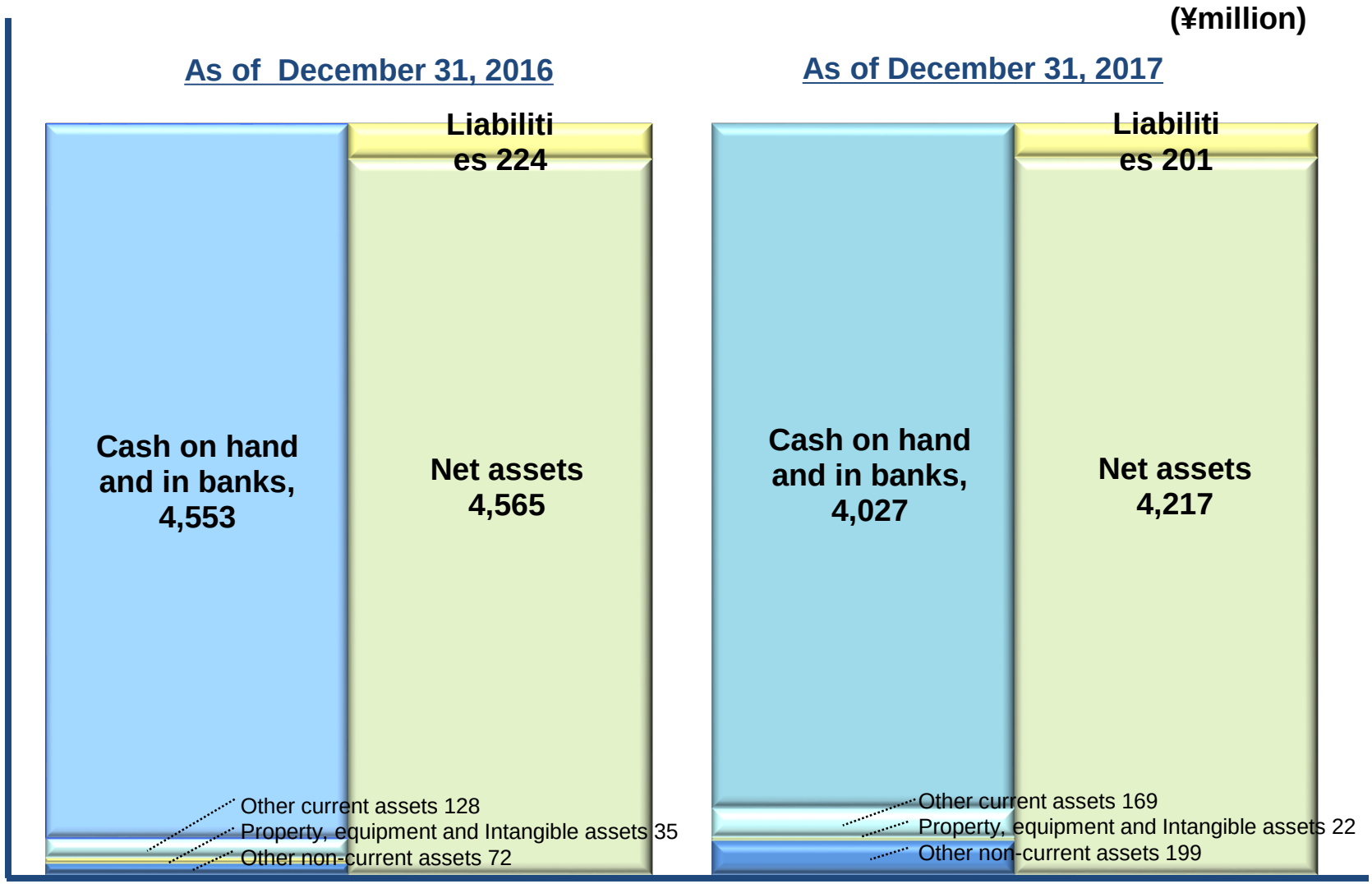
- **Net Sales**
  Drug Discovery and Development (DDD) 59 million yen: Upfront payment of the License Agreement with ADC Therapeutics（ADCT） and 1st milestone payment were posted.
  Drug Discovery Support (DDS) 200 million yen： Mainly consists of sales from Chugai Pharmaceutical Group and Mitsubishi Tanabe Pharma Group etc.

- **R&D expenses**
  Expense of GMP manufacturing for clinical development was posted.



Financial results: Balance Sheet

(¥million)



Financial results: Cash Flows

(¥million)

	FY12/16	FY12/17
Cash flows from operating activities	△969	△867
Cash flows from investing activities	1,988	△137
Cash flows from financing activities	1,433	478
Net increase (decrease) in cash and cash equivalents	2,452	△525
Cash and cash equivalents as of the beginning of the year	2,100	4,553
Cash and cash equivalents as of the end of the year	4,553	4,027

- **Cash flows from investing activities**
  - **Purchase of investment securities for Trans Chromosomics, Inc. (TC)**
  - **Proceeds from collection of lease and guarantee deposits**

- **Summery of financing through third-party allotment**
  - **Total amount of funds (Sept. 16, 2016~Dec.31, 2017): JPY1.7 billion**
  - **Total number of dormant stocks: 1,347**

(¥million)

Use of funds	Cost	Scheduled period of spending
Pre-IND submission and early-phase clinical development	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 FY12/17 “Operation highlights”

Business Segment

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.

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.

Operating highlights (1)

Drug Discovery and Development Business

- **License Agreement executed with ADC Therapeutics（ADCT）**
  - ✓ To develop, manufacture, and commercialize an antibody, LIV-1205, as Antibody Drug Conjugate (ADC) for cancer treatment .
  - ✓ On track for clinical development; the first milestone payment has been received.
- **Strategic chemistry, manufacturing and control (CMC) activities for LIV-1205 have been initiated, aiming at its in-house clinical development.**
  - ✓ ProBioGen AG (Germany) as the partner for the Master cell banking and GMP manufacturing.
  - ✓ Clinical development plans will be determined following results obtained from the US National Cancer Institute program for pediatric cancer, and hearings to KOLs, etc.
- **Licensing activities dedicated to pipelines in preclinical stage.**
  - ✓ LIV-2008: Option License was not exercised by ADCT; research and licensing efforts continue.
  - ✓ BMAA (anti-semaphorin 3A antibody): continue licensing activity.

Operating highlights(2)

Drug Discovery and Development Business

- **Expanding pipeline**
  - ✓ **A public offering for research themes related to refractory cancer, rare diseases and designated intractable diseases.**
  - ✓ **Positively approached industry-academia collaboration organizations and academic institutions for acquiring novel drug candidates.**

- **Joint research contract executed with Trans Chromosomics, Inc. (TC)**
  - ✓ **Capitalized in February, 2017 (underwriting of new shares by third-party allotment).**
  - ✓ **Fostering drug discovery research by leveraging TC's fully human antibody-producing mice/rat complementary to Chiome's existing antibody discovery toolbox.**

Operating highlights(3)

Drug Discovery Support Business

- **Continue transactions with Chugai Pharmaceutical Group based on Master Service Agreement as main revenue source**
  - ✓ **Joint Research and Development Agreement terminated in December, 2017.**
  - ✓ **Master Service Agreement remains effective.**

- **Provide antibody generation service for Mitsubishi Tanabe Pharma Group utilizing ADLib® system.**
  - ✓ **Transactions continue based on the agreement concluded in December, 2016.**

- **Perform joint research or contract service for pharmaceutical and diagnostic companies.**
  - ✓ **Produce antibody using the ADLib® system and other antibody discovery platforms for new clients.**

Pipeline

Out-Licensed Product

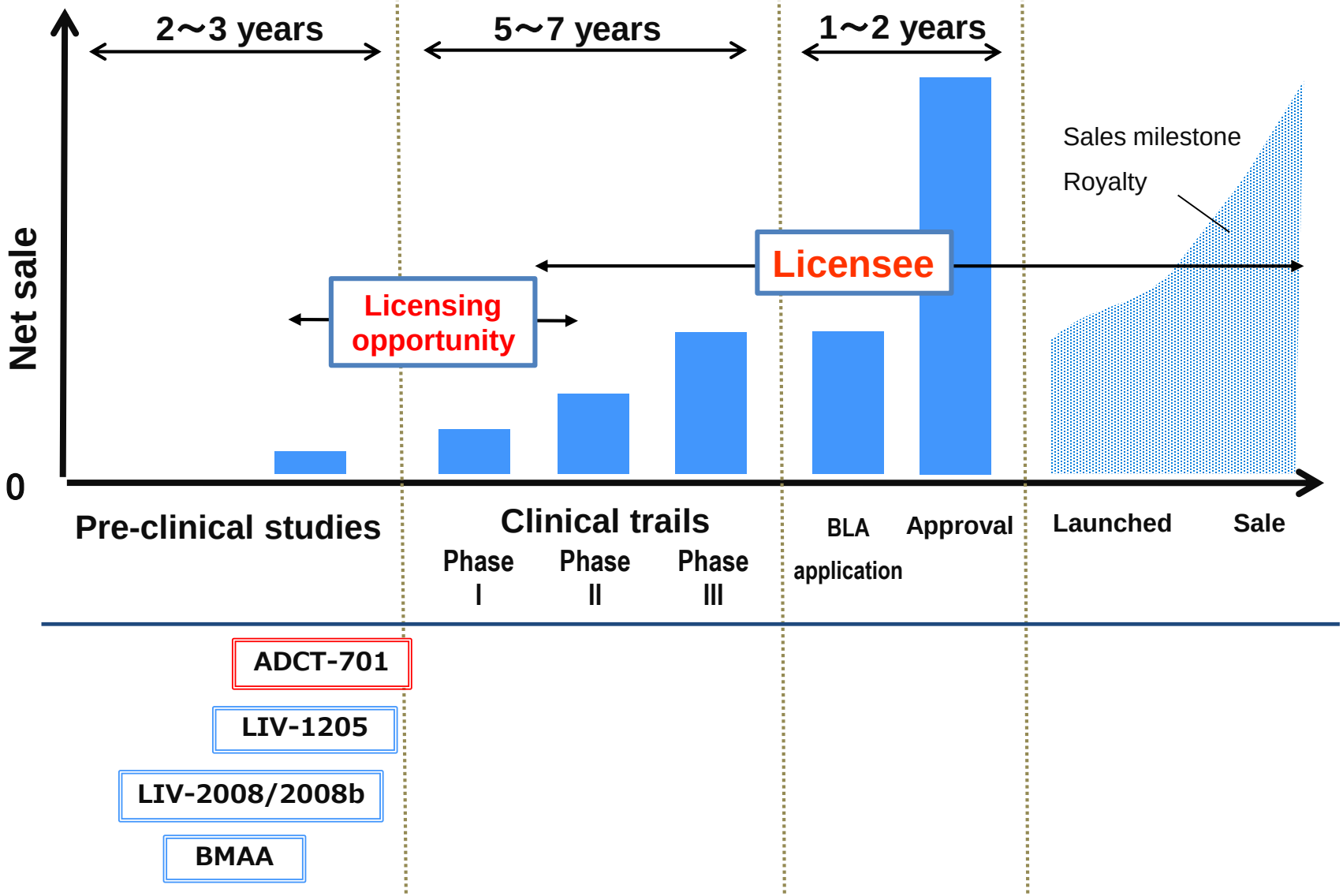
Code	Target	Therapeutic Area	Basic research, Drug Discovery	Preclinical Study	Clinical Trials	Partner
ADCT-701 (LIV-1205 ADC)	DLK-1	Oncology /ADC				ADC THERAPEUTICS

Pipelines

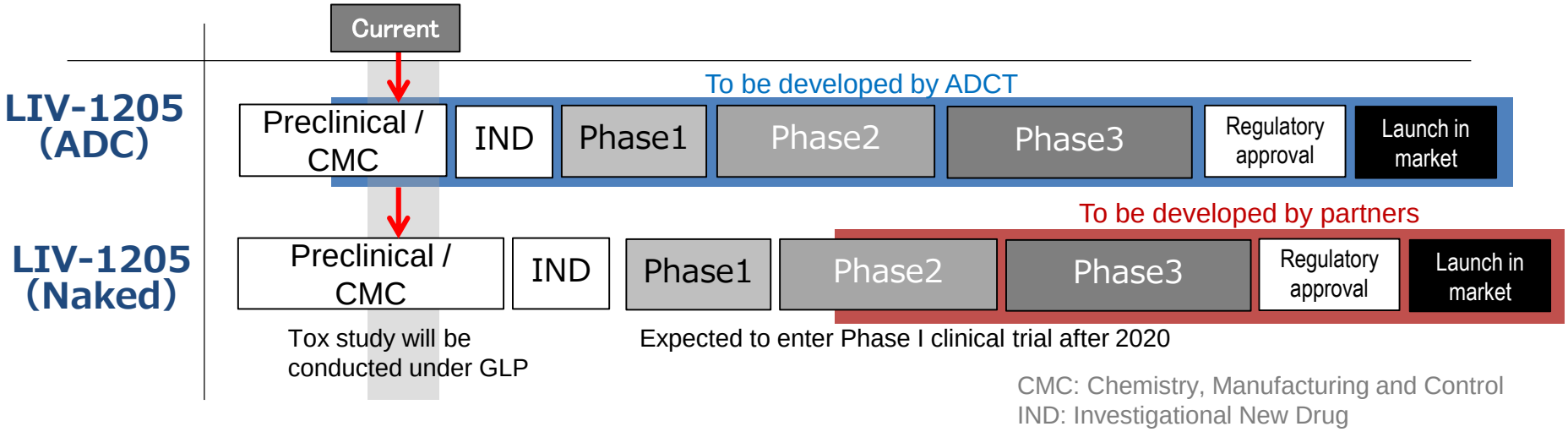
Project	Target	Therapeutic Area	Basic research, Drug Discovery	Preclinical Study	Clinical Trials	Partner
LIV-1205 (Naked)	DLK-1	Oncology				–
LIV-2008 /2008b	TROP-2	Oncology				Looking for partners
BMAA	SEMA3A	Undisclosed				Looking for partners
Discovery PJ (8)※	Undisclosed	Oncology infectious/ rare diseases				–

※ 5 joint studies in 8 discovery projects

Development timeline and revenue model



Development timeline of LIV-1205



CMC: Chemistry, Manufacturing and Control
IND: Investigational New Drug

	LIV-1205 (Humanized anti-DLK-1 antibody)
Target	DLK-1
High expression cancer	Liver cancer, lung cancer, neuroblastoma etc.
Novelty of target	Novel target
Competitor	No clinical stage compounds targeting DLK1
Patent	JP,US,EP,CN
Efficacy in human	Unknown
Expectation	First-in-class therapeutic antibody targeting intractable cancers
Naked antibody	LIV-1205 exhibited a noticeable inhibitory effect on tumor growth using animal model in single administration
Fitness for ADC	LIV-1205 has internalization activity

Final Report from the Advisory Board

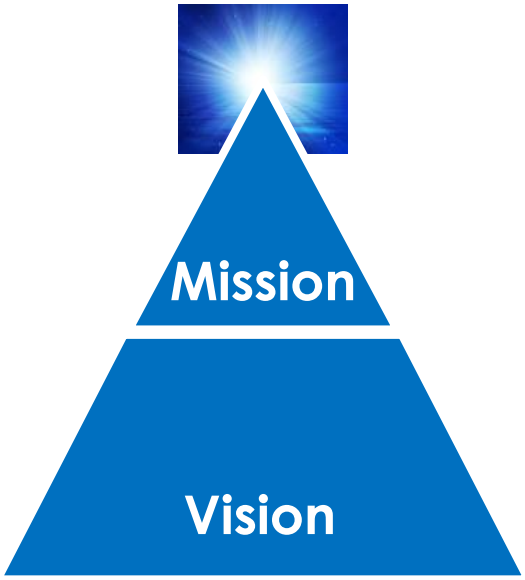
According to the final report from the Advisory Board, "...considering the Securities Listing Regulations of Tokyo Stock Exchange, it is concluded that there were inappropriate contents found in company announcements released in the past."

Chiome acknowledged and regretted the attitude resulting in lack of clear statements in the past disclosures which might have caused confusion regarding business operation. Going forward, Chiome will implement the following processes to ensure proper disclosures required by the Securities Listing Regulations.

1. **Consultation with external executives of special expertise.**
2. **Education and training of all executives and employees.**
3. **Coordination between the executives and the auditors.**

New Business Strategy

Corporate Philosophy



Mission

Shed lights of Drug Discovery on unmet medical needs

Vision

Will become No. 1 biotech venture that discovers and develops antibody against unmet medical needs

Management principle

Shift the focus to Drug Discovery

- **Chiome will become a company that fights against unmet medical needs with creativity and science, with mind of keeping wealthy management and credibility in the first place.**
- **Chiome will contribute to patients by generating the best antibodies by leveraging several platforms, and developing them in the field where unmet medical needs exist.**
- **Chiome will increase its corporate value by promoting drug discovery and business development through investment into its own pipeline and strengthening partnership.**

Business segments

Chiome Bioscience

Drug targets/candidates Discovery Partnership × **Multi platforms Select the best clone efficiently** × **Drug Discovery Support function**

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

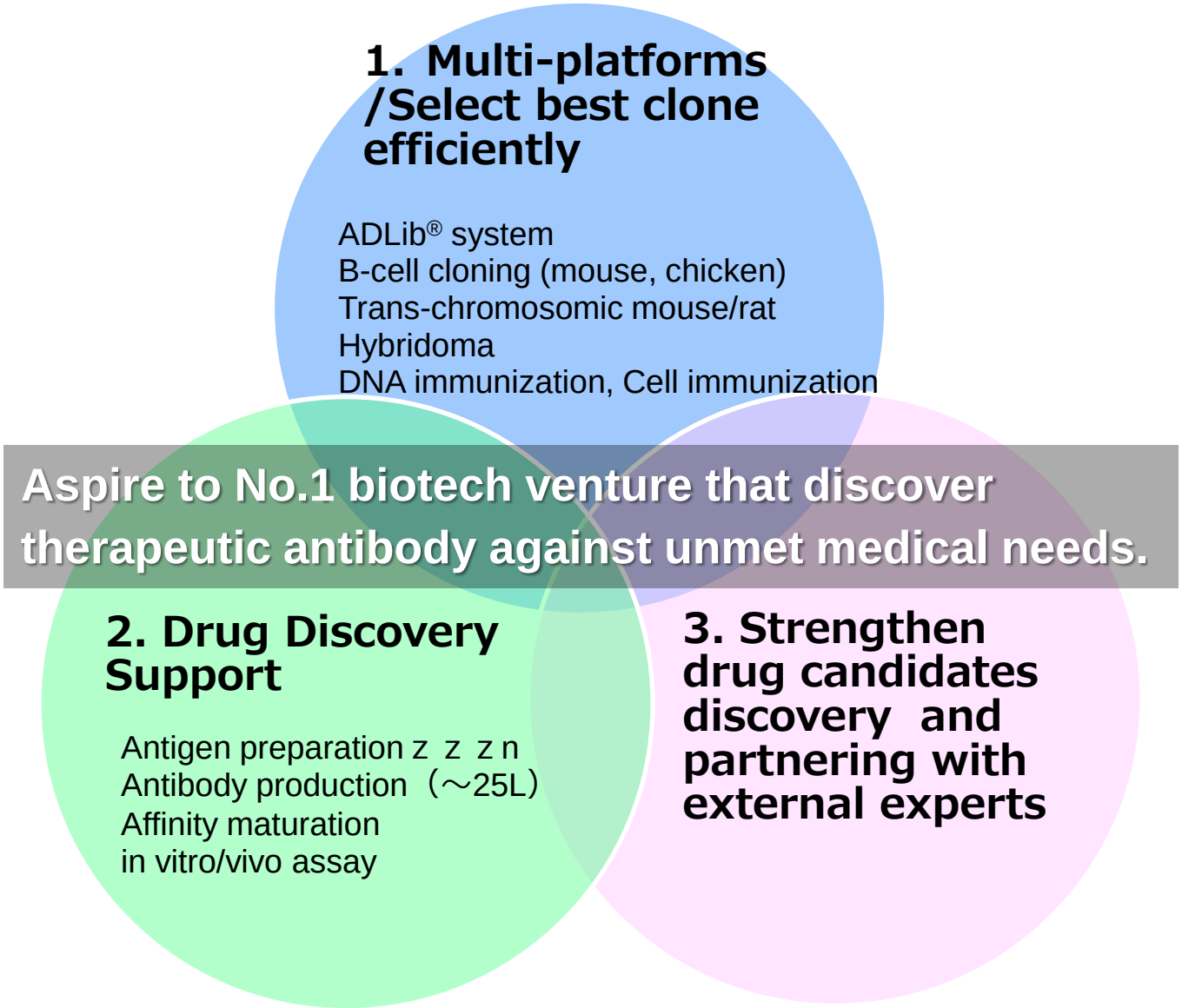
Continuity

Obtain constant revenue

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

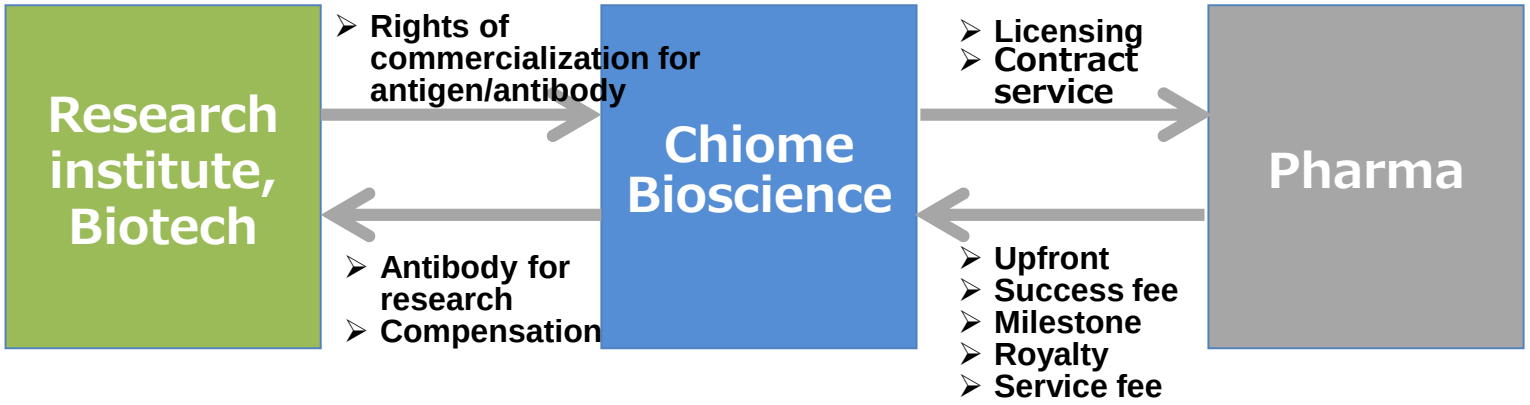
Shed lights of Drug Discovery on unmet medical needs

Key factors to grow: Ability of drug candidates discovery



Business model

Chiome will develop antibody up to preclinical package or early clinical stage, and then find a partner for licensing.



In-house drug discovery projects

Stage	Number of Projects (joint research)	
Drug Discovery	8（5）	
Preclinical	2	LIV-2008・BMAA
Clinical candidate	1	LIV-1205(Naked)

Out-licensed：ADCT-701（LIV-1205･ADC）

Strategy in Drug Discovery project

1. Increase success rate by continuously keeping more or less 10 projects taking failure risk into account.

2. In-license advanced stage project to fulfill pipeline as short-term direction.

Company Profile

As of December 31, 2017

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 Dec.31,2017)
Number of Employees		46 (As of Dec.31,2017)
Directors and Corporate Auditors		President, Chief Executive Officer — Shigeru Kobayashi, M.E. Executive Director, Chief Financial Officer, Head of Corporate Planning Officer — Arihiko Bijohira Executive Director — Akiyuki Furuya Executive Director — Kunihiro Ohta, Ph.D. Audit & Supervisory Board Member — Ken-ichiro Saitoh Audit & Supervisory Board Member — Yasuhiro Tsuji, Ph.D. Audit & Supervisory Board Member — Nobuo Taguchi
Major shareholder		Rakuten Securities, Inc., SBI Securities Co., Ltd., Miraca Holdings, Inc.

Glossary

Unmet medical needs	A condition for which there exists no satisfactory method of diagnosis, prevention or treatment authorized in the Community.
ADLib® system	A proprietary monoclonal antibody generating technology developed by Chiome Bioscience.
B cell cloning	A method to directly retrieve the antibody gene sequences from immune B cells which express antibodies specific to the target, and are derived from animals undergone immunization by the target antigen.
Antigen	A substance to which the antibody binds, refers to a substance which is a target of therapeutic antibodies.
DNA immunization	A method for producing monoclonal antibodies. Instead of protein antigens, DNAs which encode the antigens are used for animal immunization.
Cell immunization	A method for producing monoclonal antibodies. Instead of protein antigens, cells which express the antigens are used for animal immunization.
TC	Trans Chromosomics Inc. A Japanese biotech company leveraging innovative chromosome engineering technology developed by Tottori University (Japan) for drug discovery and development, as well as providing drug discovery supports.
Affinity maturation	A method to improve the binding strength of antibodies with antigen.
ADC	Antibody Drug Conjugate. Complex molecules composed of an antibody linked to a biologically active cytotoxic (anticancer) payload or drug.
IND	Investigational New Drug Therapeutics. A request for authorization to administer an investigational drug to humans for clinical trials.
GLP	Good Laboratory Practice. A set of principles intended to assure the quality and integrity of non-clinical laboratory studies.
GMP	Good Manufacturing Practice. Practices required in order to conform to the guidelines recommended by agencies that control the authorization and licensing of the manufacture and sale of pharmaceutical products.
First in Class	The first compound in the world for a particular target (antigen).
Internalization	A phenomenon that antibodies are incorporated into cells after binding with cell surface antigen.

Shed Lights of Drug Discovery on Unmet Medical Needs

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

Disclaimer

- 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.