

Otsuka Holdings Co Ltd

The 3rd Medium-Term Management Plan FY 2019 - 2023

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President and Representative Director, CEO
Otsuka Holdings Co., Ltd.

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- **Value Creation Model and Goals**
- **Position and Performance Targets**
- **Growth Strategies**
 - Pharmaceutical Business
 - Nutraceutical* Business
 - Financial Policy

* (NC) Nutraceutical = nutrition + pharmaceuticals

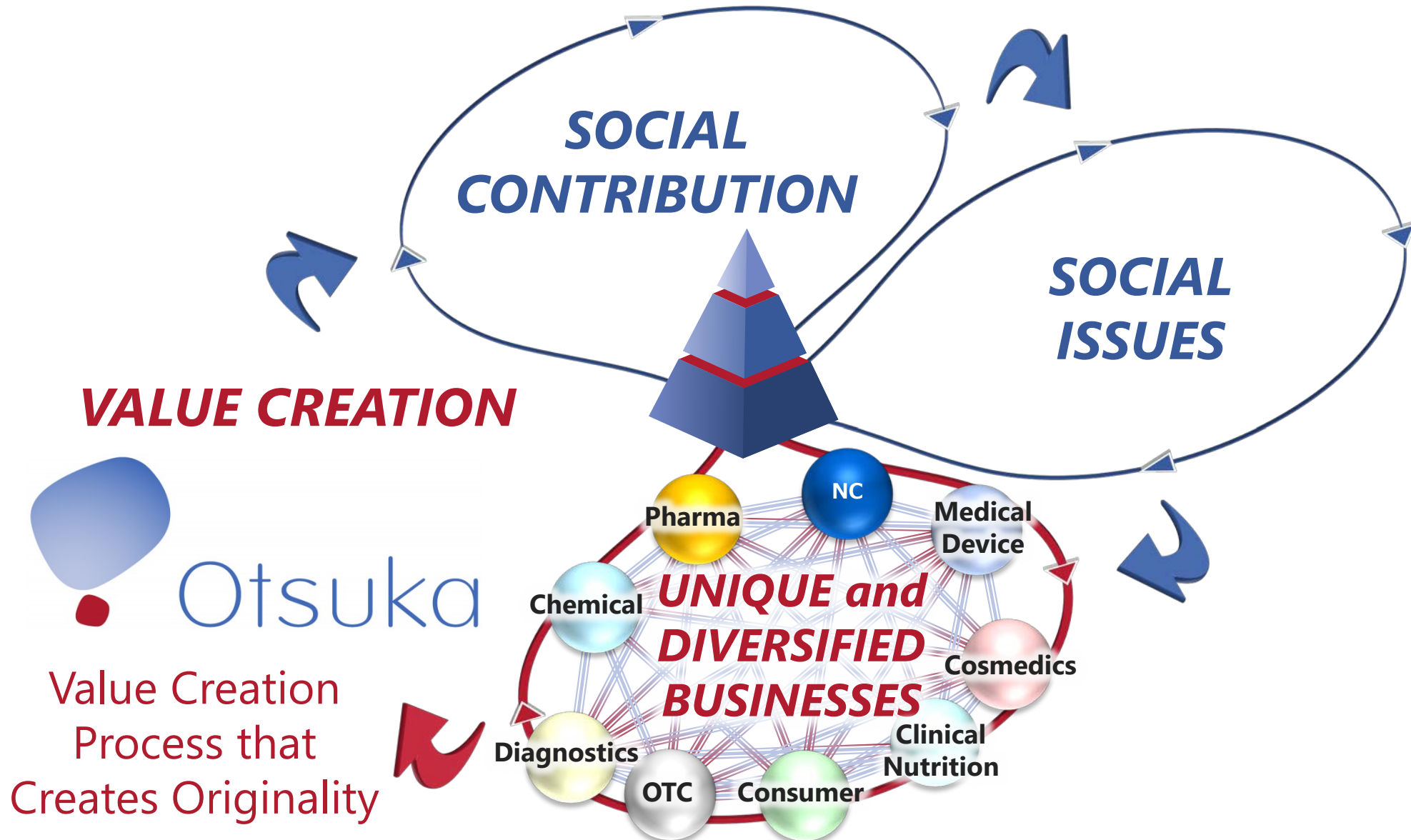
Essence of Management

– Basis of Our Value Creation Model

Otsuka-people creating new products
for better health worldwide

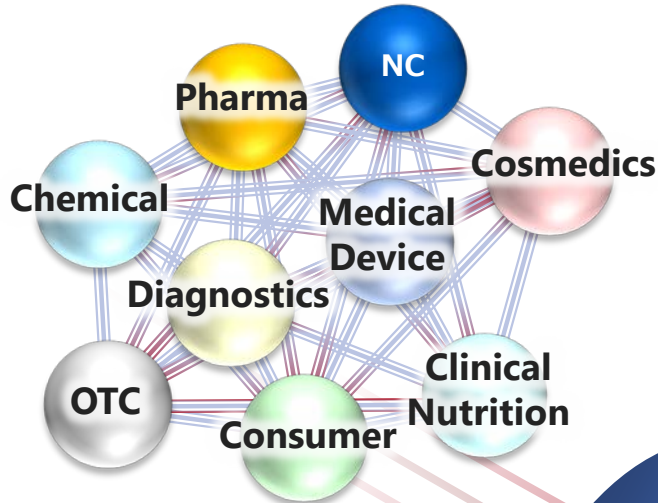


Unique Value Creation Model



Value Creation Process that Creates Originality

Unique and Diversified Businesses



Real Needs
Insights

Technology

Science

New Value Creation

Niche

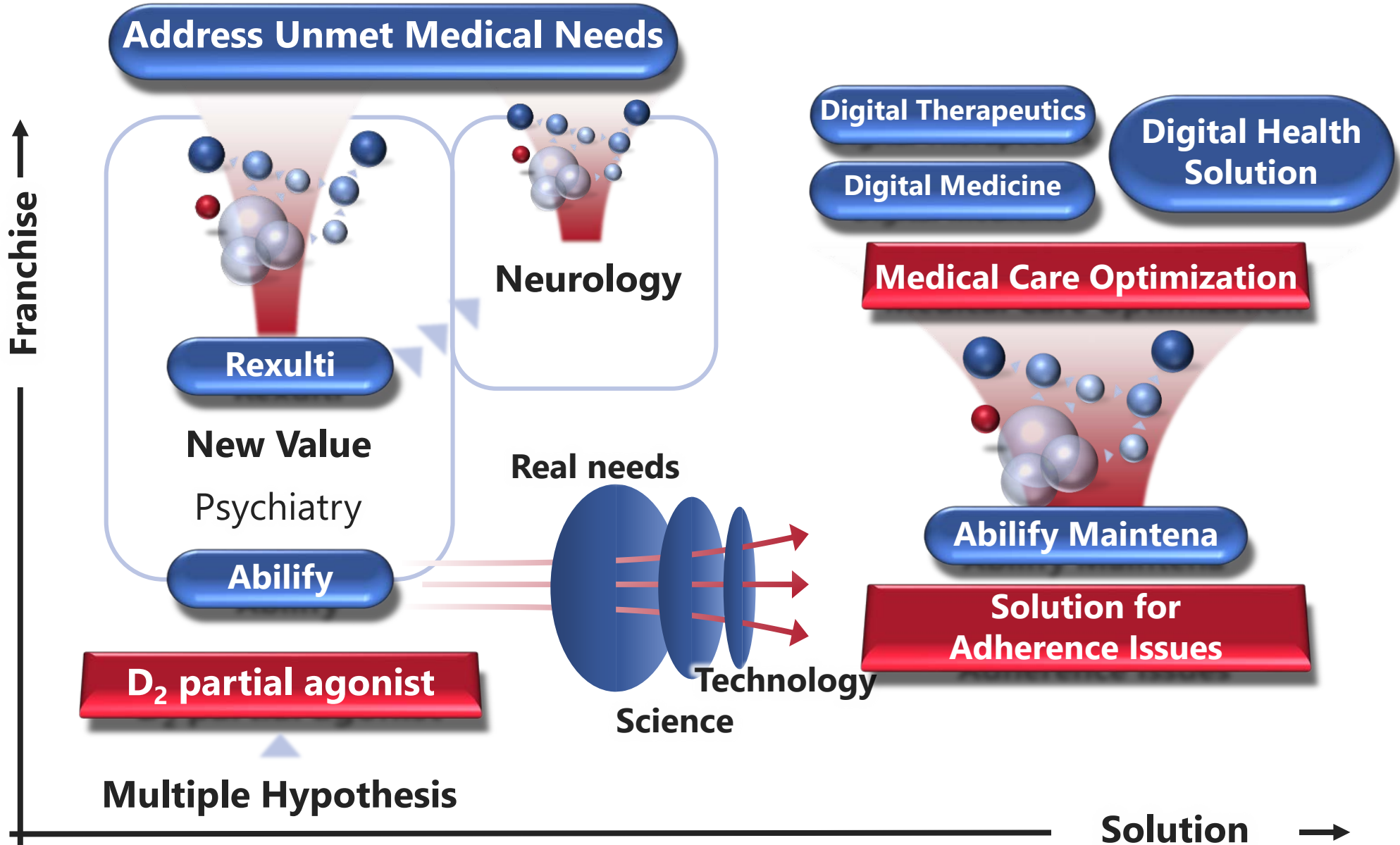
Derivation

Synergy

Value Creation

New Concept

Value Creation Process in Psychiatry & Neurology



To become an indispensable contributor
to people's health worldwide

Total Healthcare

Unmet medical needs

**Pharmaceutical
Business**

Yet-to-be-imagined needs

**Nutraceutical
Business**

Position and Performance Targets

Advance in the Global Market as a Unique Total Healthcare Company ~ Five-Year Growth Phase ~

- **Existing Business Value Maximization and New Value Creation**
- **Business management with a corporate-wide awareness of capital costs**

- **Performance Target: Business Profit CAGR of 10% or more**
 - ✓ By organic growth of mainstay products and brands on Pharmaceutical and NC business
 - ✓ Implement aggressive R&D investments and continue development of new drugs that drive revenue growth on and beyond next MTM

- **Business Strategy: Existing business value maximization and new value creation**
 1. **Strategic initiatives for mainstay products and brands accelerate growth**
 - ✓ Strengthen strategic initiatives on growth drivers:
 - 4 Global Products of the Pharmaceutical business
 - 3 Major Products & 3 Nurture Products of the NC business
 2. **Nurture next generation businesses and products**
 - ✓ Launch and nurture new drivers for sustainable growth on Pharmaceutical and NC business

- **Financial Policy: Business management with a corporate-wide awareness of capital costs**
 - ✓ Balancing investments for future growth and shareholders return
 - ✓ Securing funds for investments for growth and shareholders return

Key Performance Targets

- **Business profits: CAGR 10% or more**
- **Revenue and Business profits before R&D expenses: Surpass historic highs**
- **R&D expenses: Continue aggressive investments for sustainable growth**

(¥billion)	2018A	2021E	2023E	CAGR 2018A-2023E
Revenue	1,292.0	1,500.0	1,700.0	5.6 %
Business profit before R&D expenses	313.8	390.0	460.0	7.9 %
Ratio/Revenue	24.3 %	26.0 %	27.1 %	
R&D expenses	192.9	230.0	260.0	6.1 %
Business profit	120.9	160.0	200.0	10.6 %
Ratio/Revenue	9.4 %	10.7 %	11.8 %	
ROE	4.7 %	≥6.0 %	≥8.0 %	

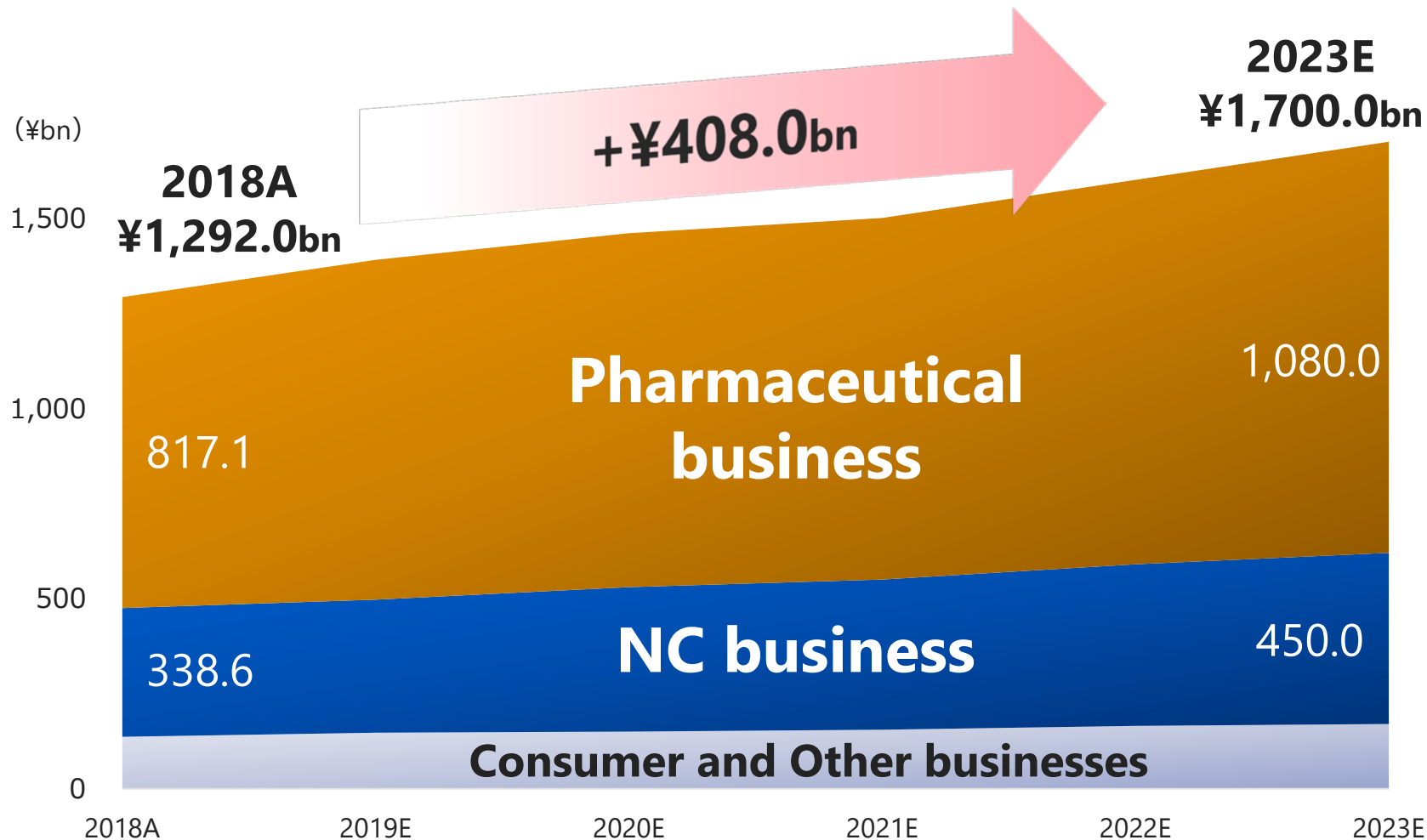
Note: Exchange rate assumptions ¥110/\$, ¥130/euro

Not including performance growth by strategic investments (M&A etc)

Business profit = Revenue – COGS – SG&A + Share of profit of associates – R&D expenses

Revenue Plan by Organic Growth

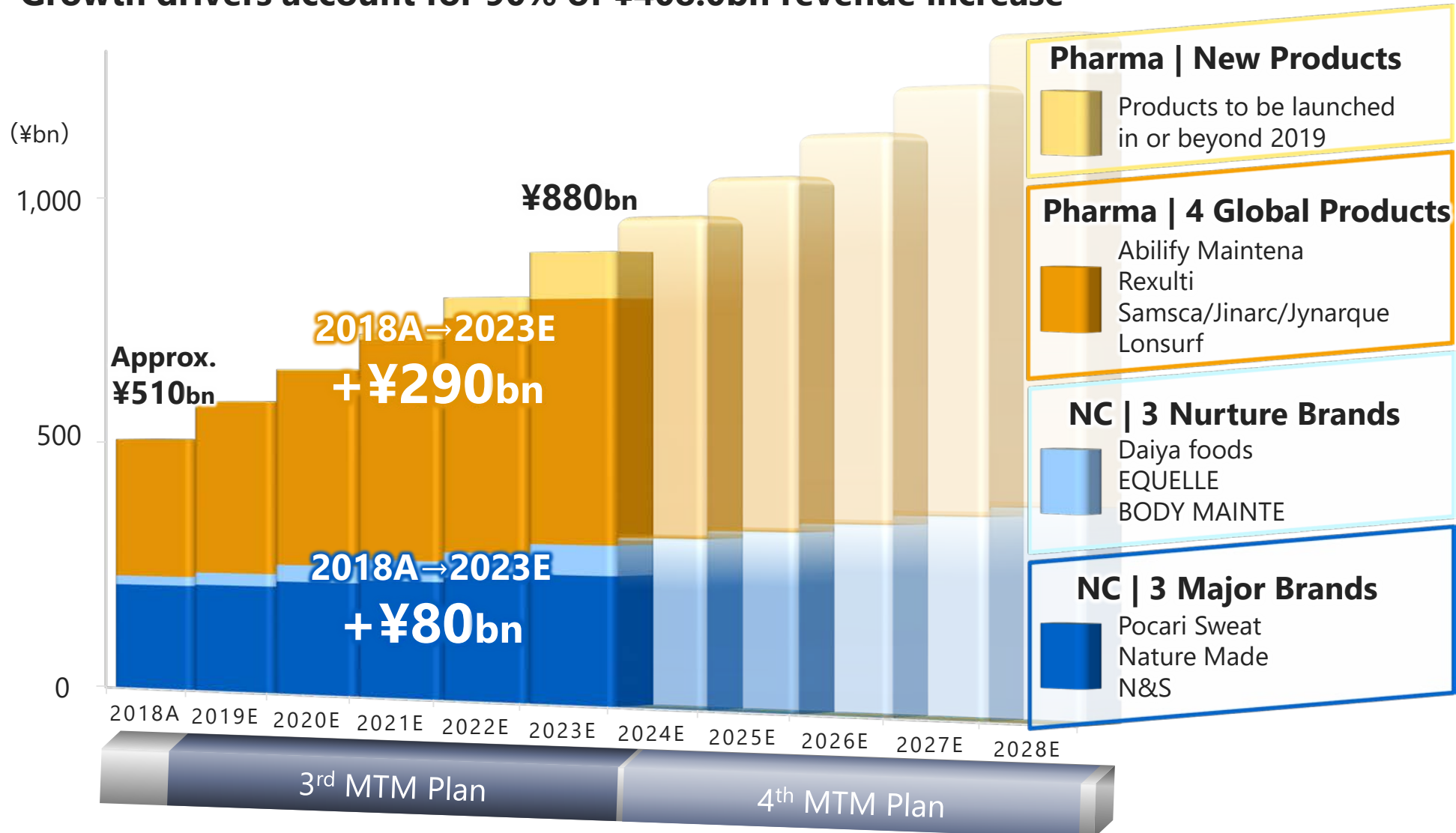
- Revenue forecast ¥1,700bn in 2023, ¥408.0bn increase from 2018, by organic growth of pharmaceutical business and NC business



* Revenue from external customers

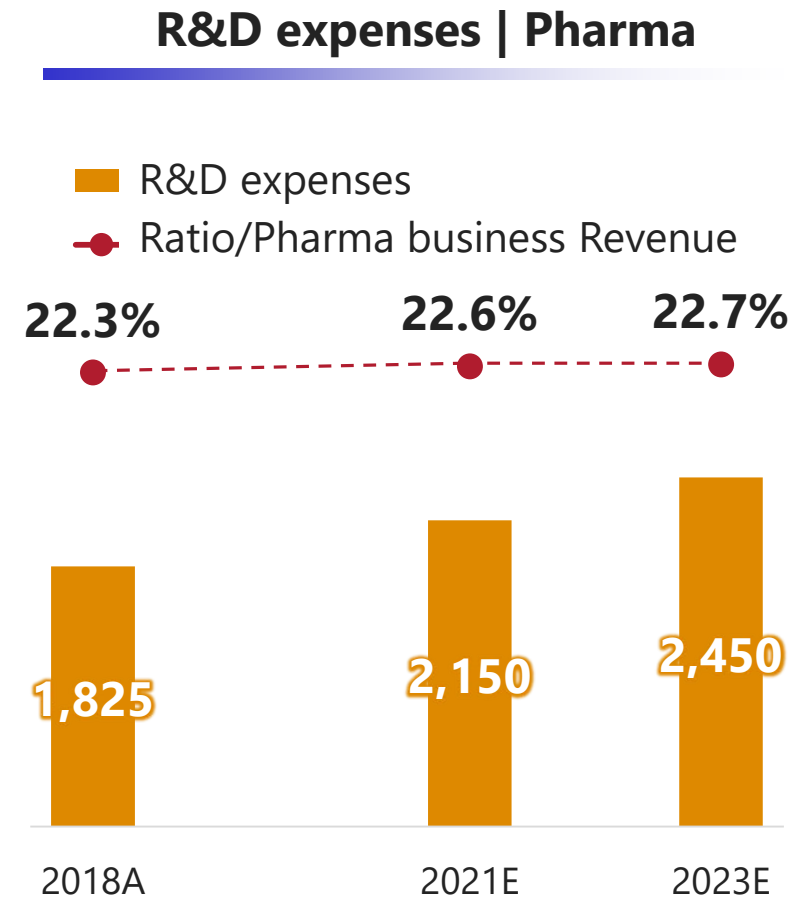
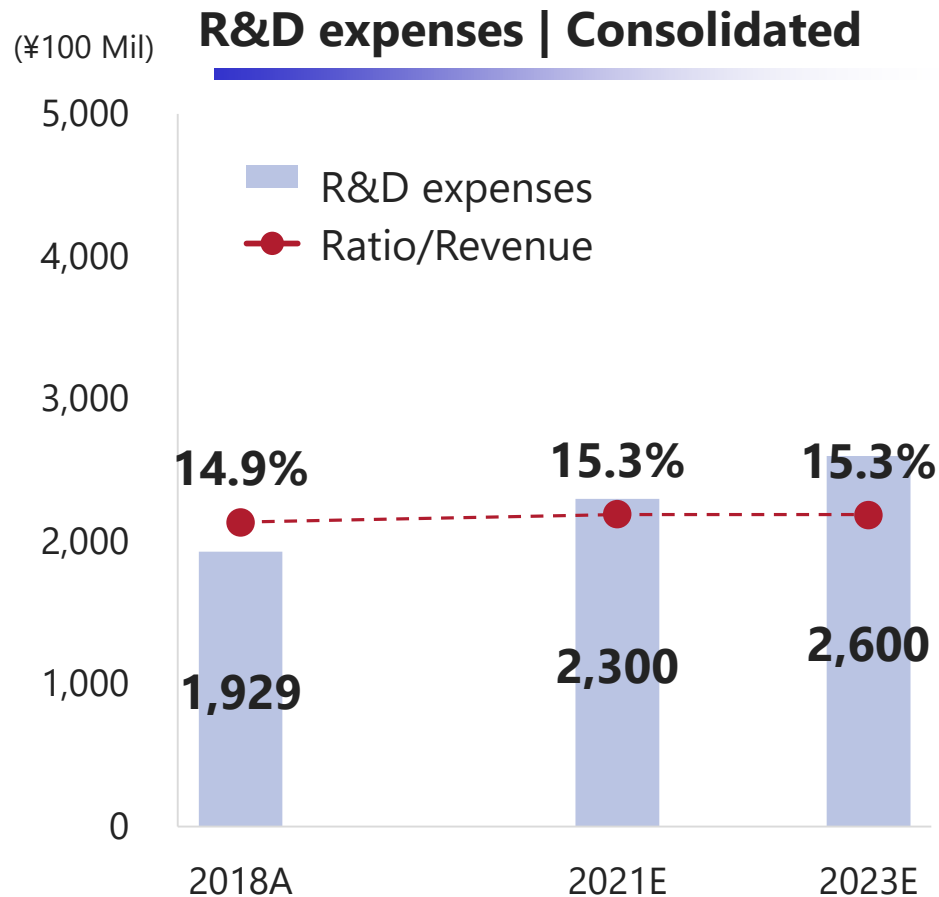
Growth Drivers' Revenue Forecast

- Home-grown products and brands to drive growth of Pharma and NC businesses
- Growth drivers account for 90% of ¥408.0bn revenue increase



Aggressive R&D Investments Support New Value Creation

- Aggressive R&D investments support Otsuka's original business model in the two core businesses of pharma and NC
- Pharma business: maintain high level of R&D investments



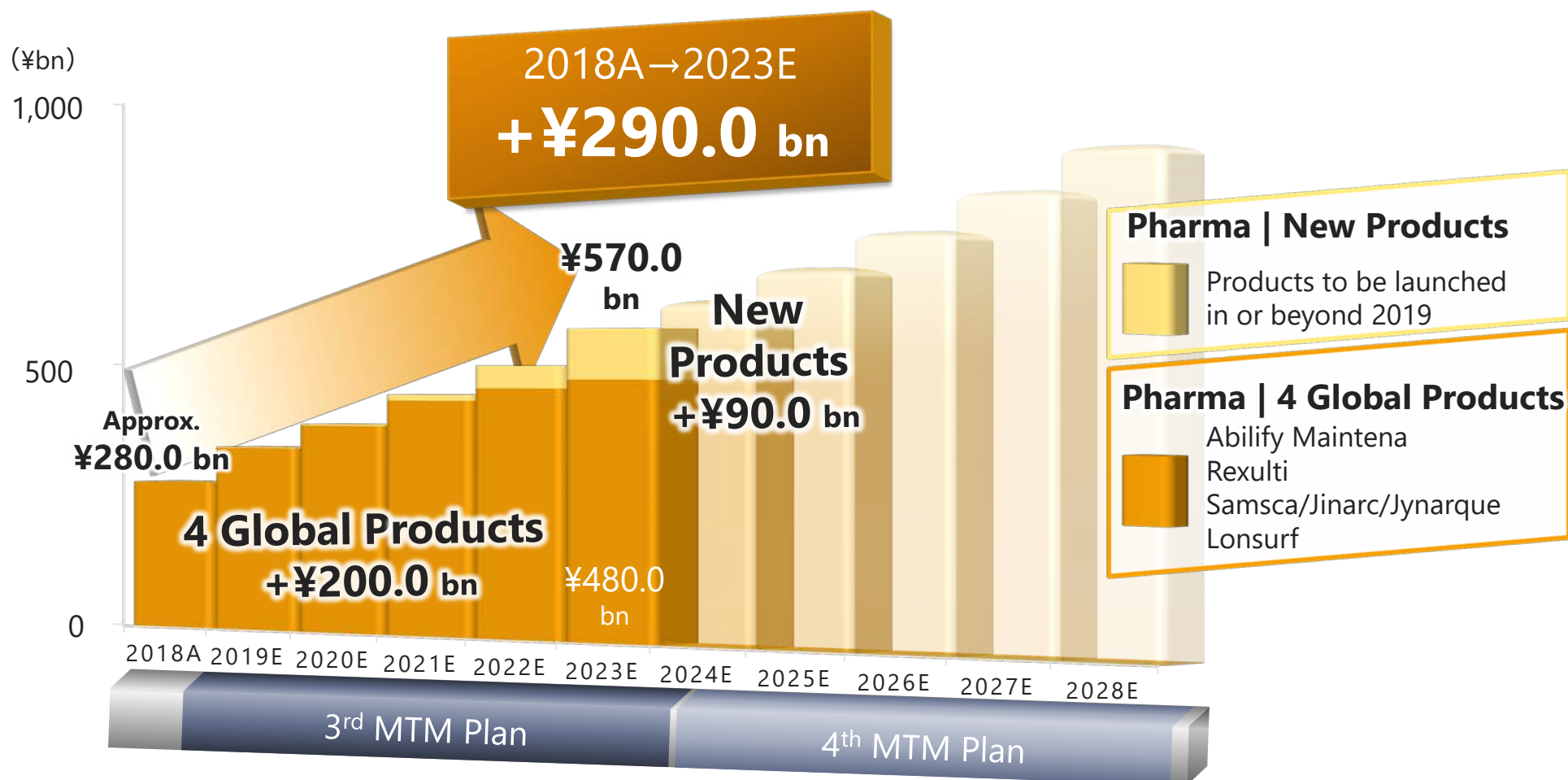
Pharmaceutical Business

Existing Business Value Maximization and New Value Creation

- **Maximize Values of Existing Businesses**
- **Challenge New Frontiers that “Only Otsuka Can Do”**
- **Generate Innovation From Creative and Diverse Research Platforms**

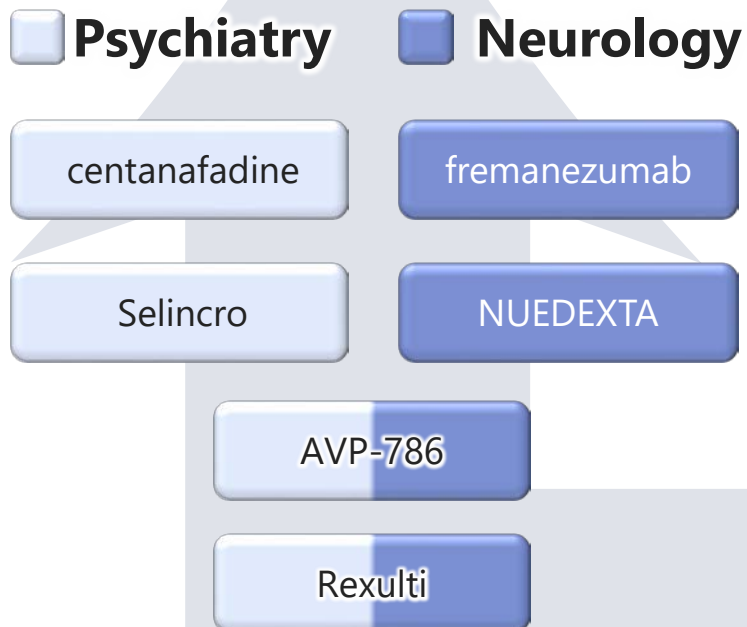
Growth Drivers' Revenue Forecast

- Aim to maximize value of 4 Global Products
- Challenge to launch New Products that drive sustainable growth during and beyond the 4th MTM plan period

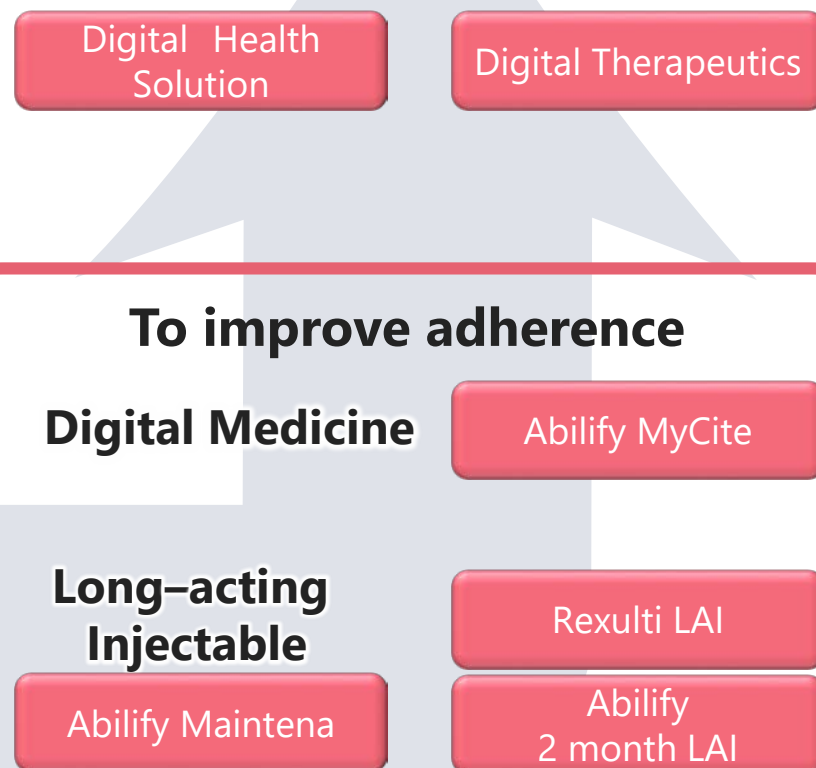


- Address unmet medical needs and medical care optimization

Address Unmet Medical Needs



Medical Care Optimization



Address Unmet Medical Needs and Maximize Product Value

- AD patients population increases with advancement of aging society
- BPSD including agitation is one of the big social issues for patients, caregivers and healthcare providers
- Challenge to solve this issue with Rexulti and AVP-786, which have different MOAs

AD agitation patients in the US in 2027 (estimate)¹⁾

3.31 million | AD diagnosed patients

2.50 million | AD agitation diagnosed patients

1% ≈ \$150~200 Million²⁾

¹⁾ ©[2018 Alzheimer's Disease Epidemiology - Mature Markets Data] DR/Decision Resources, LLC. All rights reserved. Reproduction, distribution, transmission or publication is prohibited. Reprinted with permission ²⁾ Annual estimate for illustrative purposes

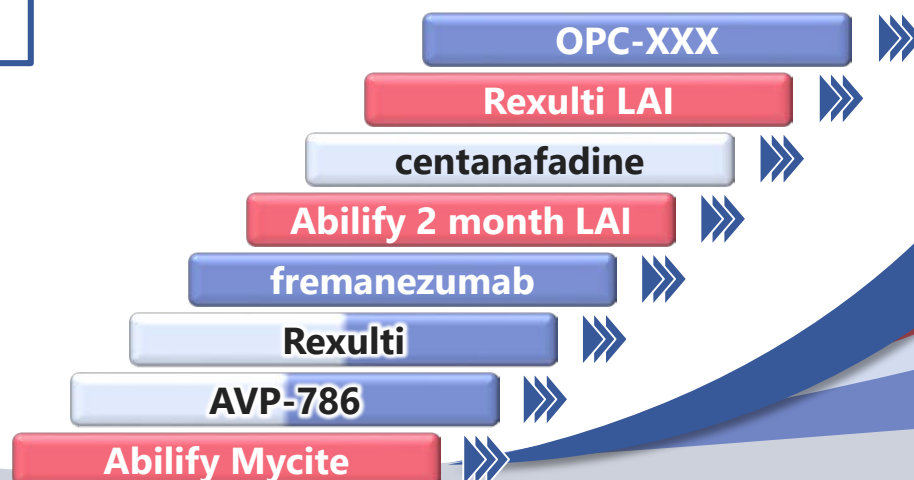
Psychiatry & Neurology | Aim at the World Top Class Revenue

- Top player in Psychiatry & Neurology area, with high potential pipeline and product portfolio

Become the top class in Psychiatry & Neurology area

Top class revenue
In FY2013
Approx. ¥600.0 bn

High potential pipelines and products



Solution Business
LAI

Psychiatry

Neurology

Otsuka's revenue image in
psychiatry and neurology area

2nd MTM Plan

FY2014

3rd MTM Plan

FY2019

4th MTM Plan

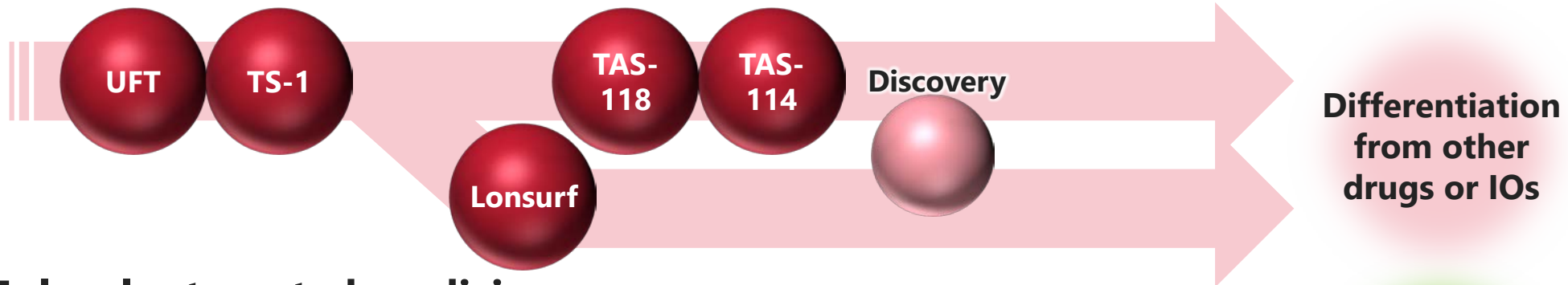
FY2024

Strategy on Oncology | Small Molecule based R&D Platform

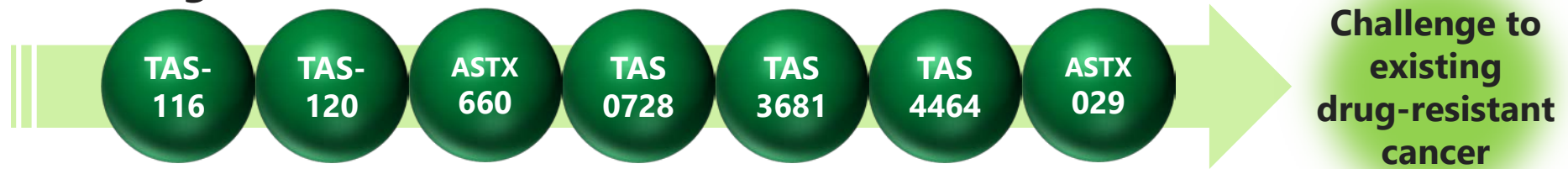
- Maximize values by combination with drugs of different MOA
- Challenge to refractory cancers and difficult drug discovery with small molecule based drug discovery
- Explore new modality and realize continuous creation of innovative new drugs

Antimetabolite

Biochemical modulation



Molecular targeted medicine



New modality, New technology



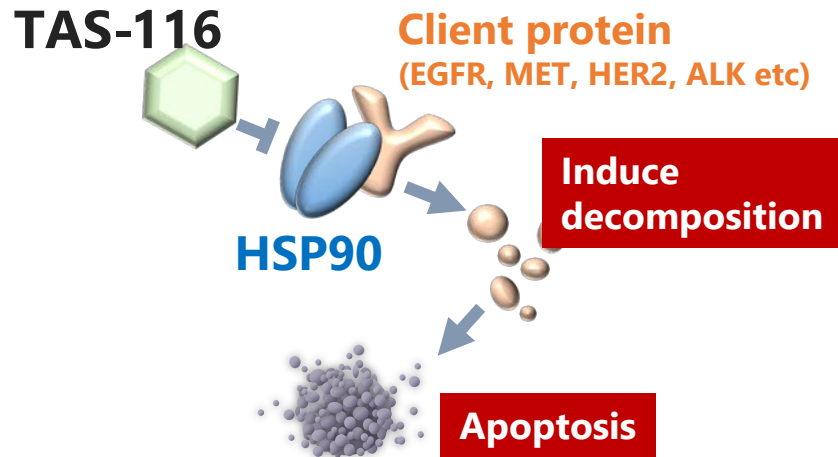
Strategy on Oncology | Structure for Value Maximization

- Aim to maximize the oncology business value by leveraging strengths of group companies' assets



TAS-116 | Challenge to “First-in-Class”

- TAS-116, an oral HSP90* inhibitor created by our tenacious R&D efforts
- HSP90 attracted attention as a target, but no drugs available in the market



Value Maximization

**LCM to other cancer types
Combo with other drugs**



*Heat Shock Protein 90

Strategy on Cardiovascular & Renal System

- Create first-in-class products by new drug discovery technology and devices

Cardiovascular Area



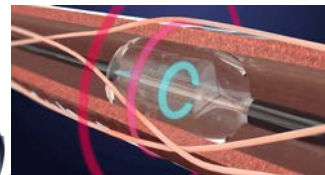
Samsca[®]
(tolvaptan)



Tablets
PLETAL[®]
(cilostazol)



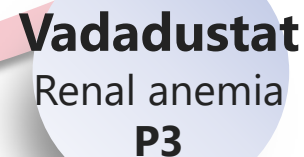
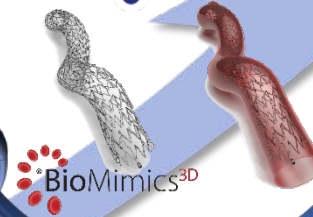
ReCor Medical
Ultrasound Denervation Therapies



Renal denervation



Veryan



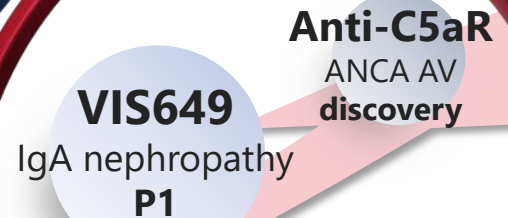
Vadadustat
Renal anemia
P3



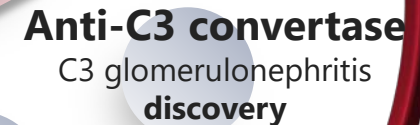
Akebia[™]
THERAPEUTICS



JYNARQUE[™]
JINARC[™]
tolvaptan



Anti-C5aR
ANCA AV
discovery
VIS649
IgA nephropathy
P1



Anti-C3 convertase
C3 glomerulonephritis
discovery



Anti-IL-2R
Lupus nephritis
discovery

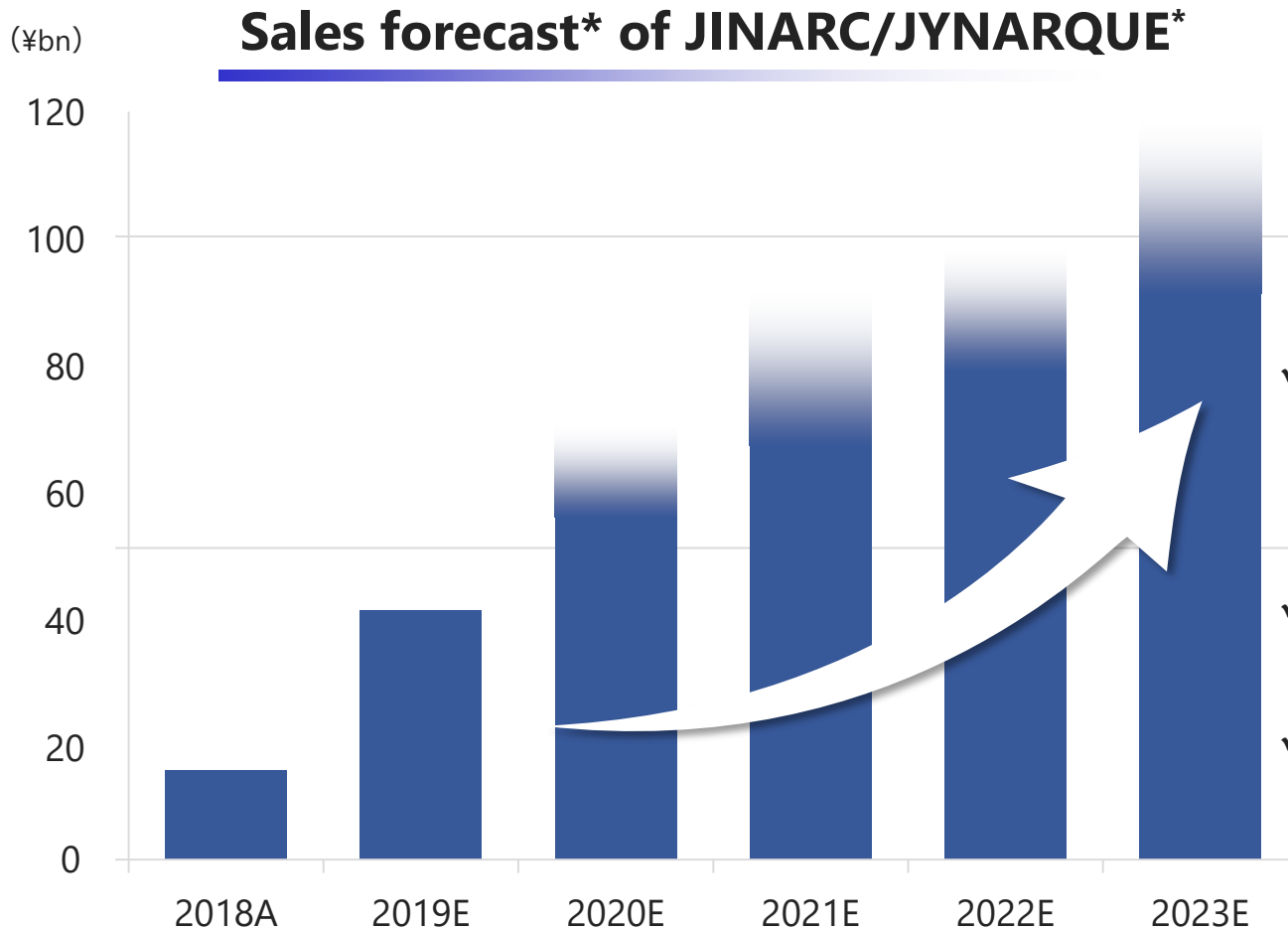


Visterra

Renal Area

Further Contribution to ADPKD Treatment and Product Value Maximization

- Implementing multiple initiatives to maximize product value by improving diagnosis and treatment of ADPKD



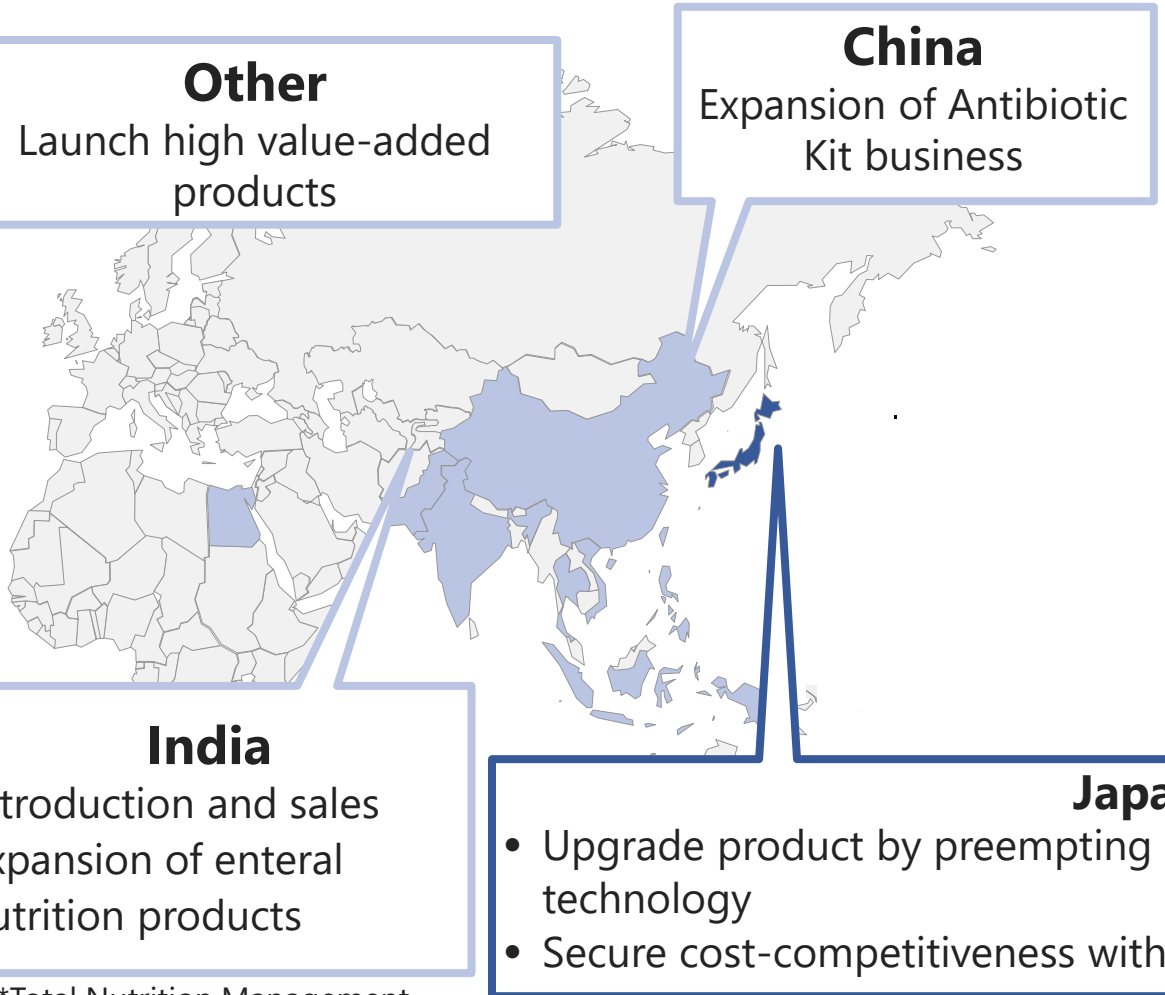
* North America, Europe, and Asia, except Japan

Enhancement of disease awareness and proper use of JINARC/JYNARQUE

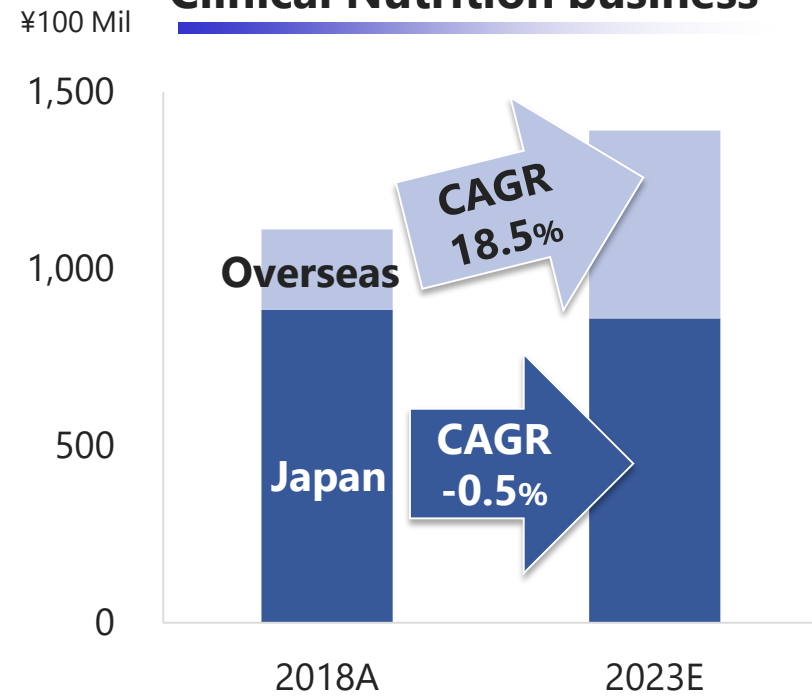
- ✓ Promote better understanding of clinical conditions and diagnosis of rapidly progressive ADPKD
- ✓ Promote efficacy and safety of JINARC/JYNARQUE
- ✓ Support REMS and product access

Strategy on Clinical Nutrition | Global Operation of High Value-added Products

- Overseas | Launch high value-added products and implement TNM*
- Japan | Maintain stable profitability



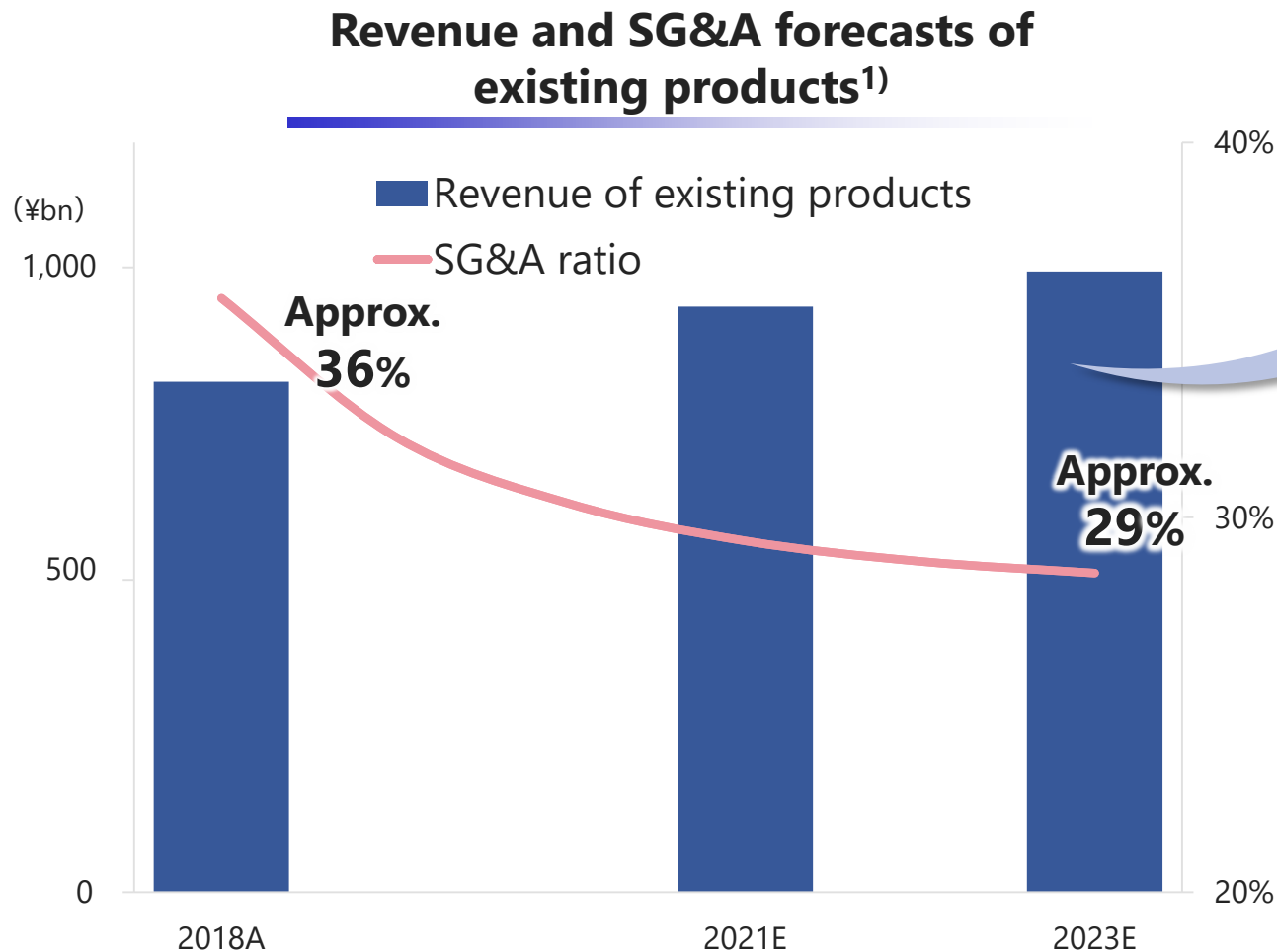
Revenue estimates | Clinical Nutrition business



*Total Nutrition Management

Existing Product Value Maximization Enables New Investments

- Profits gained through value maximization of global products in the 2nd MTM plan enables active investments for sustainable growth



Aggressive investments for sustainable growth

1) Except cost on new products, co-promotion fee, and one-time factors

Transformable Innovation Platform

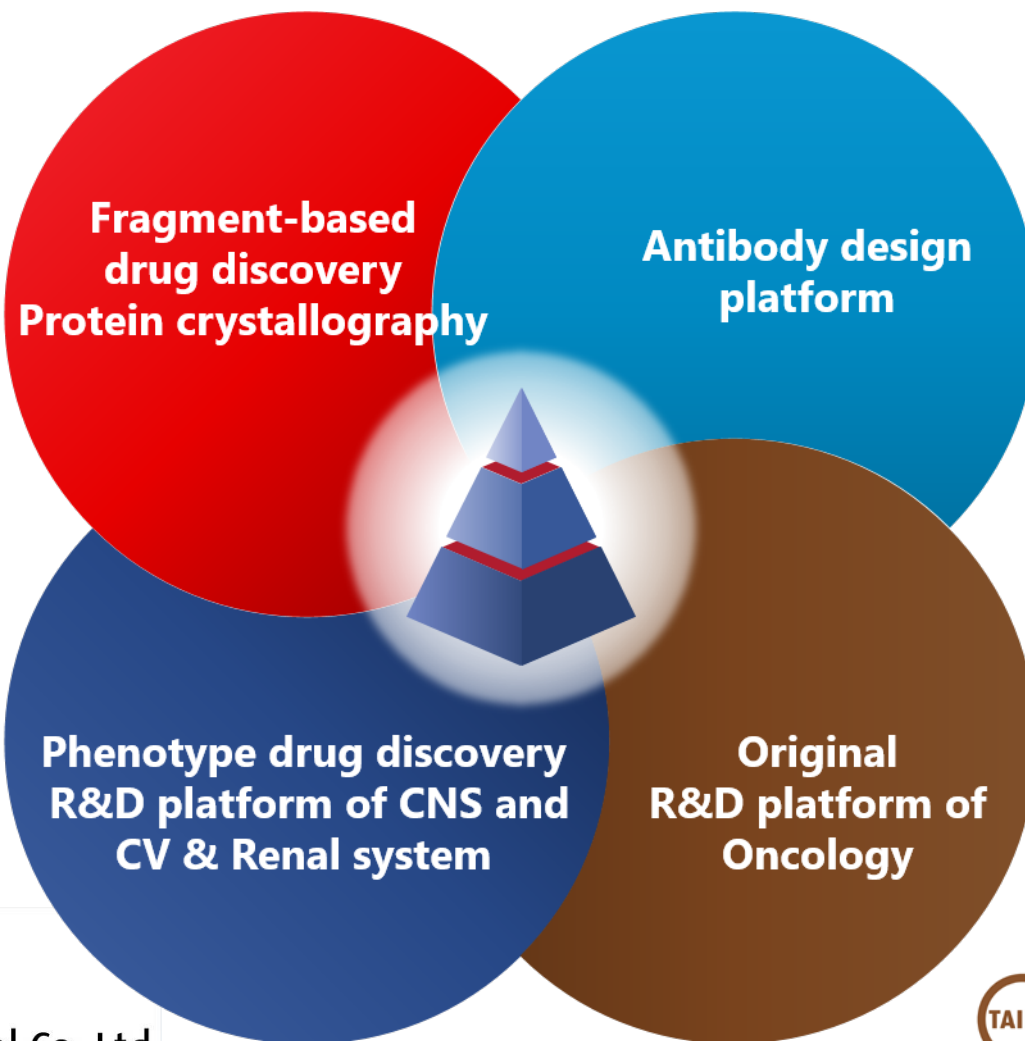
- Create innovation by combining existing drug discovery platform and world's cutting-edge technology: activities to show **Commitment, Actualization, and Creativity**



astex[®]

<Astex technology>

- Kisqali[®] (Novartis)
- BALVERSA[™] (J&J)



Visterra

<Visterra pipeline>

- VIS410 (P2)
- VIS649 (P1)

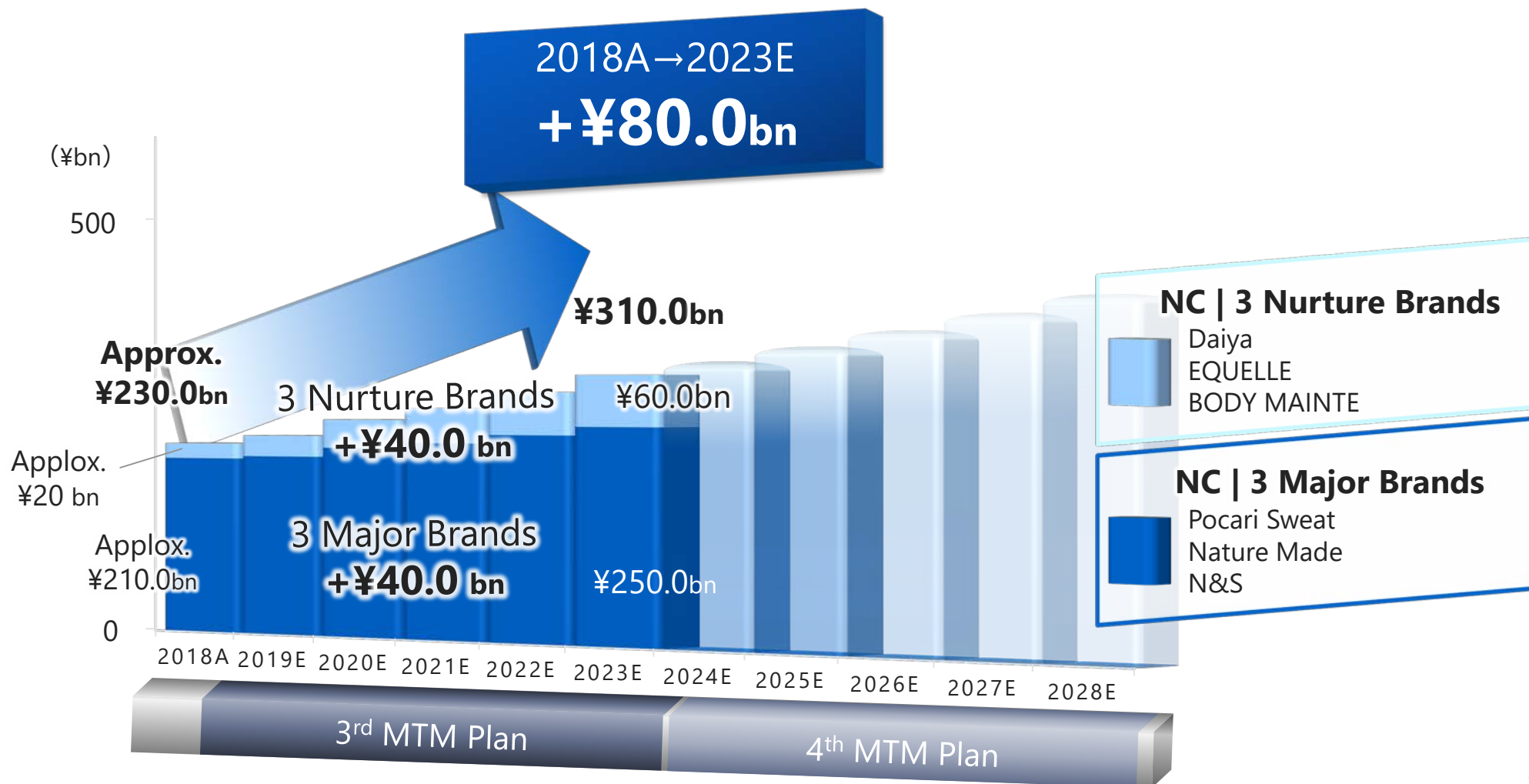
Nutraceutical Business

Existing Business Value Maximization and New Value Creation

- **Create New Concepts Keeping an Eye on Changes in the Environments**
- **Challenge to New Categories and New Areas**
- **Continuous High Profit Structure**

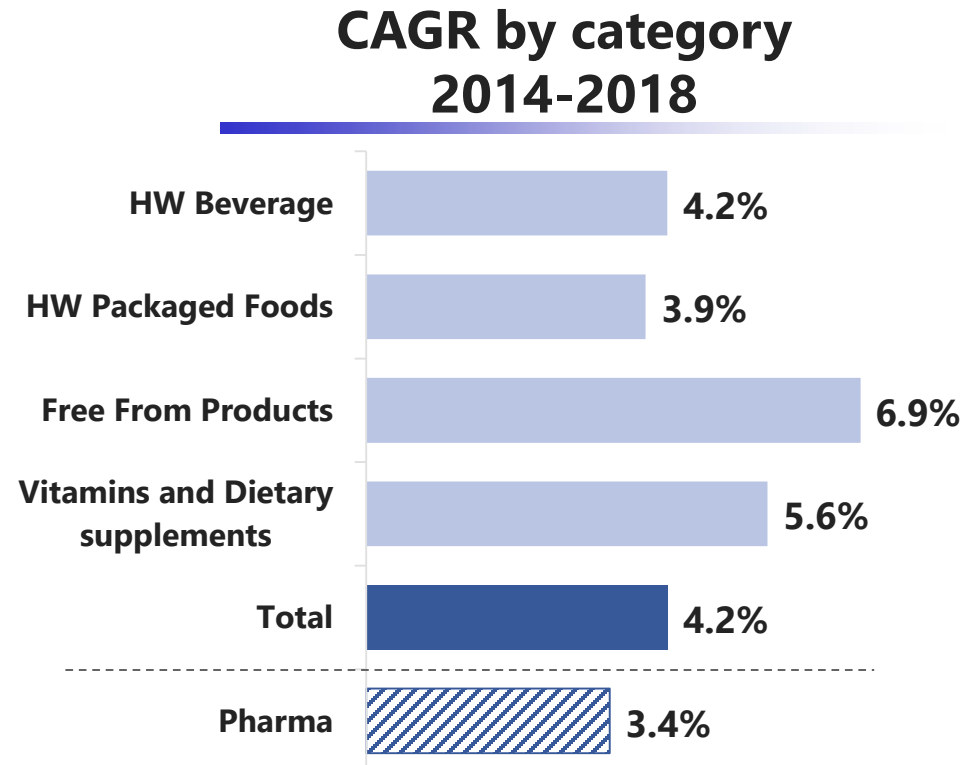
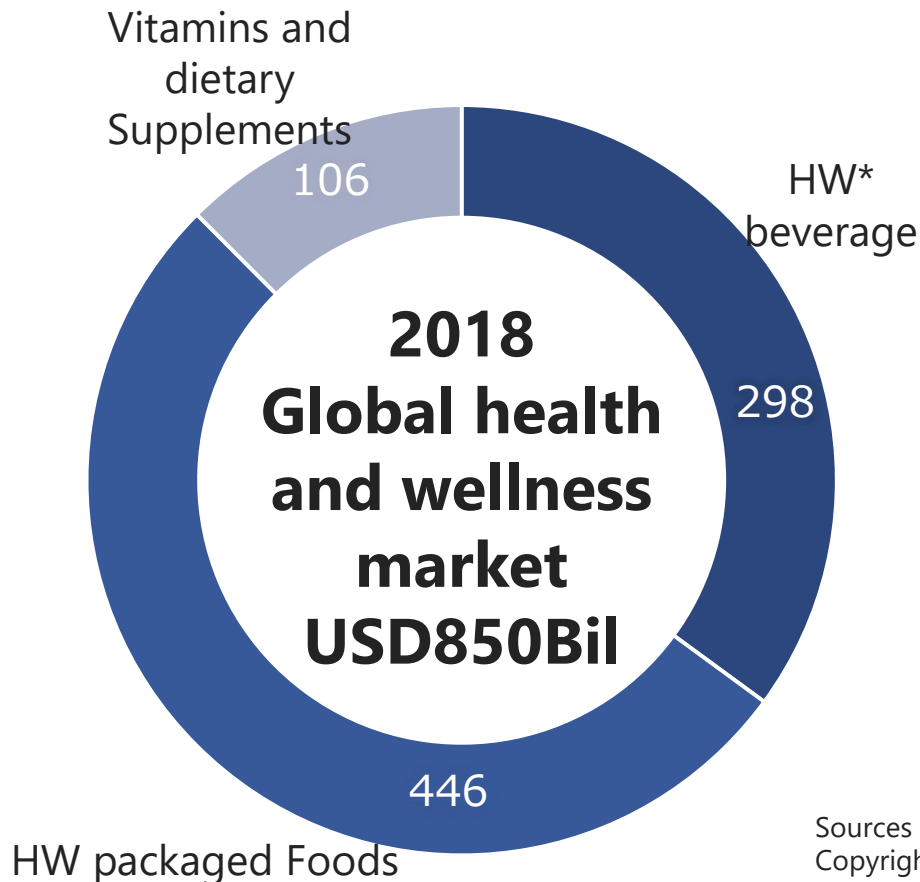
Growth Drivers' Revenue Forecast

- 3 Major Brands | Challenge to new category and new area to be "100 billion-yen-brands"
- 3 Nurture Brands | Construct business platforms to be main brands in the future



Target: Attractive High Growth Markets

- Global health related market: USD850Bil, CAGR(2014-2018) 4.2%
- Same growth rate as global pharmaceutical market
- Rising health consciousness accelerates the market growth



Sources | Pharma : Calculated based on IQVIA World Review 2014-2018 by Otsuka Holdings
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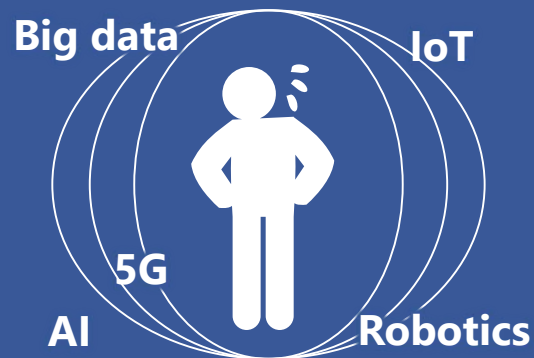
*Health and wellness

New Concept on the 4th Industrial Revolution

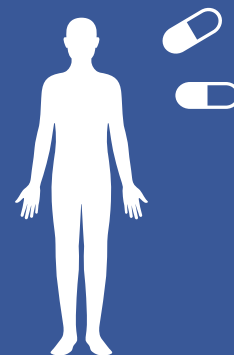
- Needs for health maintenance are diversifying with advance of science and technology
- Create new concepts combining diversified needs with Otsuka's unique business model

Health maintenance in the 4th industrial revolution

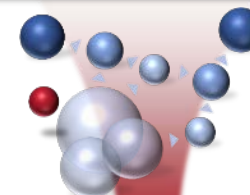
Signs of unwellness



Self-medication

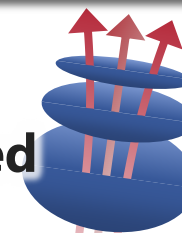


New Value Creation



New Concept

Diversified needs



Technology
Science

Pharma
business

NC
business

Accelerate Global Expansion

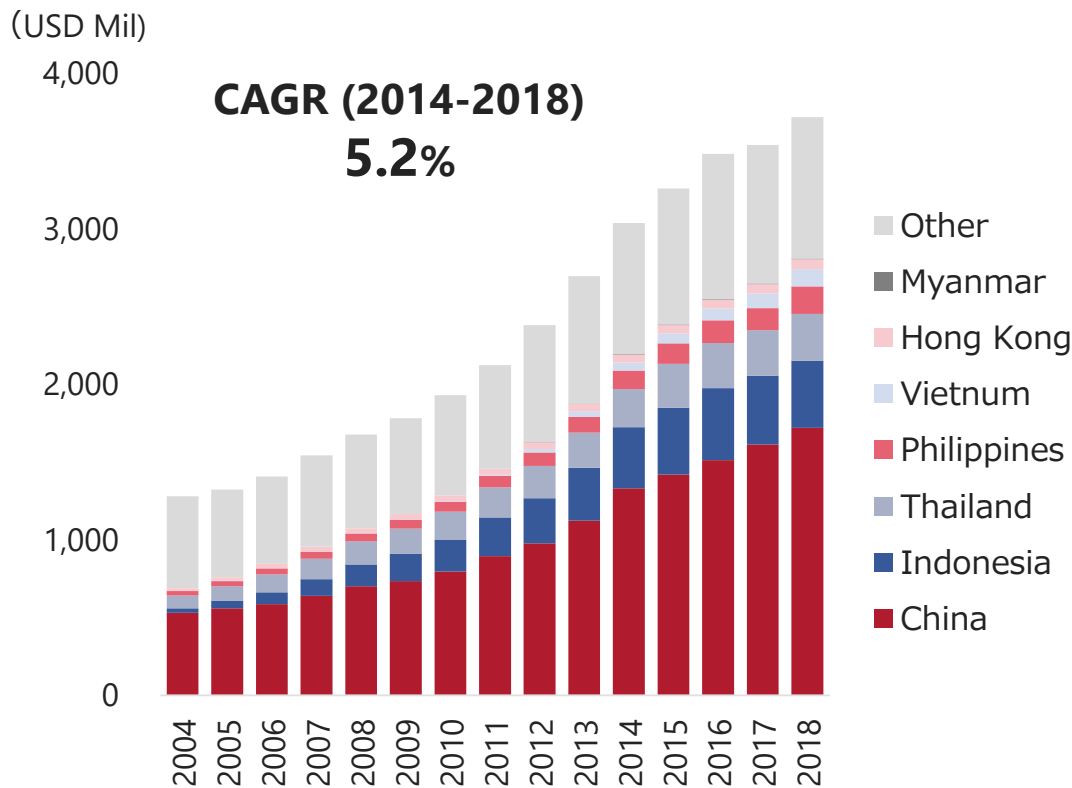
- Accelerate global expansion and build a foundation for 3 Major Brands to be “100 billion-yen-brands” and for 3 Nurture Brands to be future main brands



Challenge to “100 billion-yen-Brand” | Pocari Sweat

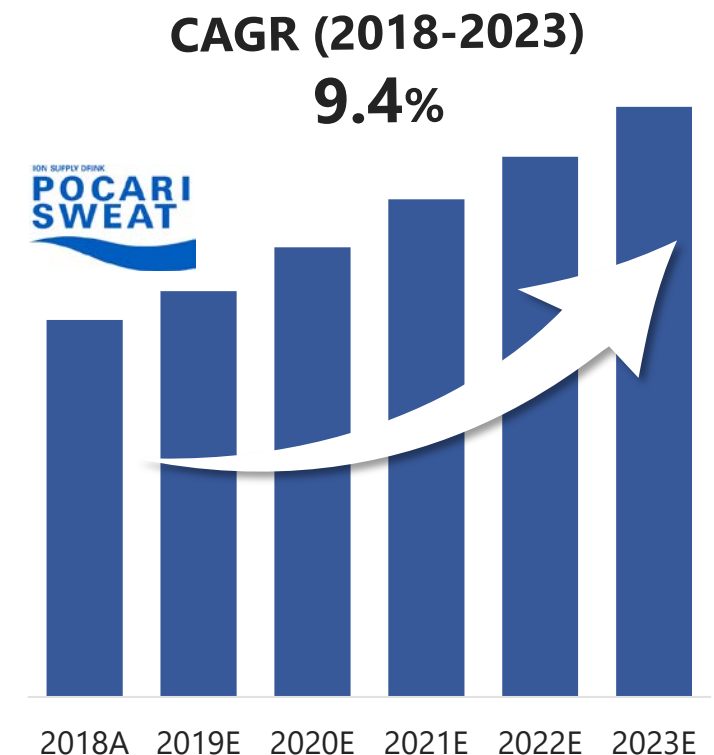
- Focus on promoting importance of hydration in growing markets mainly in Asia where people’s health consciousness is rising
- Develop growth base by business expansion to new categories for sustainable growth

Sports drink market | Asia-Pacific*



Sources | Euromonitor international *Except Japan

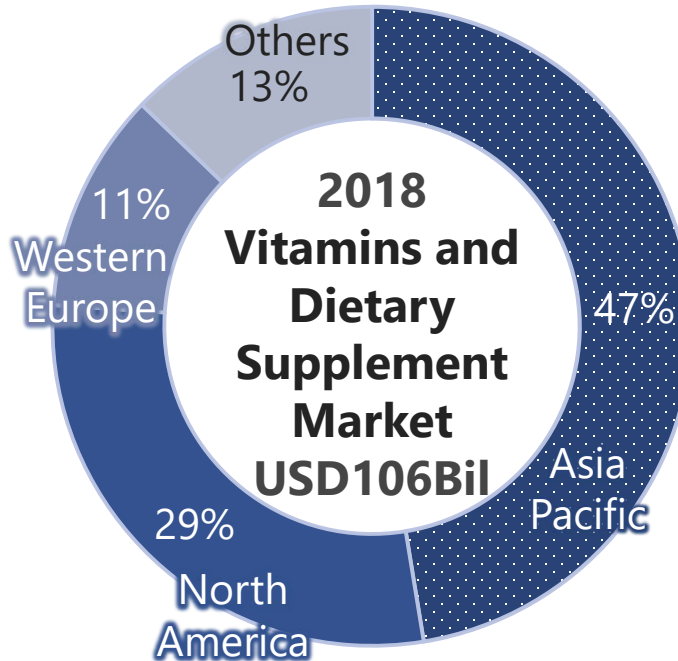
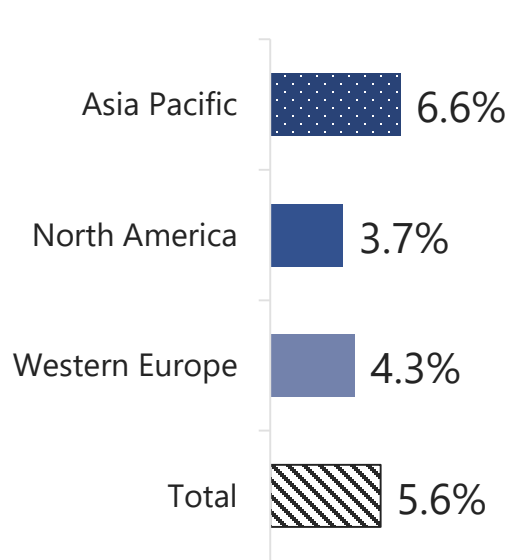
Sales of Pocari Sweat | Overseas



Challenge to “100 billion-yen-Brand” and New Categories | Nutritional Supplement

- Nature Made | Challenge to new categories to be “100 billion-yen-brand”
- EQUELLE | Challenge to create new category and new market in North America
- New operation in highly growing Asia-Pacific areas

Nutritional supplement market CAGR 2014-2018



Source | Euromonitor international

Challenge to new categories North America

- ◆ Personalized nutrition



- ◆ Create new category and new market

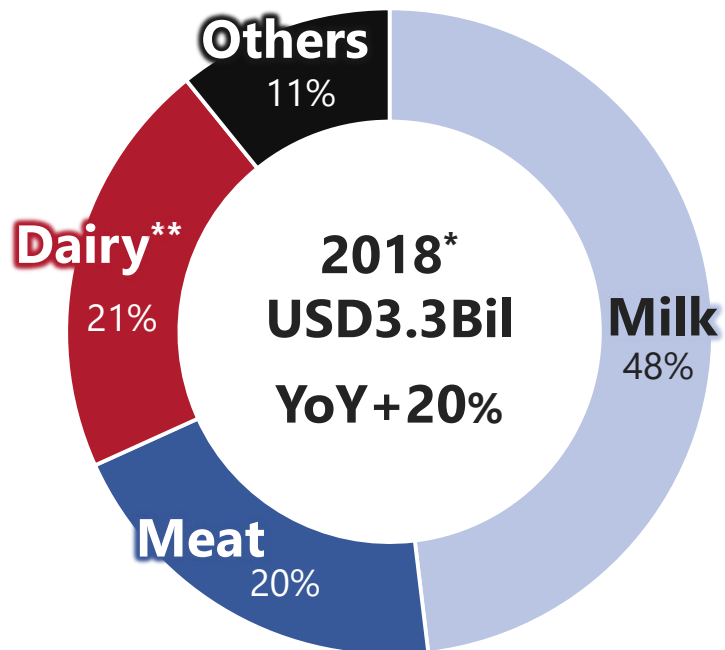
EQUELLE®



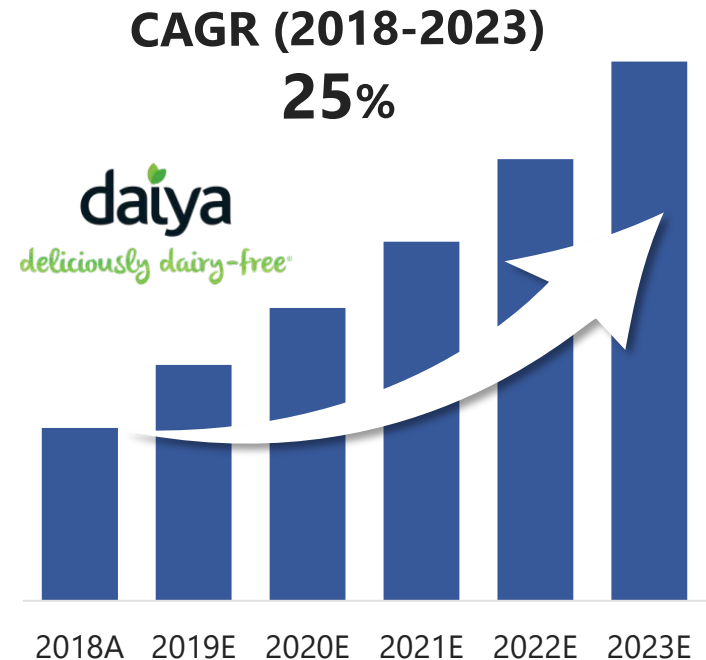
Category Leader of Plant-based Foods in North America: Daiya Foods

- Address health issues of health conscious consumers with aggressive marketing in highly growing plant-based alternatives market

US plant-based alternatives market



Revenue forecasts | Daiya Foods



*Sources | PBFA-commissioned data from Nielsen (52 weeks dollar sales ending June 2018)

**Ice cream, Yogurt, Cheese, Creamer, Butter, Dressing

Revenue Forecasts by Category

- Each categories' revenue grows at same pace as or faster pace than market, mainly with 3 Major Products and 3 Nurture Products

Nutritional Supplement

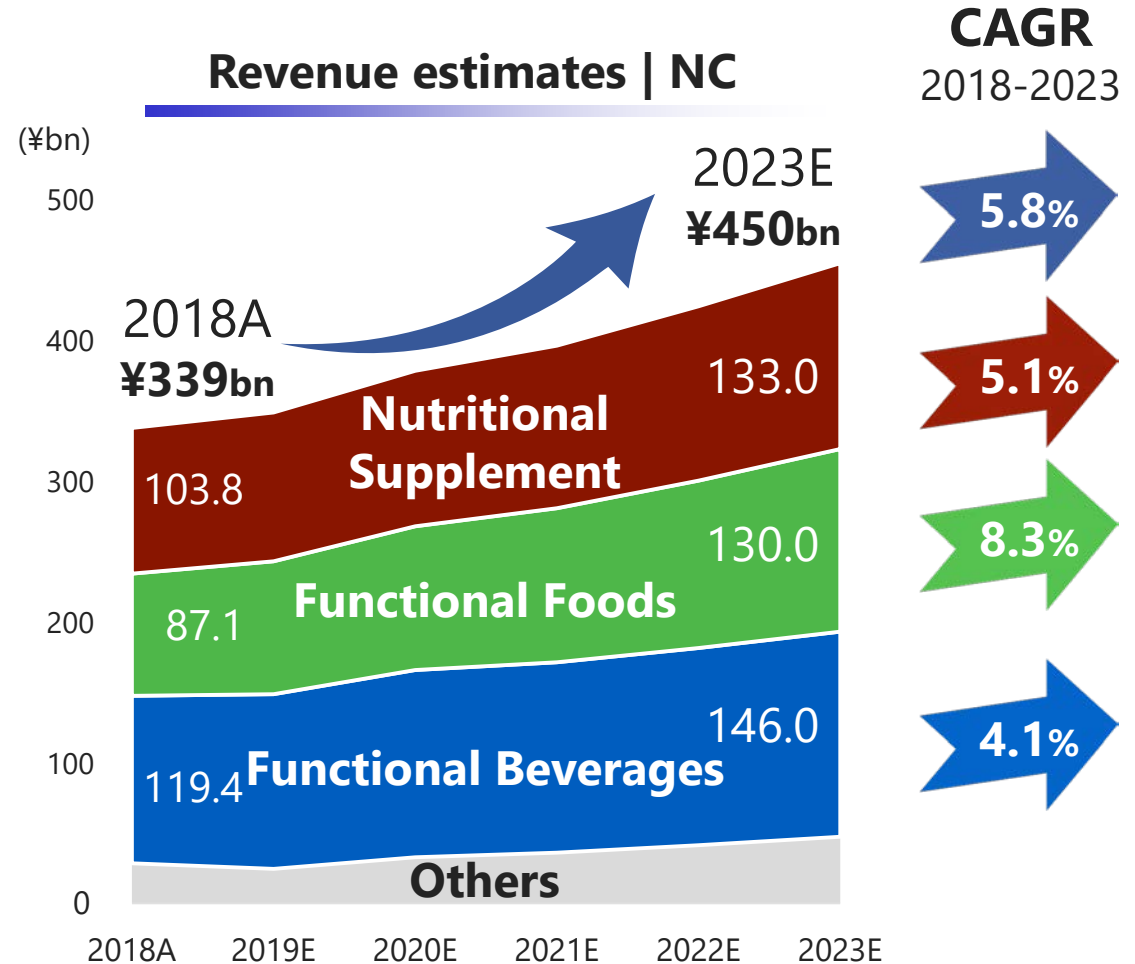
Nature Made
EQUELLE
Kenja-brand etc.

Functional Foods

Calorie Mate	N&S
Daiya	SOYJOY

Functional Beverages

Pocari Sweat	OS-1
Oronamin C	Tiovita etc.
BODY MAINTENANCE	



Continuation of Stable Revenue Bases

- Continued high profit structure and sales expansion lead to stable revenue base

The 3rd MTM Plan

New Products

Global Operation

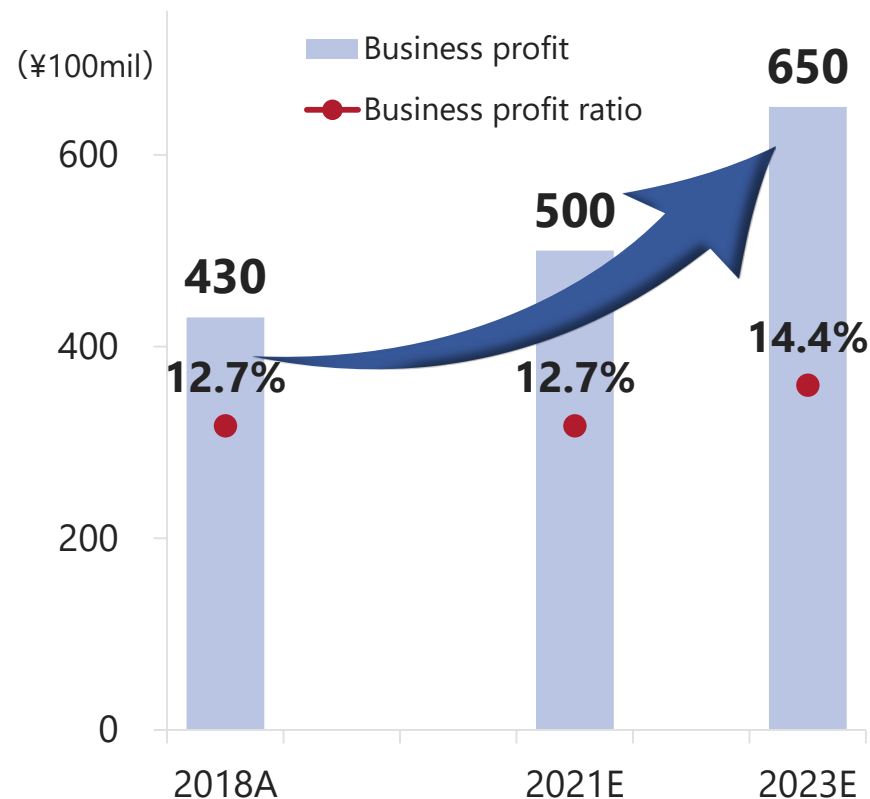
New Business

Business Profit
over 10%

Strengthen business foundation

The 2nd MTM Plan
Review of business assets
supporting value chains

NC | Business Profit forecasts



Financial Policy

Business Management with a Corporate-wide Awareness of Capital Costs

- **Balancing Investments for Future Growth and Shareholders Return**
- **Clarifying Main Investment Areas**
- **Enhancing Management Efficiency**

Corporate-wide Awareness of Capital Costs

■ Implementing “Business management with a corporate-wide awareness of capital costs” throughout the group

- ✓ Increased awareness of capital costs reflecting business risks
- ✓ Performance evaluation based on capital costs

**ROIC improvement
on mid-to long term basis
(Business return ↑)**

**Business and
investment strategies**

ROIC management

Value maximization of
existing businesses

**Investment for new
value creation**



**Optimal funding
(Capital cost ↓)**

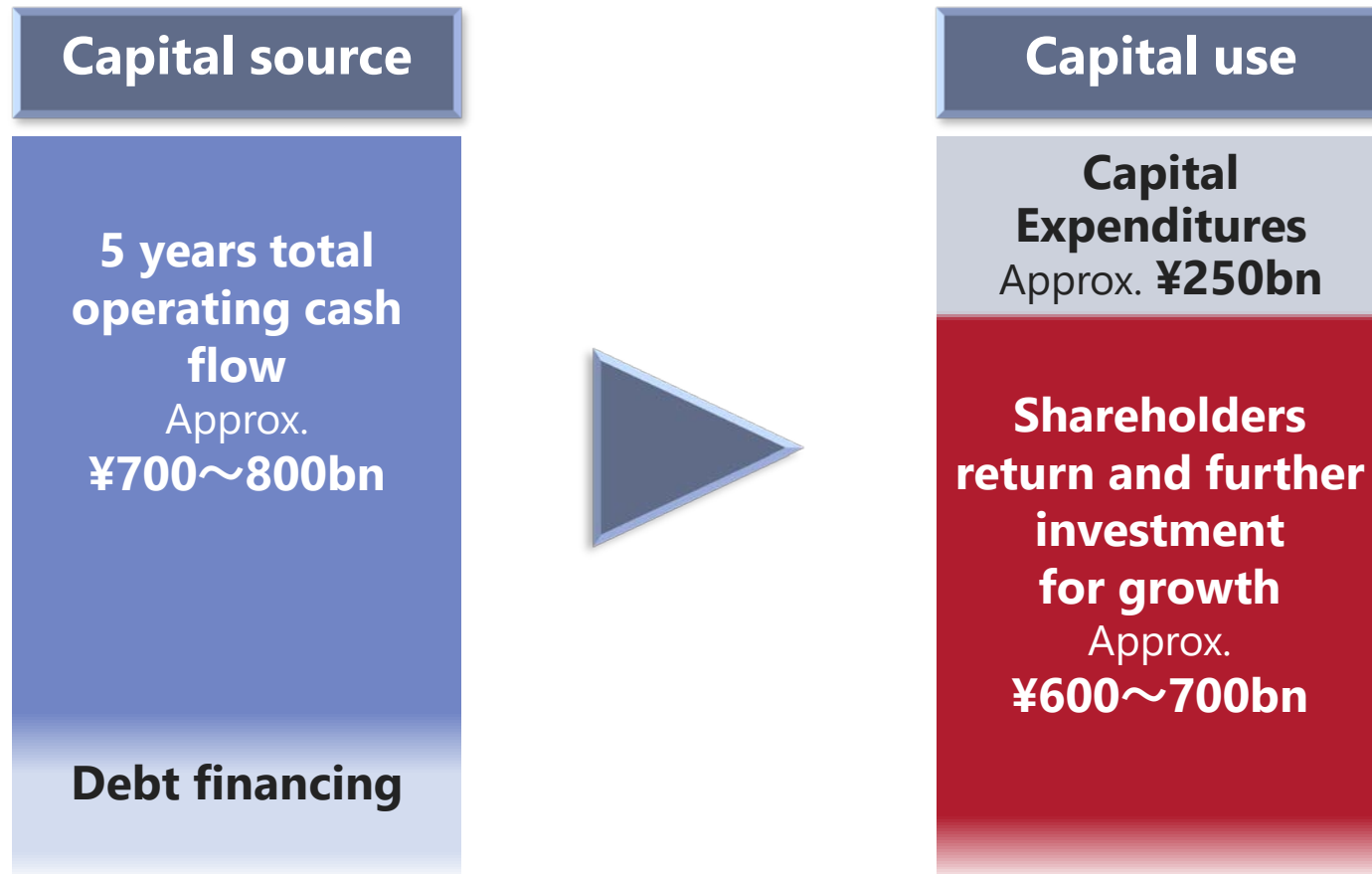
Financial policy

**Optimal capital
structure**

**Corporate
Value
Maximization**

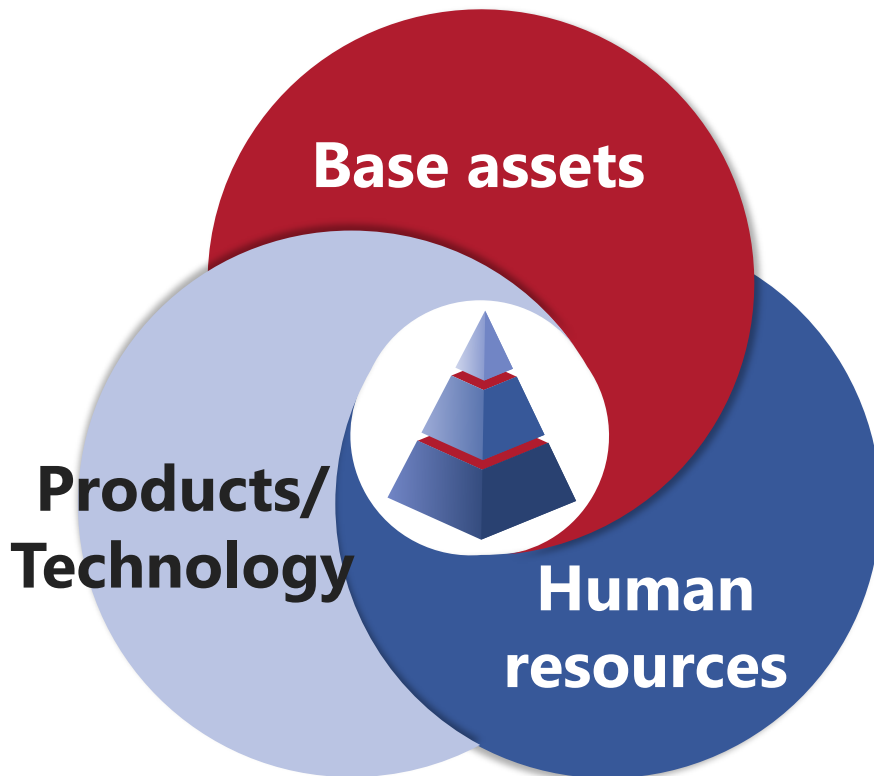
Balancing investments for future growth and shareholders return

- Disciplined investments based on capital costs
- Ensure solid financial foundation and aim ROE \geq 8%
- Keeping with our basic policy of stable dividends, further shareholders return depending on the profit growth



Clarifying Main Investment Areas

- Investments that generate greater values by combining with our existing business assets
- Investments that fit our short-, mid- and long-term strategies



Main investment areas

Pharma

- Products and pipelines on Psychiatry & Neurology area
- Products and pipelines for Japanese market
- New technology

NC

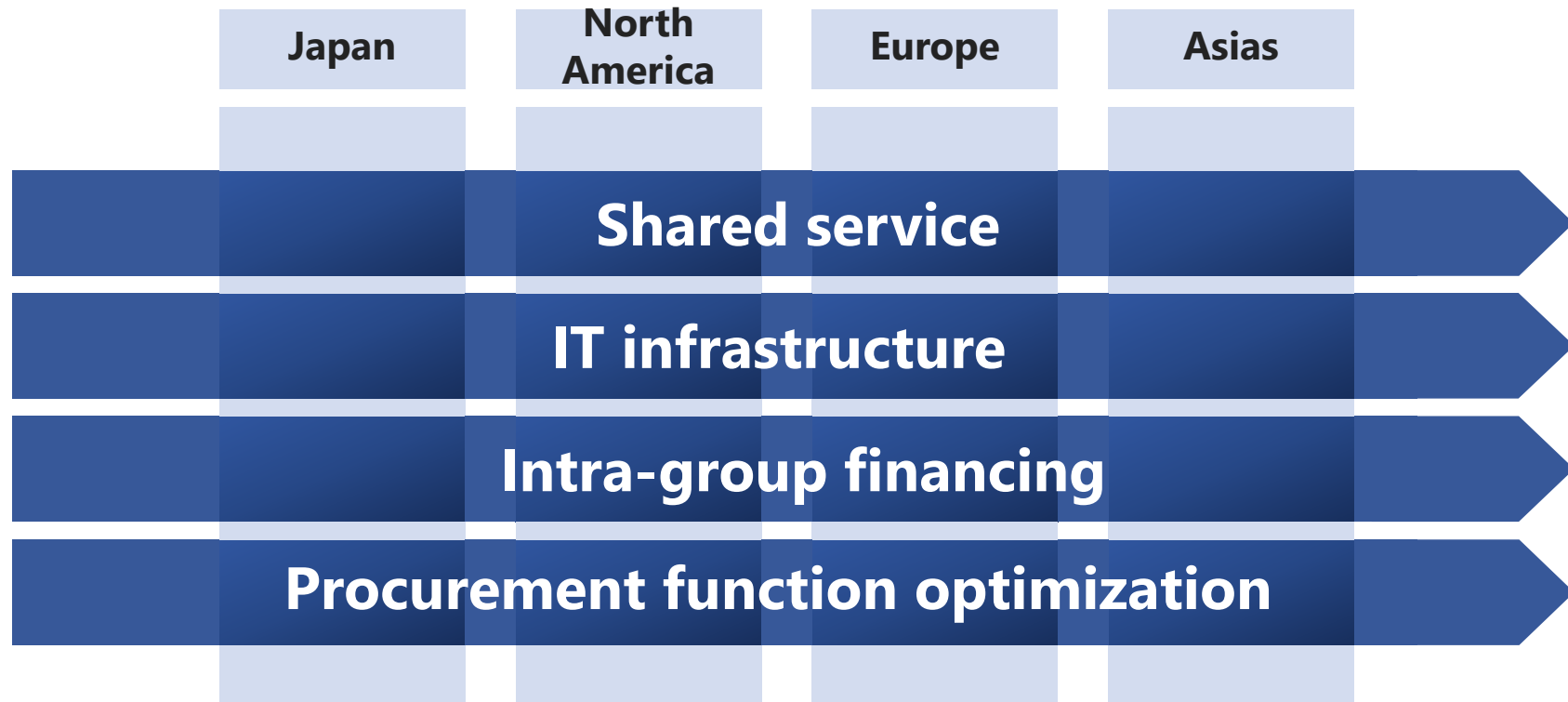
- New business
- Pioneering high-growth markets

Initiatives to Enhance Management Efficiency

- Group-wide management infrastructure to support accelerated global business operations

Initiatives to enhance management efficiency

- Task-standardization and optimization
- Strengthen internal control functions
- Correspond to regulatory environment



- **Performance Target: Business Profit CAGR of 10% or more**
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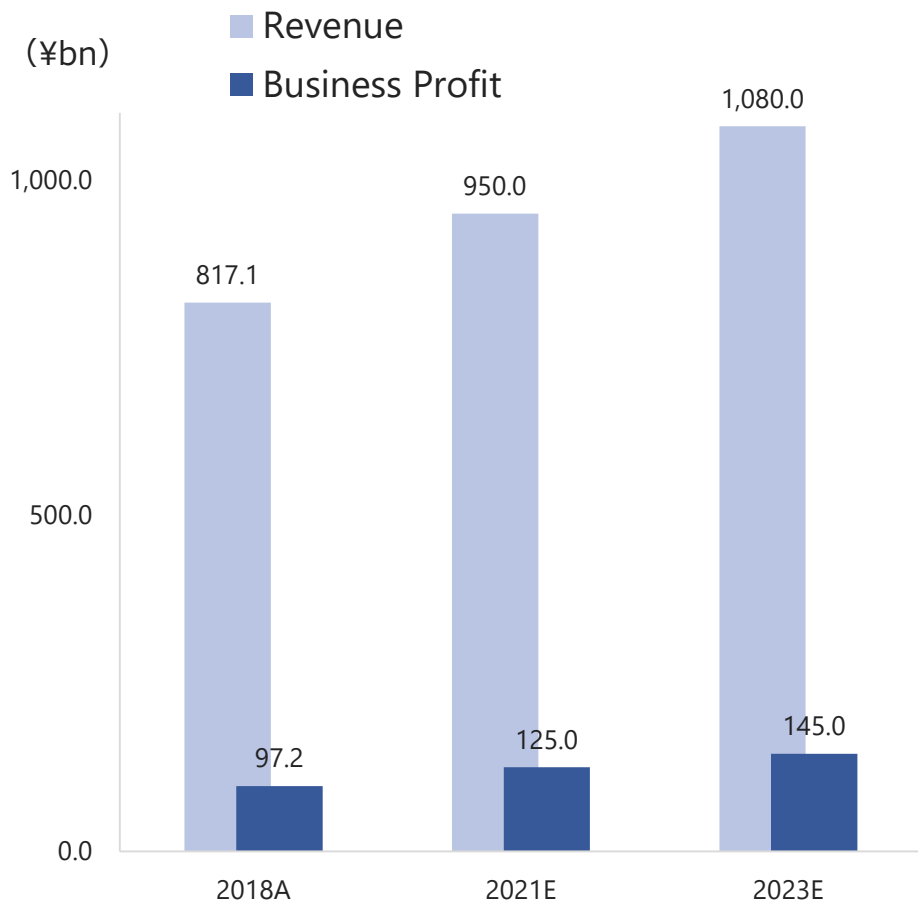
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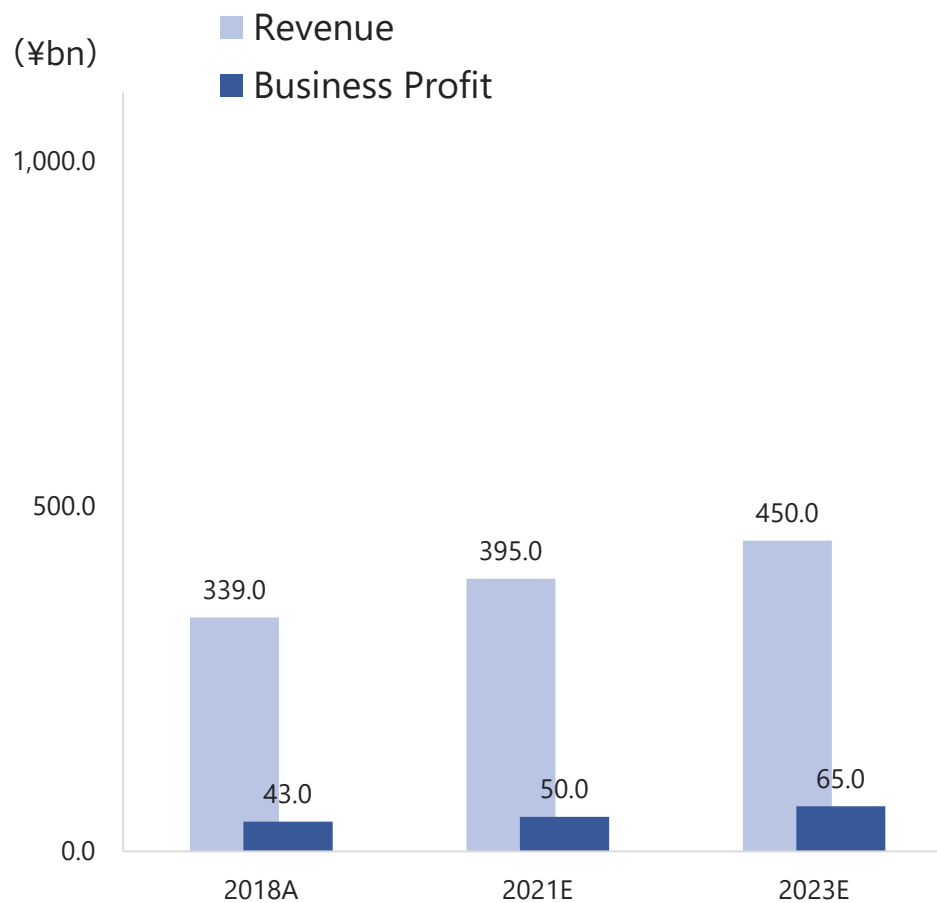
Appendix

Forecasts by Segments | Revenue and Business Profit*

Pharmaceutical

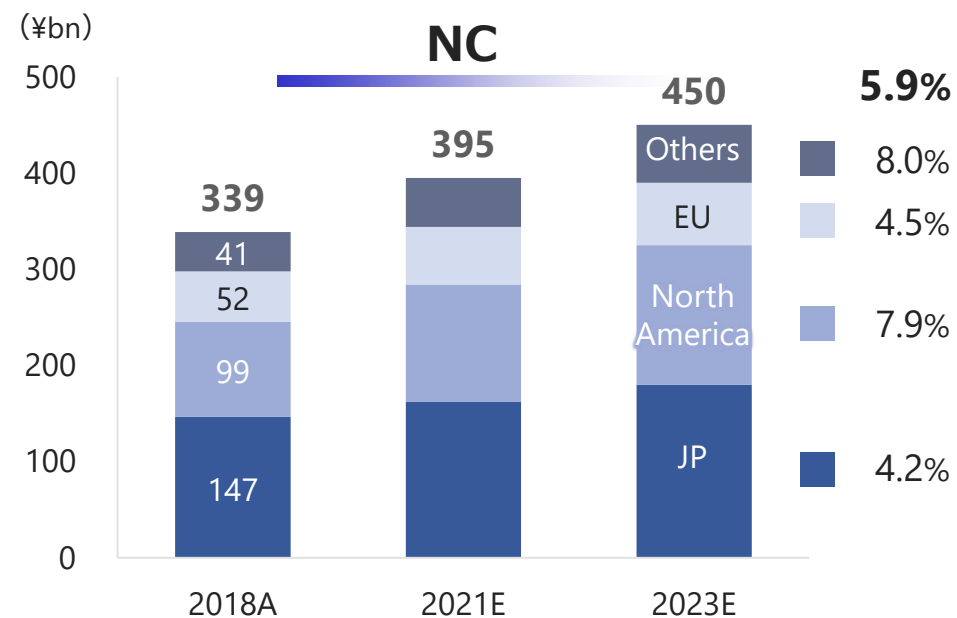
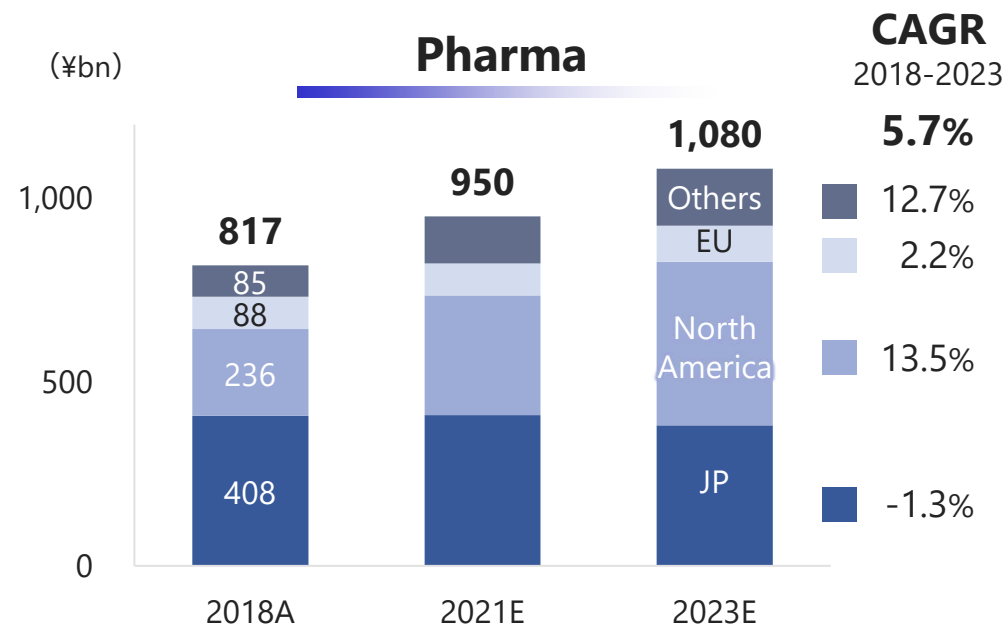
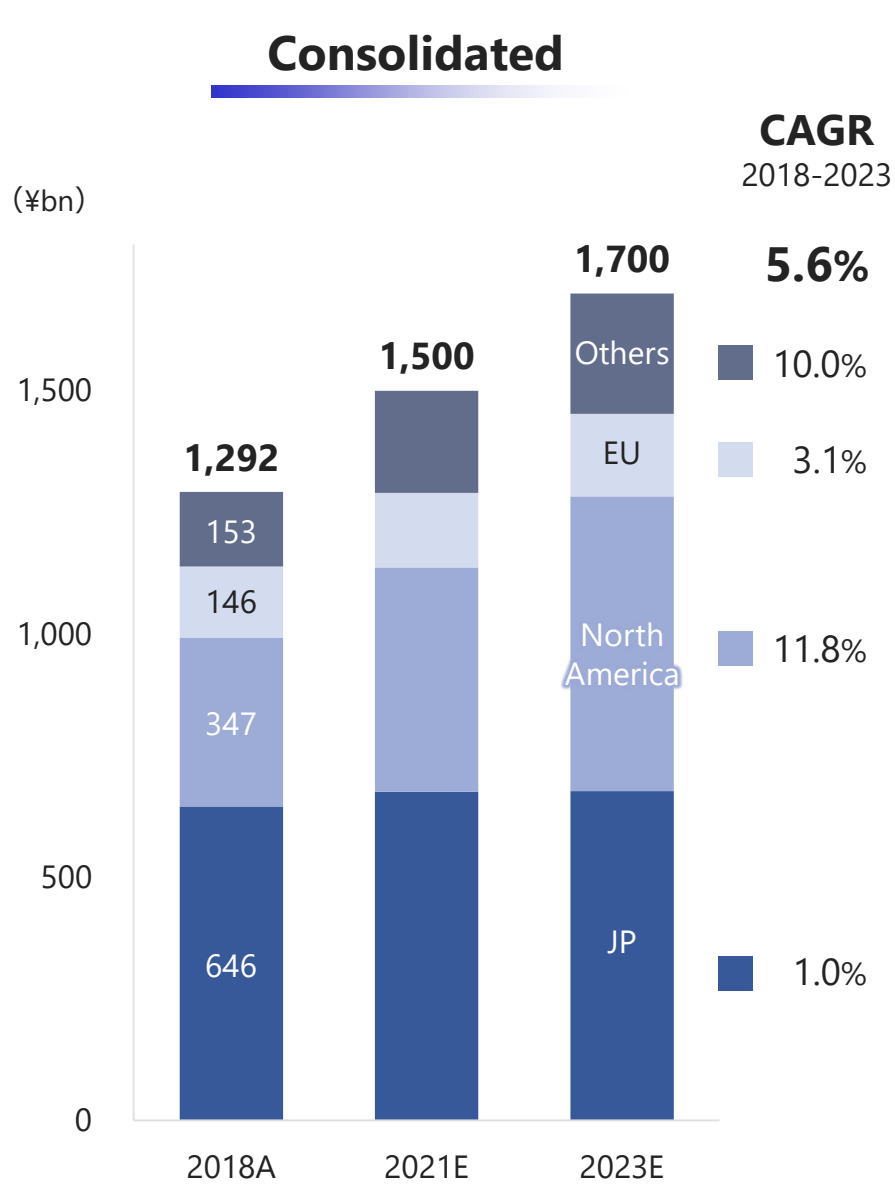


NC



*Revenue including intersegment sales or transfers,
Business profit before corporate expenses deduction

Forecasts by Areas | Revenue*



* Revenue from external customers

Quick Improvement in Earnings

Nurture of New Products | Brand Expanding of Major Products



Challenge to New Category



Meat-free Hamburger

Production Efficiency



Accelerated Development of New Markets in Worldwide

Otsuka Chemical

- Interior Thorium Blowing Agent
- Cable Material for Parking Brake
- Clutch Bearing
- Electric Parking Brake Gear
- Clutch Vibration Absorbing Parts
- Brake Assist Parts
- Interior Goods

Windshield

Decomposition Agent for Aldehyde

Tail Lamp

Decomposition Agent

Door Mirror Gear

Weather Strip

Capacitor electrolyte for electrical equipment

Chipping Paint

Electrostatic Primer

Brake Pad Friction Material

Automobile Related Products

Reinforcement of materials & technologies

















Otsuka Warehouse
















Accelerated common platform & expanding efficiency by linking distribution data

Major Products to be Filed in the 3rd MTM Plan



CNS

Products ¹⁾	Indication	Area
Abilify Maintena	(2 month LAI) Schizophrenia Bipolar I disorder	
REXULTI	MDD ²⁾	
	Agitation associated with dementia of the Alzheimer's type	  
	PTSD ³⁾	 
AVP-786	Agitation associated with dementia of the Alzheimer's type	 
centanafadine	ADHD ⁴⁾	
Digital Medicine (quetiapine etc.)	Schizophrenia etc.	
fremanezumab	Migraine	
Cardiovascular & Renal system		
SAMSCA	SIADH ⁵⁾	
vadadustat	Renal anemia	 
OPC-61815	Cardiac edema	

Oncology

Products ¹⁾	Indication	Area
TAS-118	Gastric cancer	
SGI-110	MDS ⁶⁾	  
ASTX727	AML ⁷⁾ / MDS ⁶⁾	 
TAS-116	GIST ⁸⁾	
Pro-NETU	CINV ⁹⁾	
TAS-120	ICC ¹⁰⁾	  
TBI-1301	Synovial sarcoma	
TAS3681	Prostate cancer	

Others

DELTYBA	MDR-TB ¹¹⁾	
OPA-15406	Atopic dermatitis	

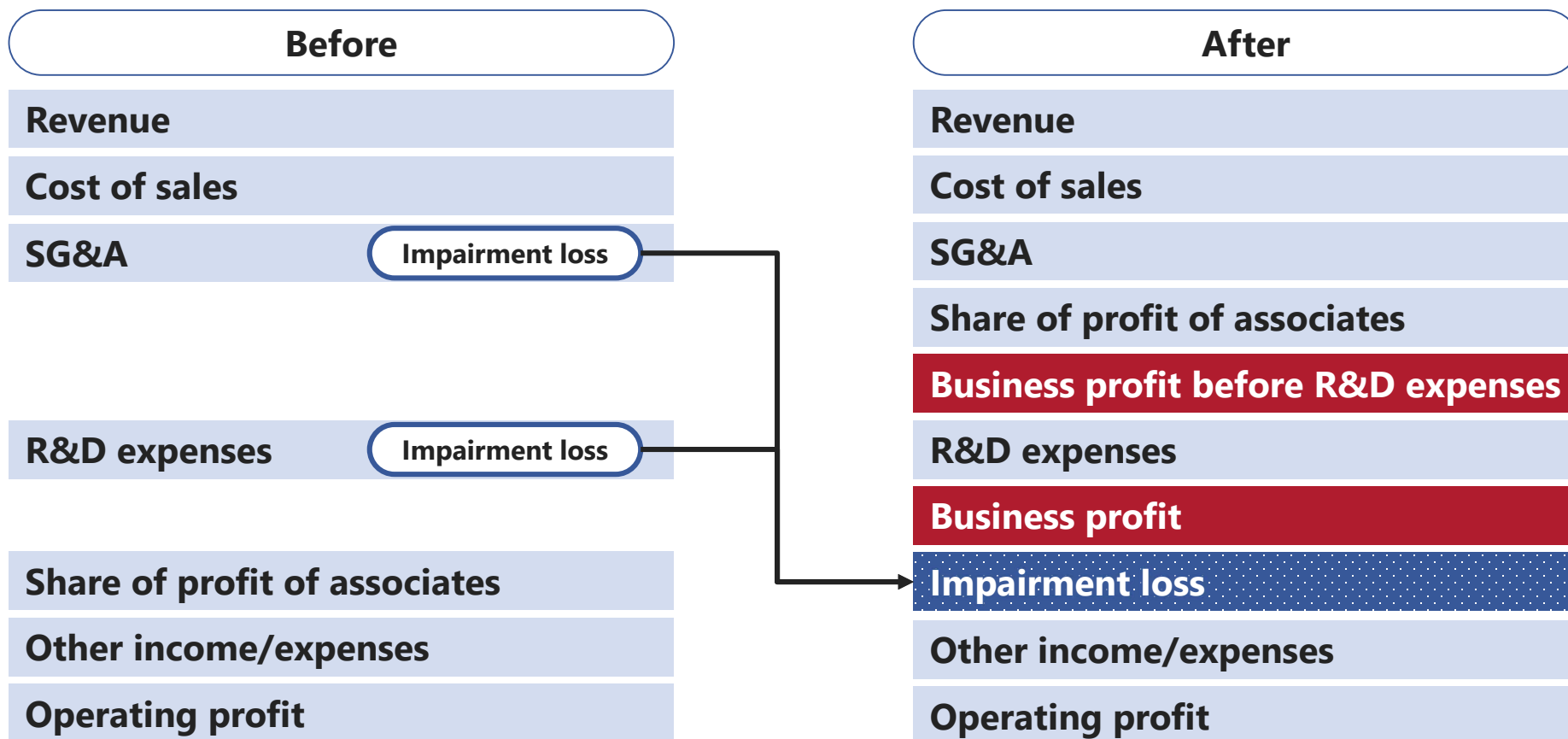
< Products filed from Jan. to May 2019 >

- canerapturev (JP: Melanoma)
- Abilify MyCite (EU: Schizophrenia)

1) Brand name, generic name or development code, 2) Major depressive Disorder, 3) Post traumatic stress disorder, 4) Attention deficit hyperactivity disorder, 5) Syndrome of inappropriate antidiuretic hormone, 6) Myelodysplastic syndromes, 7) Acute myelogenous leukemia, 8) Gastrointestinal stromal tumor, 9) Chemotherapy-induced nausea and vomiting, 10) Intrahepatic cholangiocarcinoma, 11) Multidrug-resistant tuberculosis

Adoption of “Business Profit”

- “Business profit” is to be used as an index of real earning power from business (before impairment loss and other income and expenses)
- Impairment losses previously included in SG&A and R&D expenses are combined and reported under “Impairment loss” in the financial statements



For Sustainable Society | Otsuka's CSR mission

- Promote business-integrated-CSR based on corporate philosophy
- Aim to realize sustainable growth and sustainable society
- Contribute to SDGs as a company signing the Global Compact



Contribution to Sustainable Society



Otsuka's business = Address to social issues = CSR

Otsuka-people creating new products for better health worldwide

【Society】

Health People Quality in all we do

【Environment】

Climate change Resource circulation
Water conservation
















【Governance】

Corporate governance Compliance Risk management

<CSR Mission>

CSR is integrated into our businesses across the Otsuka group of companies, which aims to grow while contributing to the creation of a healthy and sustainable society. We pursue these objectives supported by a comprehensive governance system.

Otsuka Group's Materiality and Related SDGs

Materiality		Social Issues	Our Goals	Our Activities	Related SDGs
Society	Health	<ul style="list-style-type: none"> Unmet medical and health needs* Nutritional needs Increasing aging issues 	<ul style="list-style-type: none"> Contribution to unmet needs solution Eradication of tuberculosis Creation of a system for the realization of a healthful life Healthy life extension 	<ul style="list-style-type: none"> Promotion of R&D for unmet needs R&D of antituberculosis drugs and improvement of drug access Support for people's health maintenance / improvement mainly on exercise and nutrition etc., enlightenment activities Promotion of problem solving by strengthening partnerships 	   
	People	<ul style="list-style-type: none"> Presentyism Unpaired to diversification 	<ul style="list-style-type: none"> Creation of a corporate culture that stimulates creativity Enhance employee engagement 	<ul style="list-style-type: none"> Human resource development Diversity promotion Health management 	   
	Quality in all we do	<ul style="list-style-type: none"> Consumption and production that impairs sustainability 	<ul style="list-style-type: none"> Gaining stakeholder trust Pursuing sustainability at all levels of the value chain Establishing a quality assurance system for safety and security 	<ul style="list-style-type: none"> Sustainable procurement and product design Thorough quality control and stable supply Responsible promotional activities and information provision Deepening communication with stakeholders Promotion of "Customer-oriented management" 	
Environment	Climate change	<ul style="list-style-type: none"> Global warming 	<ul style="list-style-type: none"> FY 2030 Goal 30% reduction in CO₂ emissions compared to FY 2017 	<ul style="list-style-type: none"> Reduce CO₂ emissions throughout the value chain 	 
	Resource circulation	<ul style="list-style-type: none"> Environmental load increase 	<ul style="list-style-type: none"> FY 2030 Goal 50% reduction in simple incineration and landfill compared to FY 2019 	<ul style="list-style-type: none"> Reduce environmental impact by improving resource efficiency Promotion of business activities aimed at a sustainable state in both society and the earth 	 
	Water conservation	<ul style="list-style-type: none"> Reducing freshwater availability 	<ul style="list-style-type: none"> FY 2030 Goal Improvement of water use efficiency by 15% compared to FY 2017 	<ul style="list-style-type: none"> Understanding water resources risk Management and effective use of water resources 	
Governance	<ul style="list-style-type: none"> Fragile governance system Social change risk 	<ul style="list-style-type: none"> Long-term improvement of corporate value 	<ul style="list-style-type: none"> Strengthen corporate governance Thorough compliance Risk identification, evaluation and management 		

*The situation where productivity does not go up from the badness of the mind and body condition despite coming to work