

Briefing on Pharmaceutical Segment

Pharmaceutical Business Strategy

June 19, 2017 Meiji Holdings Co., Ltd.





1. Market Environment

2. Our Growth Strategy

- Business forecasts and other forward-looking statements are based on information available at the time of the release of this presentation and reasonable assumptions made by the Company. Actual results could differ materially from forecasts due to various factors.
- Although this material includes information concerning pharmaceutical products (including those currently under development), such descriptions are not intended to advertise the products or provide any medical advice.

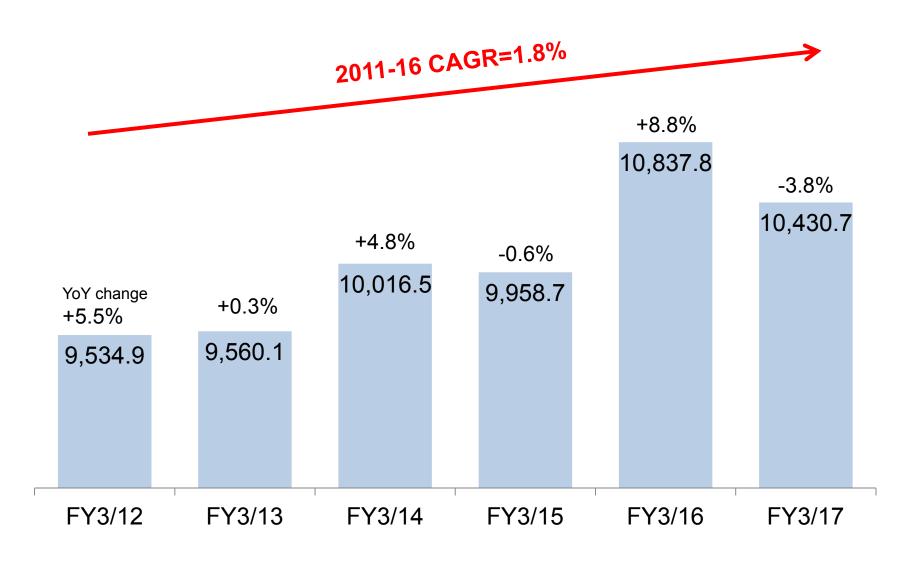


1. Market Environment

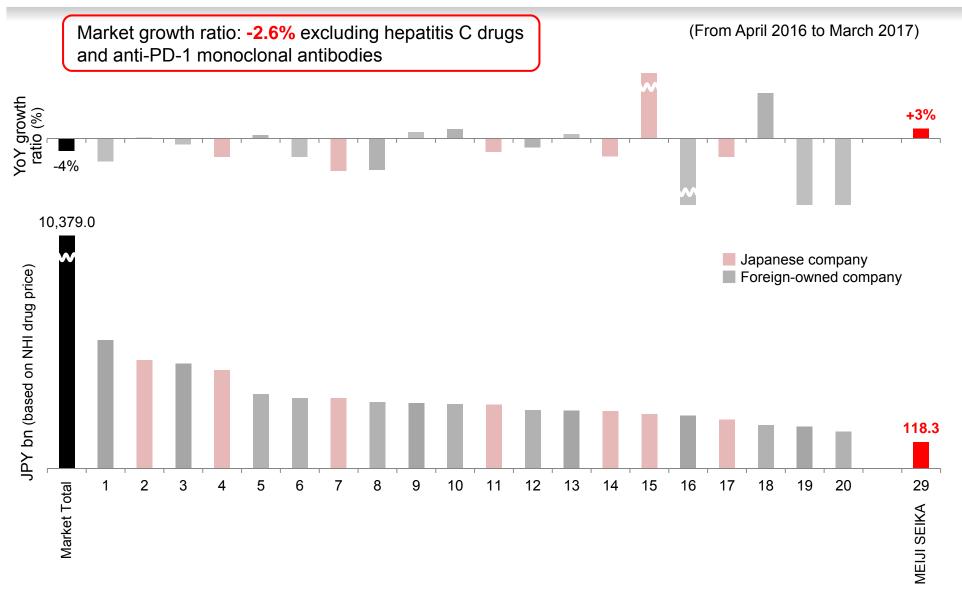
Ethical Pharmaceuticals Market in Japan



(JPY bn)



Ethical Pharmaceuticals Market in Japan (by Company) meiji



Medical Megatrends (2010-2050) and Possibilities for Market **meiji** Expansion

| - | | 2010 | 2030 | 2050 |
|------------------------|--------|--|--|--|
| Population | Global | 6.9 billion | 8.3bn | 9.3bn |
| Popu | Japan | 128.06 million | 116.62mm | 970.8mm |
| | | | | |
| Iderly | | 7.7% | 12.0% | 17.2% |
| % of elderly | | 23.1% | 31.6% | 38.8% |
| Jf | | | | |
| Number. of elderly | | 29.58 million | 36.85 mm | 37.67 mm |
| NU | | | | |
| SS | | | - COPD becomes 1 of 4 leading causes of death | 10 million deaths from drug-resistant bacteria Eliminate cancer deaths for all under 80 |
| Illness | | | Parkinson's patients double Diabetes patients sore to 520 million | Dementia 5 million people Cost for regenerative medicine JPY 2.5 trillion |
| Government / social | | Acceleration of health care cost control | Individualized medical care Integrated community care system | |
| Technology | | iPS cells | - AI technology - Stem cell treatment | |

6 | June 19, 2017 | Copyright © 2017 Meiji Holdings Co., Ltd. All rights reserved.



1

2

Additional NHI price reductions on long-listed drugs

Maximum 2% of additional reduction shall be applied to individual brandname drugs that have not been appropriately replaced by generic drugs even after 5 years of listing of these generics

Generic drugs

 Price of newly listing generic drugs: reduce 0.7 multiplication to 0.5 multiplication of the drug price of the original (brand-name) product

(If the medicine is more than 10 items, 0.4 multiplied)

- Consolidate drug prices for listed drugs into 3 price layers
- Amendment of volume share targets 70% by end of 2017, 80% by September 2020

3

Restrictions on polypharmacy for psychiatric drugs Promotion of proper use of antibiotics



2. Our Growth Strategy

Outlook for the FYE March 2018

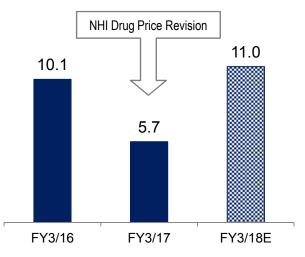


Increase Income -- Focus Resources on Core Domains, Steady Sales Growth and Low-Cost Operations

Consolidated Net Sales NHI Drug Price Revision 175.6 164.5 161 6 40.⁻ 41.9 38.7 29.9 19.0 21.5 48.3 43.0 42.5 FY3/16 FY3/17 FY3/18E (Japan) Generic drugs (Japan) Reflex + Sycrest + Bilanoa Overseas Others

(JPY bn)

Consolidated Operating Income



9 June 19, 2017 Copyright © 2017 Meiji Holdings Co., Ltd. All rights reserved.

(Note) Net sales for the parent company export business and net sales (after elimination) from overseas subsidiaries subject to the scope of consolidation are indicated as above sales.

- Maximize sales and profits of domestic ethical pharmaceuticals business
- Improve profitability of international business
- Conduct R&D that generates profits
- Make agricultural chemicals and veterinary drugs business profitable
- Optimize product portfolio and distribution structure
- Low-cost operations

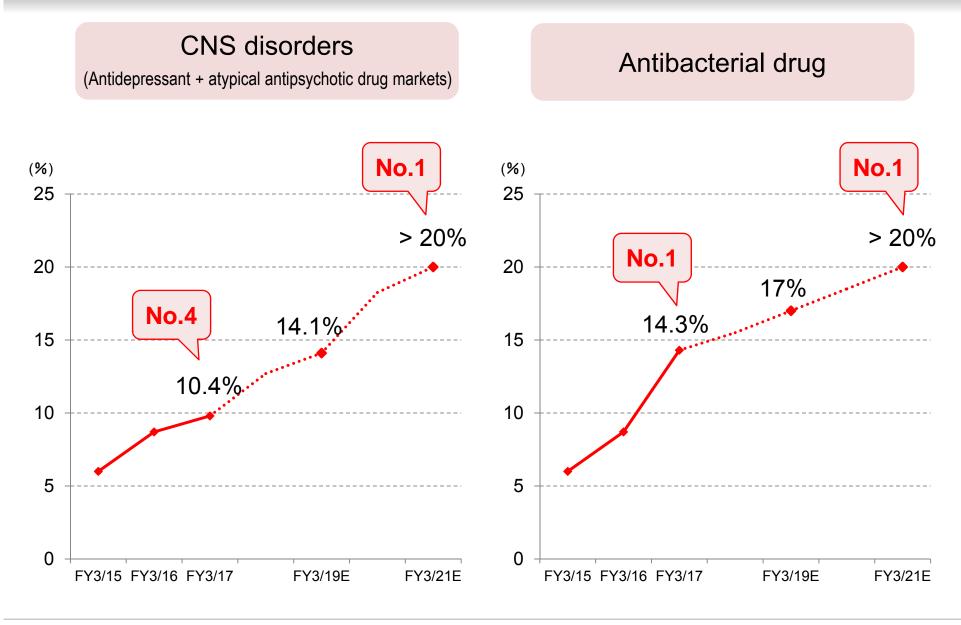
Cost reduction

Growth strategy

- Build and operate advanced quality assurance system
- Develop and hire competitive personnel

Grow Sales Share in Core Domains





11 | June 19, 2017 | Copyright © 2017 Meiji Holdings Co., Ltd. All rights reserved Reprinted with permission



Vast lineup of brand-name and generic drugs to capture top share

| | Antidepressant drug market | Market share | YoY change |
|----|-------------------------------|-----------------|---------------|
| 1 | А | 32.8% | 1 |
| 2 | REFLEX | 15.1% | 1 |
| 3 | В | 11.3% | 1 |
| 4 | С | 8.4% | \downarrow |
| 5 | D | 5.7% | 1 |
| 6 | E | 5.4% | \downarrow |
| 7 | F | 4.2% | 1 |
| 8 | G | 4.0% | 1 |
| 9 | DEPROMEL | 1.3% | \downarrow |
| 10 | SERTRALINE Meiji | 1.1% | 1 |

| | Atypical antipsychotic drug market | Market share | YoY change |
|----|------------------------------------|-----------------|---------------|
| 1 | Н | 29.3% | 1 |
| 2 | I | 19.2% | \downarrow |
| 3 | J | 10.3% | \downarrow |
| 4 | К | 8.9% | \downarrow |
| 5 | L | 5.8% | ↑ (|
| 6 | Μ | 5.2% | 1 |
| 7 | Ν | 5.1% | \downarrow |
| 8 | 0 | 1.6% | \downarrow |
| 9 | OLANZAPINE Meiji | 1.4% | — |
| 10 | SYCREST | 1.3% | |

12 | June 19, 2017 | Copyright © 2017 Meiji Holdings Co., Ltd. All rights reserved Reprinted with permission

Maximize Sales of SYCREST and REFLEX



- SYCREST, Antipsychotic drug
 - Approved for long-term prescription on June 1, 2017
 - Rapid onset and one of the promising choices for the treatment of acute stage of schizophrenia
 - Our sales estimates for FYE March 2018: JPY 4.0bn
 - Estimated peak sales: JPY 38.5bn (based on NHI drug price)
- REFLEX, Antidepressant drug
 - Expand sales using first large-scale evidence for Japanese patients

<u>Mirtazapine*</u> improves the depression evaluation scale quicker, when compared to that of generally prescribed antidepressant drugs (SSRI). The difference between the Mirtazapine and SSRI was statistically significant at week 2 after drug administration.

*General name for REFLEX

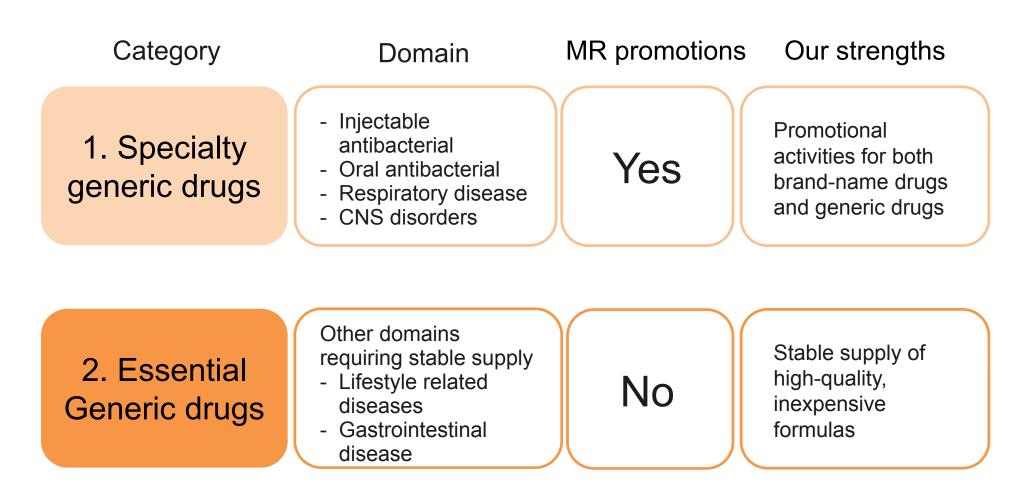


- Approved for long-term prescription in December 2017
- New active ingredient, fulfills market needs (rapid-onset, longlasting efficacy, safety)
- Our sales estimates for FYE March 2018: JPY 4.2bn



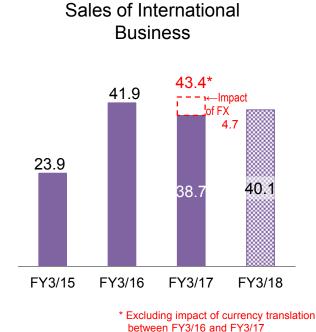


New strategy: categorize generic drugs into 2 groups



Improve Profitability of International Business





ASEAN

- Expand export business
- Expand local sales at overseas subsidiaries and sales partners
- Strengthen presence in ASEAN

Medreich Ltd.

Foreign exchange target in the FYE March 2018

| USD | JPY 110 |
|-----|---------|
| EUR | JPY 120 |
| RMB | JPY 16 |

- Expand CMO and CDMO businesses
- Establish management structure for production and supply for Japanese market
- Start supplying from autumn 2017





| | R&D Pipeline (compounds discovered in-house) | | FYE March 2018 | FYE March 2019 | FYE March 2020 |
|---------------------|---|-----------------|------------------|----------------|----------------|
| Infectious diseases | ME1111 [Antionychomycosis] ◆ | - P II | | | > |
| | ME1100 Arbekacin inhalation [HABP/VABP] ◆ | Pha | se lb (Overseas) | | > |
| | OP0595 [β-lactamase inhibitor] *out-licensed to F.Hoffman-La Roche | } | Phase | | > |
| CNS disorders | Depromel (SME3110 Fluvoxamine) [SSRI, Pediatric OCD] Expanded indication | } | -> Approve | | |
| | ME2112 Ziprasidone [Antipsychotic] | } | Phase III | | > Apply> |
| | ME2125 Safinamide [Anti-Parkinson's disease] *out-licensed to Eisai | } | Phase II/III | Apply | > |
| | REFLEX (Org3770 Mirtazapine) [Fibromyalgia treatment] Expanded indication | - P II | | | > |
| New fields | SP-02L Darinaparsin [Relapsed and refractory peripheral T-cell lymphoma (PTCL)] | -- | Phase II | Apply | > |
| | DMB-3111 Trastuzumab biosimilar [Breast cancer, Gastric cancer] * out-licensed to Gedeon Richter | - Out-licensing | (P I finished) | | > |
| | DMB-3113 Adalimumab biosimilar [Rheumatoid Arthritis/TNFα inhibitor] ◆ | Phas | e I | | > |

Make agricultural chemicals and veterinary drugs business profitable



Agricultural Chemicals

- ORYZEMATE and ZAXA : Cost reductions to improve margin and stable procurement of active ingredients
- Develop pipelines

| R&D Pipeline (+: compounds discovered in-house) | | | FYE March 2018 | FYE March 2019 | FYE March 2020 |
|---|---|---------|----------------|----------------|--------------------|
| nicals | ME5382 [Insecticide] | Applied | | | Approve -> |
| Chem | ME5343 [Insecticide] 		** | Applied | Dverseas) | Approve (Overs | > seas) |
| ultural | ANM-138 [Insecticide] Joint development with Nippon Kayaku | | Approve - | | > |
| Agricu | Fungicide for agrochemical use * out-licensed to Dow AgroSciences | Applied |) Dverseas) | Арр | rove (Overseas) |

** Discovered in a research collaboration between Meiji Seika and The Kitasato Institute

Veterinary Drugs

- Streamline product lineups
- Cost reductions including active ingredient suppliers

Create Business Platform for Global Expansion





- Reduce cost by optimizing distribution and production sites
- Build system for low-cost, stable procurement of active ingredients and raw materials
- Ensure competitive product quality to meet needs of domestic and international markets

- Expand Meiji Seika Pharma quality standards to global market
- Provide drug information to increase trust in our products
- Build quality assurance system and adequately cope with domestic and foreign regulatory requirements

Pursue Sustainable Growth



2026

ASEAN

-ceuticals

Pursue sustainable growth by responding to; expanding medical demands and changes in operating environment while continuing to offer health value Agricultural Chemicals 2000s Biopharma



Build low-cost, high-quality production structure (Medreich in India)

Biosimilars (DM Bio in South Korea)

1946 **Drugs for Infectious Disease**

1980s

Drugs for CNS

disorders



meiji





Appendix

Explanation of Terminology



- CAGR · Compound Average Growth Rate
- CMO

- Contract Manufacturing Organization
- Company that is contracted by a pharmaceutical company to conduct drug manufacturing
- Fulfills vital role of increasing productivity and reducing costs

CDMO Contract Development and Manufacturing Organization

• Company that in addition to the functions of a CMO, offers services including drug formula development.

COPD

- Chronic Obstructive Pulmonary Disease
 - Chronic inflammation of the lungs
 - Result of long-term, habitual inhalation of toxic gases included in tobacco smoke, etc.

Per Capita Medical Expenses by Age



(JPY 10 thousands)

Medical expense total Expense breakdown (Age) 100~ 117.8 95~99 116.8 90~94 109.3 85~89 102.6 80~84 92.2 75~79 77.7 70~74 61.9 65~69 45.4 60~64 35.8 55~59 27.5 50~54 21.6 45~49 16.9 40~44 13.7 35~39 12.1 30~34 10.9 25~29 9.2 Hospitalization + food & lifestyle care 20~24 7.3 Outpatient + prescriptions 15~19 7 10~14 8.8 5~9 12.1 22.2 0~4

June 19, 2017 | Copyright © 2017 Meiji Holdings Co., Ltd. All rights reserved. 24

80

100

120

140

0

20

20

0

40

60

Source: Ministry of Health, Labour and Welfare, Health Insurance Bureau (2013)

100

120

140

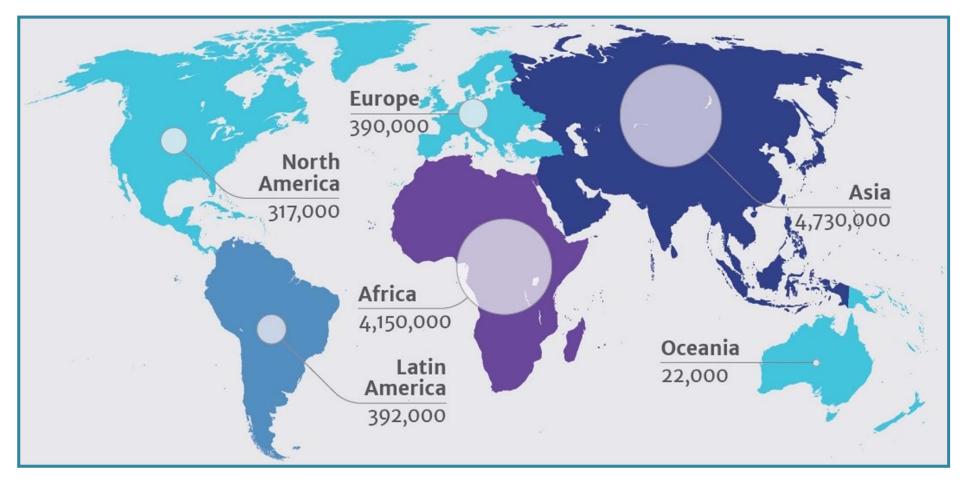
80

40

60

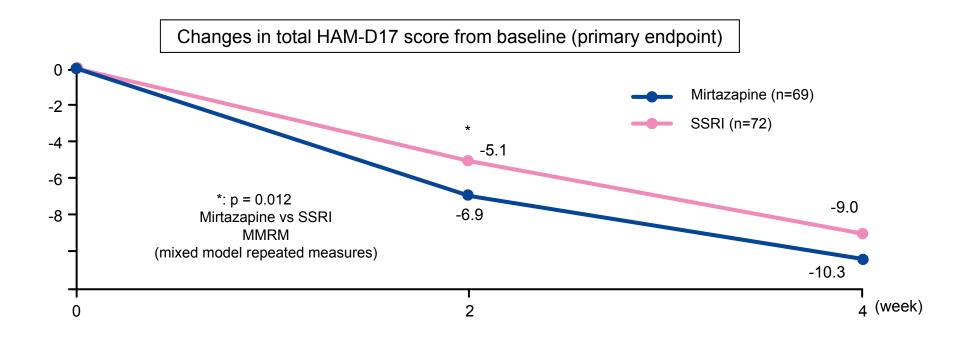
By 2050, Number of Deaths from Drug Resistant Bacteria will **meiji** Reach 10 Million

Number of deaths



GUNDAM:

<u>Genotype</u> <u>Utility</u> <u>Needed for</u> <u>Depression</u> <u>Antidepressant</u> <u>Medication</u>



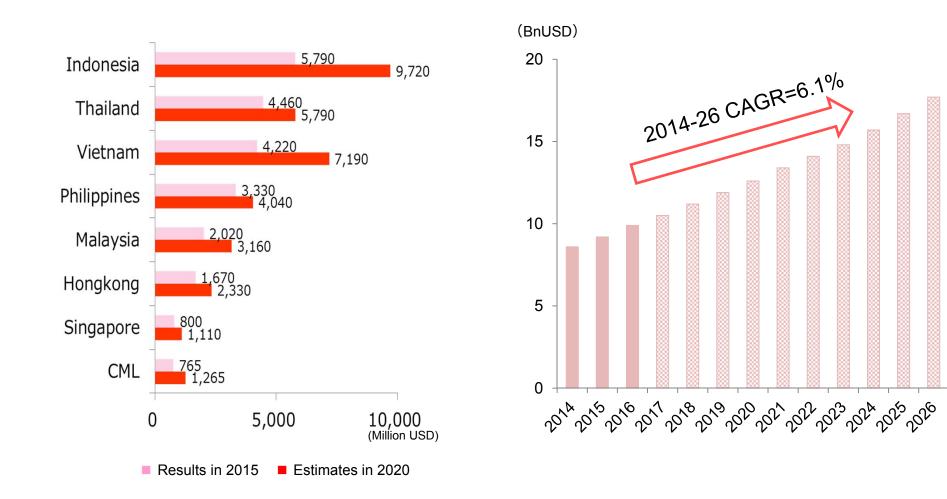
Created based on Kato M, et al. J Psychiatr Res 2017; 89: 97-104. Authors receiving support from Meiji Seika Pharma Co., Ltd., etc.

Market Trends

meiji

ASEAN ethical drug market

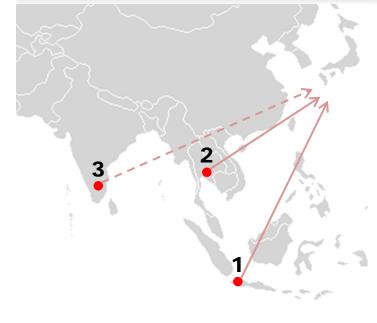
Global solid dosage form CMO market



Drug Production for Japanese Market in Overseas

meiji

Vial washing and sterilization (P.T. Meiji Indonesian)



3. Medreich

- Subsidiary since 2015 via stock acquisition
- Preparing for the first generic drugs shipment to Japan in Autumn 2017

1. P.T. Meiji Indonesian Pharmaceutical Industries

- Established in 1974
- Started to export ethical pharmaceuticals to Japan in 1994
- Manufacturing penicillin drug after expanding facility
- Contract manufacturer for major pharmaceutical companies (CMO)

2. Thai Meiji Pharmaceutical

- Established in 1979
- Started to export ethical pharmaceuticals to Japan in 2004
- Manufacturing generic drugs such as Amlodipine



Laser marking (Thai Meiji)