

OLYMPUS Investor Day 2018
Overview

Hiroyuki Sasa
Representative Director, President
Olympus Corporation
September 5, 2018

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- The financial forecasts and other material in this document are based on judgements and assumptions derived from currently available information. Actual results may differ significantly from targets, being subject to change due to factors such as the uncertainties implicit in these judgements and assumptions and due to future changes in business operations and circumstances inside and outside the company.
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Key Points for Today

Olympus's Endoscope Business
Medical business in emerging-market

Review and the forecast for FY2021

Initiatives for Achieving Sustainable Growth

Olympus's Endoscope Business
Medical business in emerging-market

Review and the forecast for FY2021

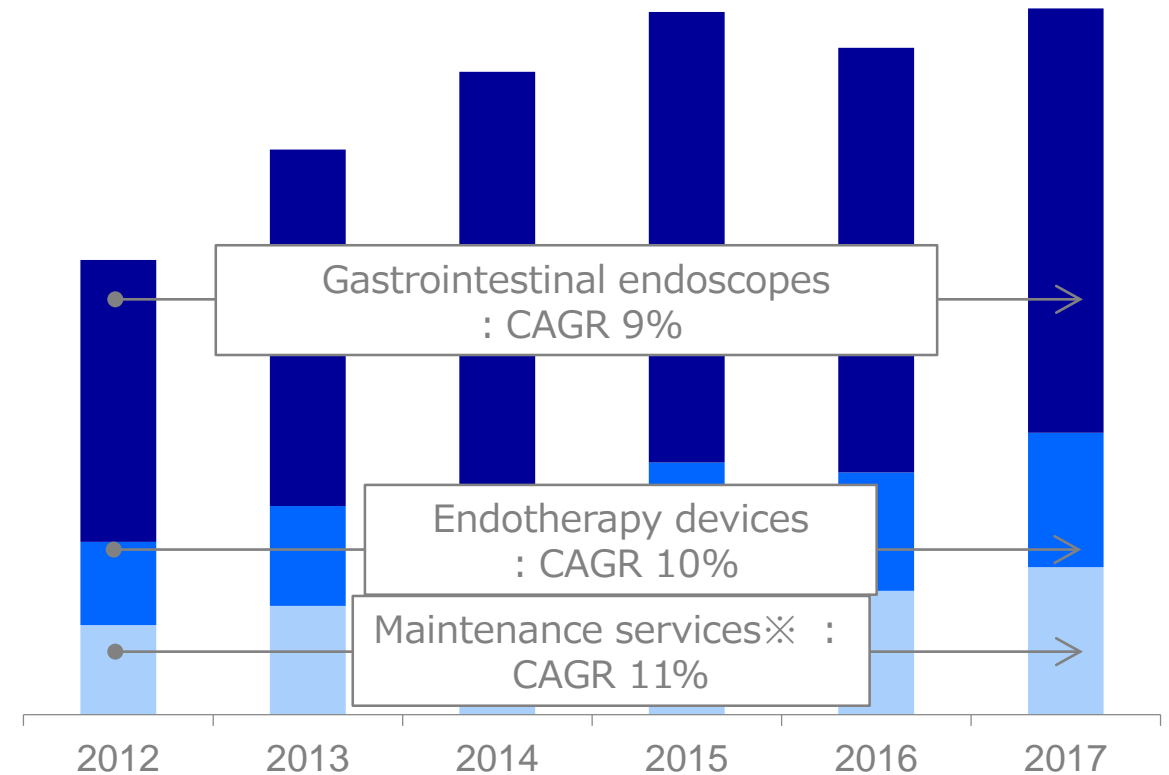
Initiatives for Achieving Sustainable Growth

Olympus's Endoscope Business

Related products and services with gastrointestinal endoscopes



Sales trend (JPY based)

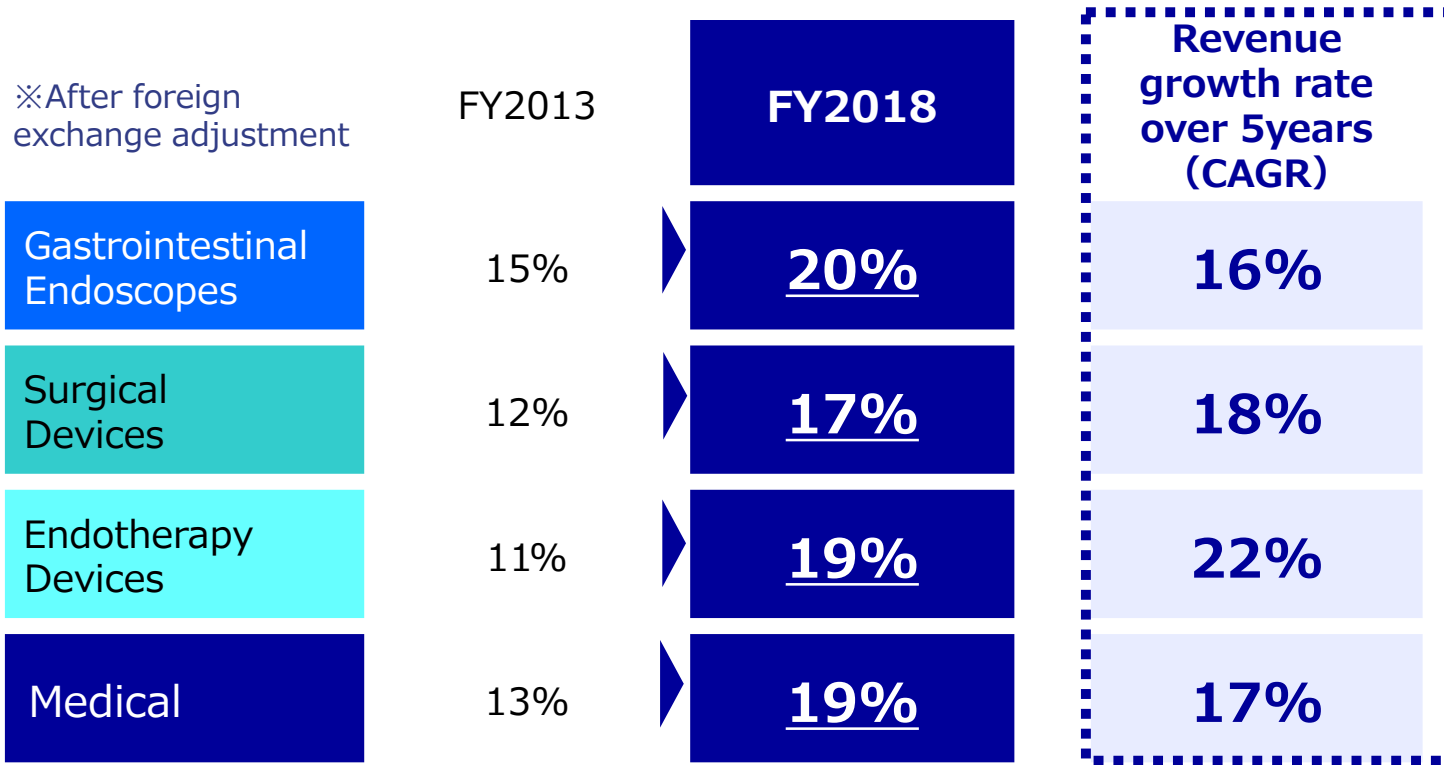


Together with a gastrointestinal endoscope with over 70% of the world market share, Steady growth of related products and services (Endotherapy devices, maintenance services, etc.) has been recorded

Medical business in Emerging-market

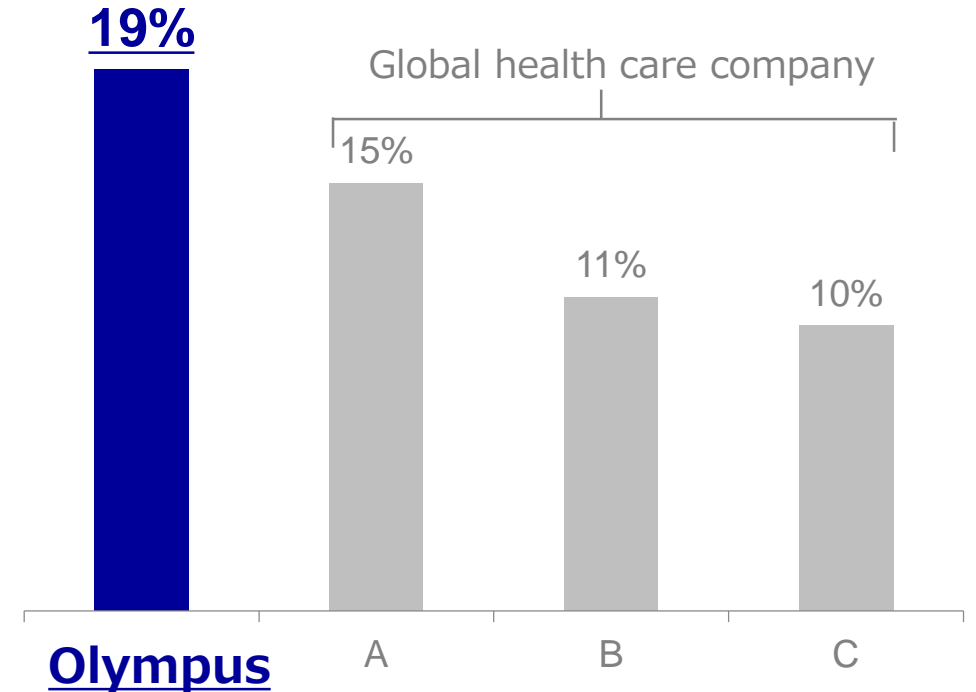
Asia / Oceania region's share of Revenue and CAGR

※After foreign exchange adjustment



Revenue ratio of emerging markets (Compared to other companies)

※FY2018



Enter the emerging markets ahead of other global health care companies and earn a firm presence

Medical business in Emerging-market

Number of Endoscopists per Million People

※Based on publicly available data

China	22
Malaysia	17
Philippines	4
Indonesia	2
Vietnam	6
Thailand	4
India	5
Japan	250

Training centers and Service bases

- Continuing training support for medical staff in Asia (New Training Center (K-TEC) established in Korea)



- Industry-leading service network spreading to approximately 200 bases worldwide including Asia

Expand revenue by taking advantage of high growth potential based on strong presence in emerging markets

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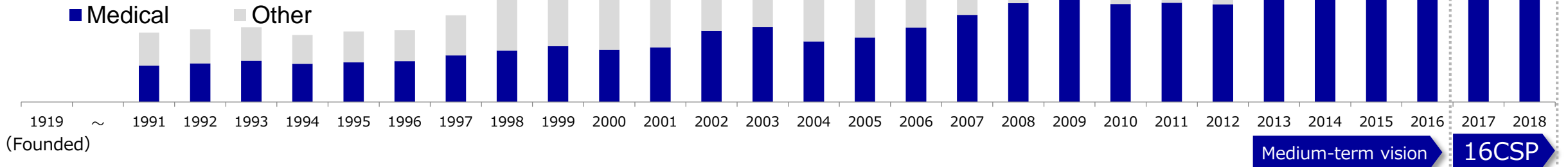
Initiatives for Achieving Sustainable Growth

Sales trend

* Excluding sales of information and communications business (2005 – 2013)

Results and progress

- ✓ Gastrointestinal Endoscopes: Good progress on development of next generation of endoscopes
- ✓ Surgical devices: Good progress on winning accounts with 4K system
A number of large revenue achieved in North American market (world's largest) through collaboration with ISM
Acquisition of new leads with IDN
- ✓ Endotherapy devices: Growth in line with plan due to product line-up expansion
- ✓ Energy devices: THUNDERBEAT continues to enjoy double-digit growth, with development and manufacturing infrastructure established in North America
- ✓ Emerging countries: Double-digit growth for two years running in Asia/Oceania region
Training and service centers established in Thailand and Dubai
- ✓ Maintenance infrastructure: Strengthening of repair infrastructure, especially in Europe and America



- Medical business continues to achieve steady growth and drive corporate performance
 - ✓ Continued growth despite a changing operating environment and gastrointestinal endoscopes being in the later stages of their product lifecycles
 - ✓ Successful implementation of investment and other measures for future growth

Review

	2017/3 (JGAAP)	2017/3 (IFRS)	2018/3 (IFRS)	<u>16CSP target</u>
ROE (Capital efficiency)	19%	11%	14%	15%
Operating margin (Business profitability)	10.2%	9.6%	10.3%	15%
EBITDA (Growth performance)	-16% (130 billion yen)	-※ (126 billion yen)	+7% (134 billion yen)	Double-digit growth
Capital-to-asset ratio (Financial soundness)	43%	41%	45%	50%

- ROE and capital-to-asset ratio are in accordance with plan
- Operating margin and EBITDA are below expectations (we are conscious of issues surrounding growth performance in particular)

Projections for March 2021 Period

CAGR (sales)

※After foreign exchange adjustment

..... 16CSP (Initial forecast)

— 16CSP (Adjusted)

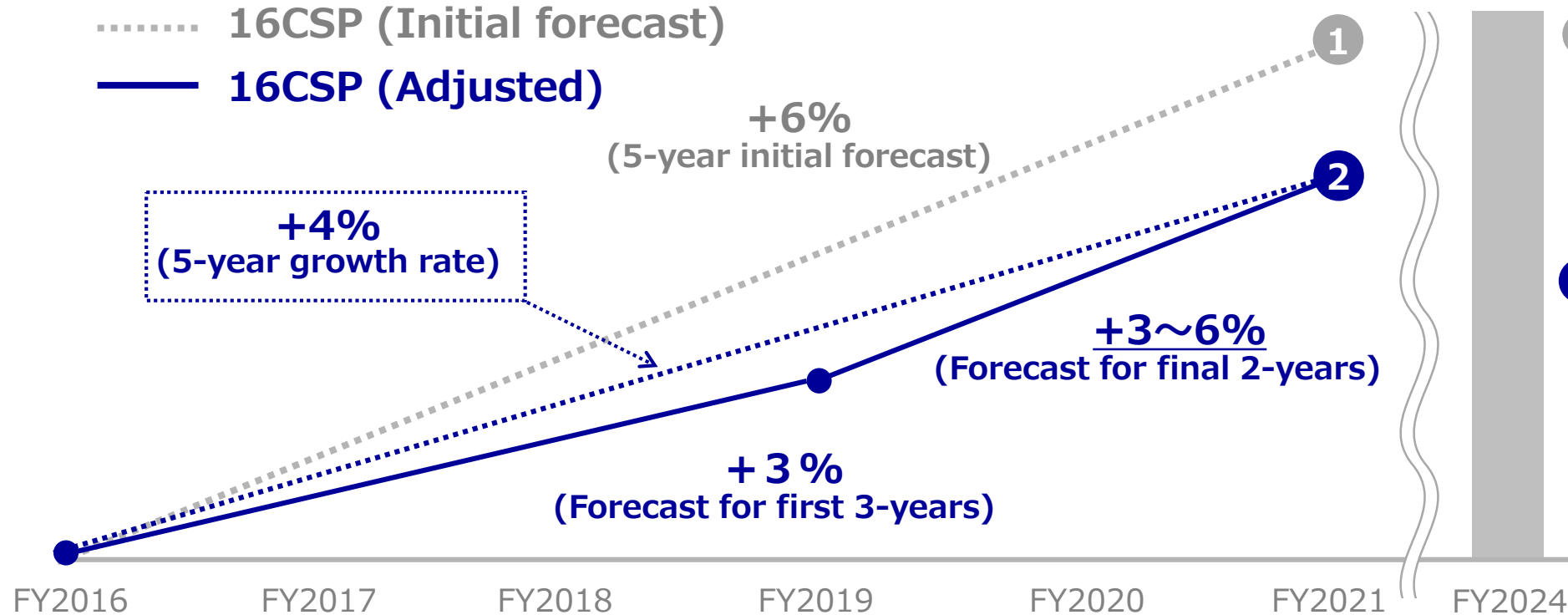
Assumed exchange rates for
FY2021 and 2024:
105 yen/\$US, 130 yen/Euro

① March 2024 period projection

Sales: 1,000 billion yen
Operating margin: 15%

② March 2021 period projection

Sales: 840-880 billion yen
Operating margin: 13%~14%



- The FY2021 targets were revised based on current situation.
- The initial targets are expected to be achieved by FY2024 at the latest (three years later than planned)

Measures Aimed at Projections for March 2021 Period

Factors impeding CAGR

✓ Endoscopes:

A number of new products have been delayed as a result of constraints on development resources due to dealing with implications of EU-MDR on existing products and reprocessing

✓ Surgical:

Affected by supply delays due to production problems during introduction of new product (VISERA ELITE II) and product launch put back due to delays in regulatory approvals in North America

■ Urology and gynecology:

Temporarily slow growth due to shipping hold and recall of flexible ureteroscopes

Measures for achieving growth over final two years (CAGR of up to 6%)

✓ Endoscopes:

Successful development and trouble-free launch of the next generation of endoscope systems

✓ Surgical:

Early resolution of new product launch delays and supply problems, and capture market share in US

✓ Urology and gynecology:

Get back on 16CSP growth track through launch of new flexible ureteroscopes

Successfully launch new products to drive sales growth

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Review and the forecast for FY2021

Initiatives for Achieving Sustainable Growth

Initiatives for Achieving Sustainable Growth: Review of Current Situation

16CSP

Shift to procedure based medical business model
(expansion of single-use device operations)

Gastrointestinal endoscopes

- Grow the business and achieve substantial market share by global deployment of modalities developed in tandem with Japanese healthcare

Differences in competitive conditions

Therapy devices

- Shift focus of business growth away from endoscopic diagnosis to therapy devices (single-use devices)
- ✓ Levels of management speed and efficiency that rival global healthcare companies
- ✓ Utilization of healthcare clusters in America and Europe

- Along with existing strengths, management speed and efficiency matching performance of European and American multinationals is needed
- To become a world-class health care company, transform into a truly global company

Initiatives for Achieving Sustainable Growth: Establish Global Management Practices

One Olympus

Coherent strategies for establishing management practices that bring together the global group

Lay out clear directions for achieving “One Olympus” management practices throughout the global group

2015

Integration of business-specific companies

Switch to management based on a business and function matrix and formulation of new management strategies under this structure

2016

Reformulate management principles to progress toward global management

Initiatives for Achieving Sustainable Growth: Formulation of New Management Principles

OUR PURPOSE

OUR PURPOSE
**Making people's lives healthier,
safer and more fulfilling**

OUR CORE VALUES



- Strengthen values that suit the current competitive environment (agility) while still holding to the principles of "Social-IN"
- Find words that will bring Olympus Group employees together around the world

Initiatives for Achieving Sustainable Growth: Formulation of New Management Principles

Ambassador workshop around the world



Launch activities around the world



The core values (values) co-sponsored by the management and global brand ambassadors of around the world for half a year cooperated and launched all over the world this summer

Initiatives for Achieving Sustainable Growth: Improve Management Speed and Efficiency

Global project for boosting management speed and efficiency

Establishment of global governance (management practices and infrastructure)

- Redefine functions and roles at global level and clarify responsibilities
- Move to new organization structure based on redefined functions, roles, and responsibilities
- Establish decision-making processes and assignment of authorities based on new organization structure
- Improve the speed of all processes until decision making, execution, evaluation, improvement

**Rapid decision making
(PDCA process)**

Design of global human resource system

- Establish human resource system that helps with global recruitment
- Maximum utilization of abundant global talents already in the group
- Improve global talent management

**Recruit highly specialized
staff Maximize human
resource value**

Open innovation and collaborative creation

- Deal with technology, innovation, and risk
- Pursue open innovation to overcome “not invented here” attitude

Growth potential of disposable device operations

- Extent to which sales organization is in place we have worked on so far
- Room for linear growth by providing additional products
(Improved development speed, High frequency product introduction)
- Potential for innovations out of USA
- Use of US medical clusters (accelerate progress based around US sites)



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OLYMPUS Investor Day 2018
Scientific Solutions Business (SSBU)

Hiroyuki Sasa
President and Representative Director
Olympus Corporation
September 5, 2018

Initiatives Planned to Achieve 16CSP Targets

Strategy revisions of life science field : Focus on profitability without tracking revenue size

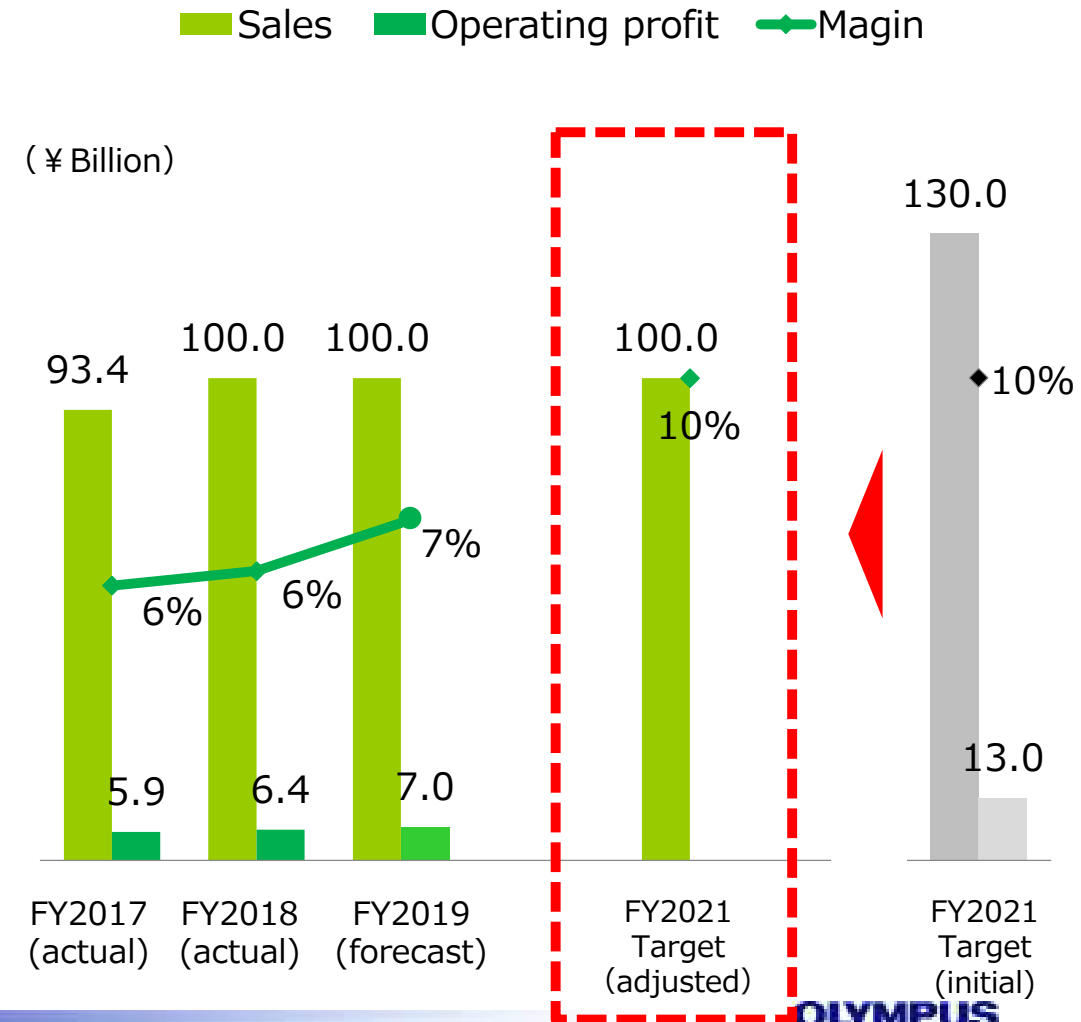
Issues

- Life science field: overall growth is slow and profitability became an issue



Key strategy revisions

- In the life science field, improvement of profitability is given top priority by structural reform and strengthening selective investment in growing fields
- Industry field continues to promote organic growth and product portfolio expansion
- The 10% target for operating margin remains unchanged, and the business will be structured to deliver an operating profit



OLYMPUS Investor Day 2018
Imaging Business Unit (IMBU)

Hiroyuki Sasa
Representative Director,
President
Olympus Corporation
September 5, 2018

Initiatives Planned to Achieve 16CSP Targets

Continuously Improve Profitability by Advancing High-Value-Added Business

Improve Profitability

- Expand sales of highly-profitable OM-D series cameras and PRO series lenses:
Mirrorless camera system that are uniquely Olympus, attaining high level of compatibility between overwhelmingly compact & lightweight and high image quality with the Micro Four Thirds Standard
- Accelerate development of products aimed for professional and high-level amateur users
- Improve manufacturing cost ratio by consolidation of manufacturing facilities and improved efficiency in manufacturing startups

Groupwide technology driver

- Apply technologies acquired in Imaging Business to other businesses

① Advanced digital technologies

Scientific Solutions Business

Development of regenerative medicine solution prototypes using Wi-Fi and ICT

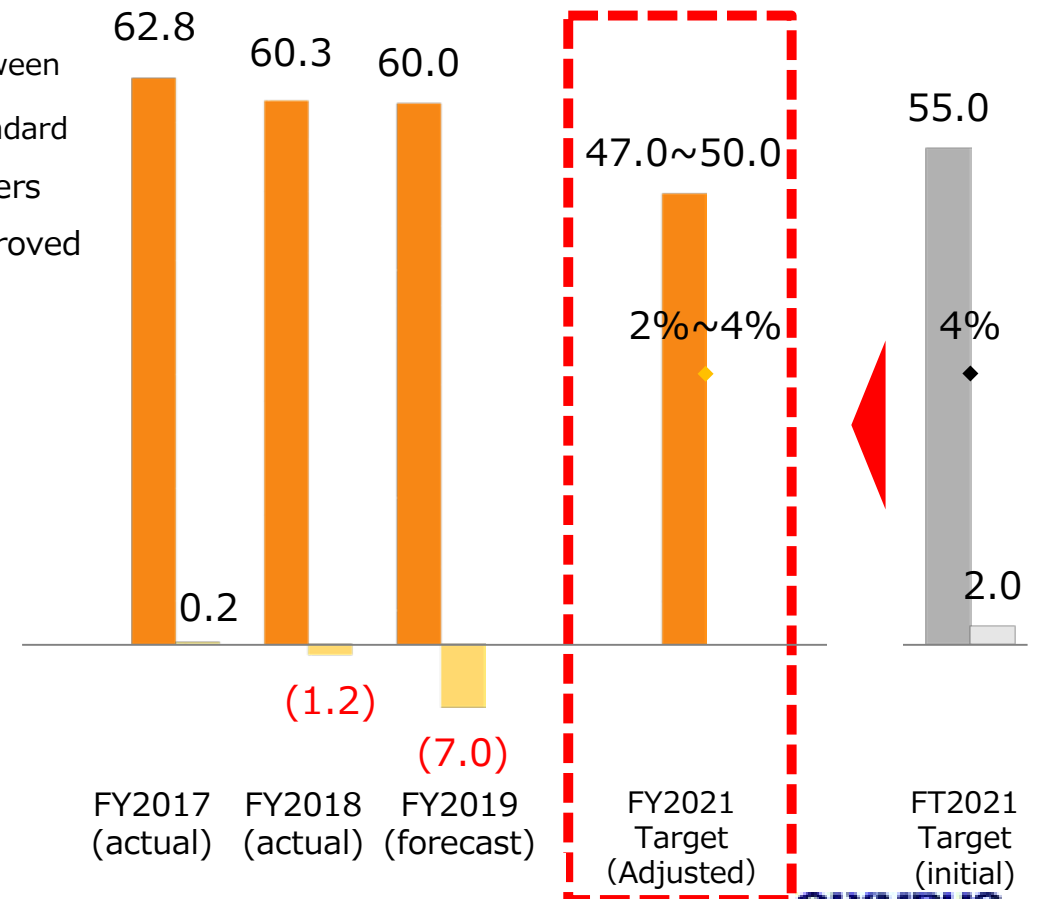
② Low-cost production and design technologies

Medical Business

Development of next-generation energy devices using shortened, low-cost development processes and mass-production and miniaturization technologies

③ Mobile technologies

(¥ Billion) Sales Operating profit Margin



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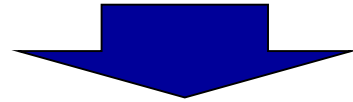
Medical Business Strategy

Akihiro Taguchi
Business Management Officer,
Medical Business
Olympus Corporation
September 5, 2018

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OUR PURPOSE
**Making people's lives healthier,
safer and more fulfilling**



Value to Be Provided by Medical Business



Endoscopes

Early diagnosis

Minimally invasive treatments

Concentrate investments on 5 BUs and increase sales and income

GIRBU



GSBU



UGBU



ENTBU



MSBU



(Note) GIRBU: Gastrointestinal and Respiratory Business Unit ; GSBU: General Surgery Business Unit; UGBU: Urology / Gynecology Business Unit; ENTBU: Ear, Nose, and Throat Business Unit; MSBU: Medical Service Business Unit

【Sales Function Investments】

- Respond to North American GPOs/IDNs and strengthen training
- Bolster sales systems and step up promotion activities in emerging countries



【R&D Investments】

- Advance R&D ventures for developing next-generation products and new businesses
- Strengthen single-use device technologies



【QA/RA Investments】

- Strengthen quality management systems
- Reinforce medical affairs functions



【Manufacturing Function Investments】

- Create globally optimized production systems (including repairs) with eye to 10 years from now



Growth
potential

Balance

Efficiency

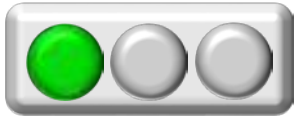
1

Expand dominant GI market share and improve profitability while realizing substantial growth in ET and Surgical business operations



Shift from installation-based medical business model to procedure-based medical business model

→ Expand single-use device operations



2

-- To be the greatest "Business to Specialist" Company --

【Sales and Marketing Functions】

- Expand procedure shares and strengthen account management
- Provide 3 types of value (medical value, economic value and patient value)

【R&D Function】

- Accelerate development and strengthen product life cycle management
- Develop products that improve efficiency of medical institutions (reduce downtime)

【Manufacturing Function】

- Boost cost competitiveness
- Improve responsiveness to production fluctuations
- Strengthen SCM

3

Expand operations in emerging countries

- Countries with sufficient medical infrastructure: Position as growth driver and continue appropriate investment
- Countries without sufficient medical infrastructure: Contribute to medical infrastructure development



4

Strengthen ability to respond to GPOs/IDNs

- Respond to market structure changes exemplified by growing presence of GPOs/IDNs in North America
- Propose value as One Olympus with unified R&D, manufacturing and service functions
- Establish processes for acquiring GPO/IDN contracts and strengthen project management



5

Strengthen QA/RA functions

- Reinforce global quality management systems with eye toward external requirements expected 10 years from now
- Strengthen global QA and RA systems in consideration of future business development
- Reinforce medical affairs functions



6

Improve productivity

- Improve productivity of all functions (R&D, manufacturing, sales & marketing and service)



Changes in the Operating Environment (Disparities from Initial 16CSP Outlook)

Macroeconomic Environment

- No major changes in the operating environment trends in comparison with initial 16CSP outlook and in the rising needs for early diagnosis and minimally invasive therapies.
- On the other hand, changes in the operating environment, such as rising regulatory requirements and more advanced reprocessing requirements, are progressing faster than anticipated.
 - ✓ Increasingly more rigorous medical equipment application and registration requirements in EU-MDR* and other countries' regulation
 - ✓ Reprocessing Requirements (cleaning, disinfection, and sterilization) are increasingly more stringent



GIR: Delayed introduction of major new products

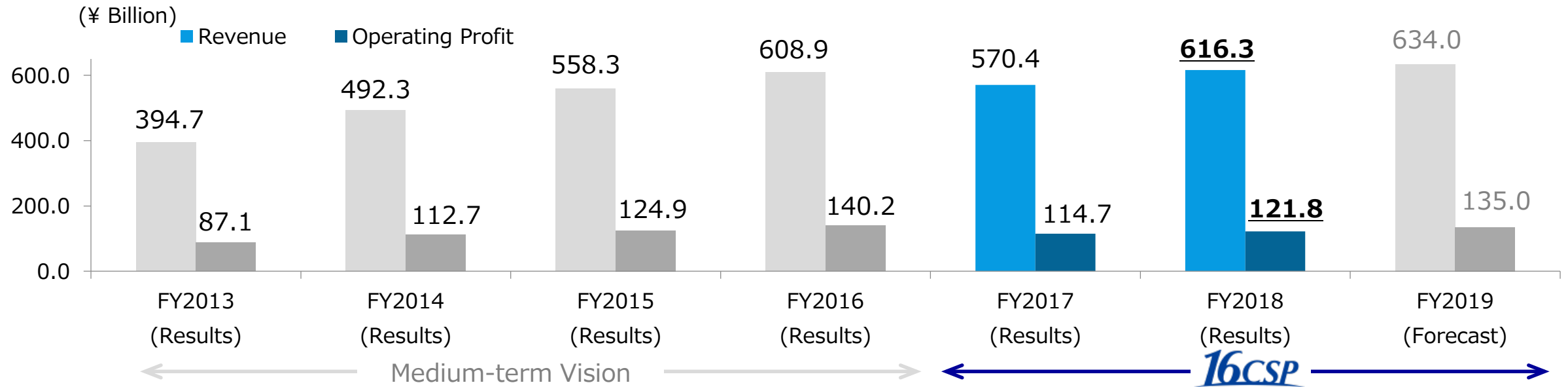
Constraints arose on development resources, mainly because existing products were prioritized to meet emerging regulatory requirements, new reprocessing requirements (cleaning, disinfection, and sterilization), and to meet and exceed quality standards.

GS: Delayed supplies and approval acquisition

Revenue growth has been impacted by delayed supply of new product (VISERA ELITE II) due to production issues at launch as well as delayed introduction of new products in North America

Major impact on
the medical
business

Review (3 business fields: Endoscopes, Surgical, EndoTherapy)



Medical	FY2017 Growth rate* (Results)	FY2018 Growth rate* (Results)	16CSP CAGR
		4%	4%
Gastrointestinal Endoscopes	4%	2%	6%
Surgical Device	4%	6%	11%
EndoTherapy Devices	7%	7%	9%

Revenue

- Other than mainstay gastrointestinal endoscopes being in the later stages of their product life cycles, **changes in the operating environment have delayed the introduction of new products in the gastrointestinal endoscopes field and surgical device field, and quality issues have occurred**, reducing growth below expectations. (EndoTherapy devices are in line with initial target)

Operating Profit

- In addition to reduction in gross profit due to a shortfall in sales, **the expenses of addressing quality issues and other unanticipated expenses arising** kept the value and margin of operating profit at broadly the same level as last year

Review (5BUs) and CAGR forecast

Medical Business CAGR <small>※After foreign exchange adjustment</small>		3 years of the first half	2 years of the second half	5 years
		CAGR Results 2017.3-2019.3	CAGR Forecast 2020.3-2021.3	16CSP CAGR Initial target
Medical		4%	5%-8%	8%
	GIRBU	<u>3%</u>	5%-7%	7%
	GSBU	<u>5%</u>	10%-13%	11%
	UGBU	<u>5%</u>	5%-8%	8%
	ENTBU	12%	10%-13%	13%
	MSBU	7%	2%-5%	5%

■ Achieve high growth over the 2 years of the second half, to recover from delays so far (3 years of the first half)

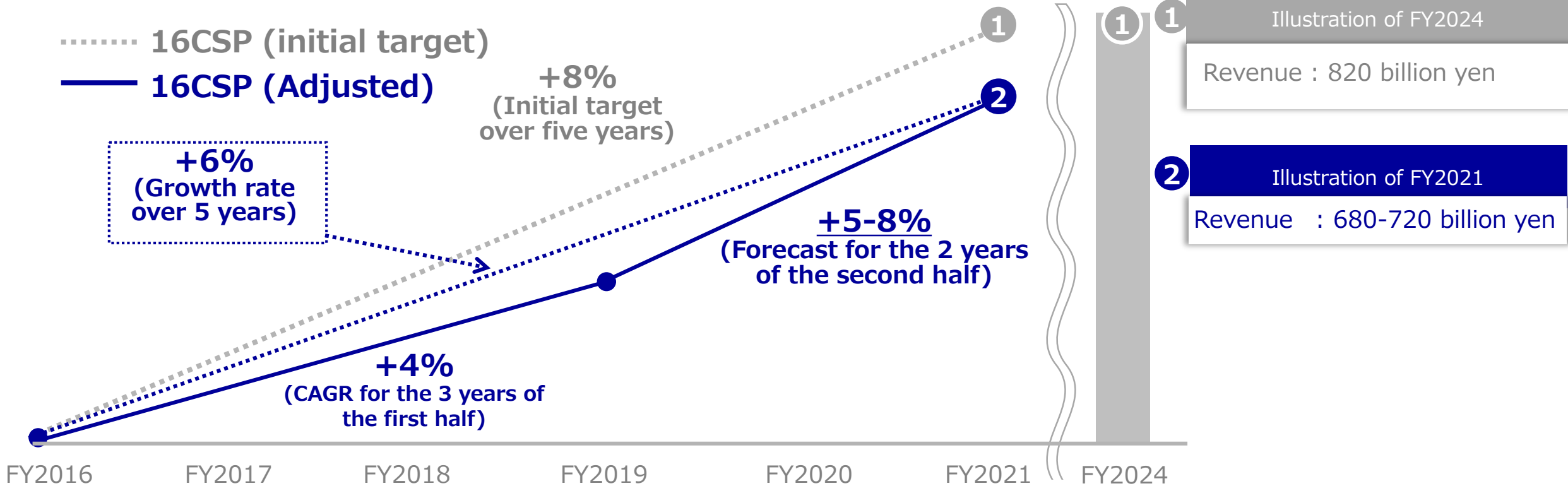
- ✓ GIRBU : Steadily introduce the next-generation endoscopy system and new endoscopes, delayed in the first half
- ✓ GSBU : Launch VISERA ELITE II in North America, Make the most of ISM
- ✓ UGBU : Voluntary suspension of shipments of flexible ureteroscopes and recall measures settled, currently returning to growth trend by introducing new products

Outlook for the Term to FY2021

Movements in CAGR (revenue)

※After foreign exchange adjustment

FY2021, 2024: Assumed rates
JPY/USD: JPY105, JPY/EUR: JPY130



- Revenue growth will be accelerated by the steady development and introduction of new products and the construction of business model to promote single-use device business

Issues and Measures

Issues

- 1** Reliable attainment of product development plans (steadily develop the next-generation endoscope systems and launch in the market). Response to quality issues
- 2** Issues of endoscope reprocessing (cleaning, disinfection, and sterilization)
- 3** Accelerate expansion of single-use device business (capturing the largest US market)
- 4** Improve profitability

Measures

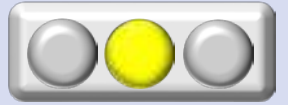
- 1** Improve the development speed and ensure the quality due to business process reengineering. Further reinforcement of QA and RA functions
- 2** New establishment of Medical Reprocessing Strategy Office
 - ✓ stronger reprocessing initiatives to ensure the safety of medical devices
 - ✓ Provide comprehensive solution
- 3** Construct a business model to expand sales in single-use device
 - ✓ Building a new business model specialized to single-use device business which has a faster cycle than capital products
 - ✓ Rearrange the value chain to introduce product matched to customer and market needs
- 4** "Select and concentrate" on investment and development and strengthen monitoring S.G.A. expenses

Gastrointestinal and Respiratory Business Unit

(GIRBU)

Strategic Initiatives for Each Business Unit: GIRBU

- Secure strong market leader position in GI business and improve profitability through selection and concentration
- Expand business in the following fields; respiratory, endoscopic ultrasound (EUS), Reprocessing* and IT
- Realize business growth in emerging markets
- Expansion of endotherapy device business (Single-use device)



Progress in Addressing Strategic Challenges (Business Strategies) (1/2)

Gastrointestinal endoscopes

- Introduction of high-value added attractive products, scheduled for the first half, has been delayed.
 - ✓ Had to comply with newly reinforced relevant regulations (FDA Guidance, EU-MDR, etc.)
 - ✓ Took time to develop internal systems
 - Restructured organization for the introduction of new products with compliance with various regulations and reassignment of personnel through business process reengineering.
- ↓
- Five new scope models have been introduced in domestic and overseas markets in the last fiscal year and the current fiscal year.
 - New products will be launched steadily in all regions in future



Hi-vision transnasal gastroscope



Super-zoom gastroscope/colonoscope



Therapeutic colonoscope



Duodenoscopes with removable distal end



Motor-driven enteroscope

Future Actions

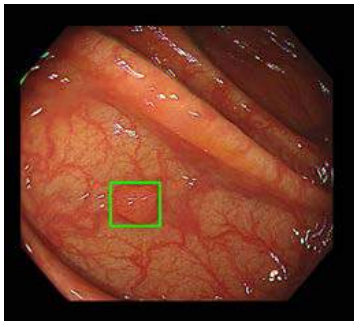
Next-generation endoscopy systems*

On-going development towards introduction in the second half of 16CSP

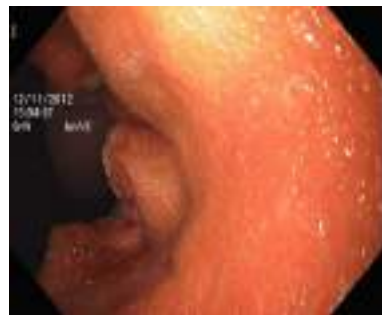


- Better Population Health:
Contribute to early diagnosis and minimally invasive therapy through new observation technologies and therapeutic devices
- Better Patient Care:
Raise quality of life and reduce patient burdens through early diagnosis and minimally invasive therapy
- Lower Per Capita Cost:
Reduce procedure-related costs with endoscopy systems that improves procedure workflow efficiency

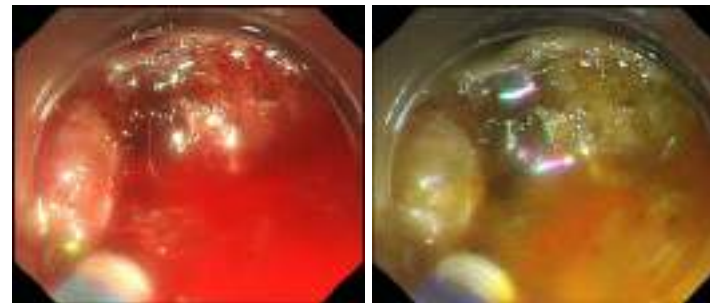
New technologies to be offered



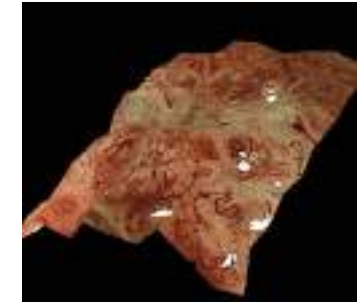
CAD*



Wide image field of depth*



Blood vessel visualization technology



3D*

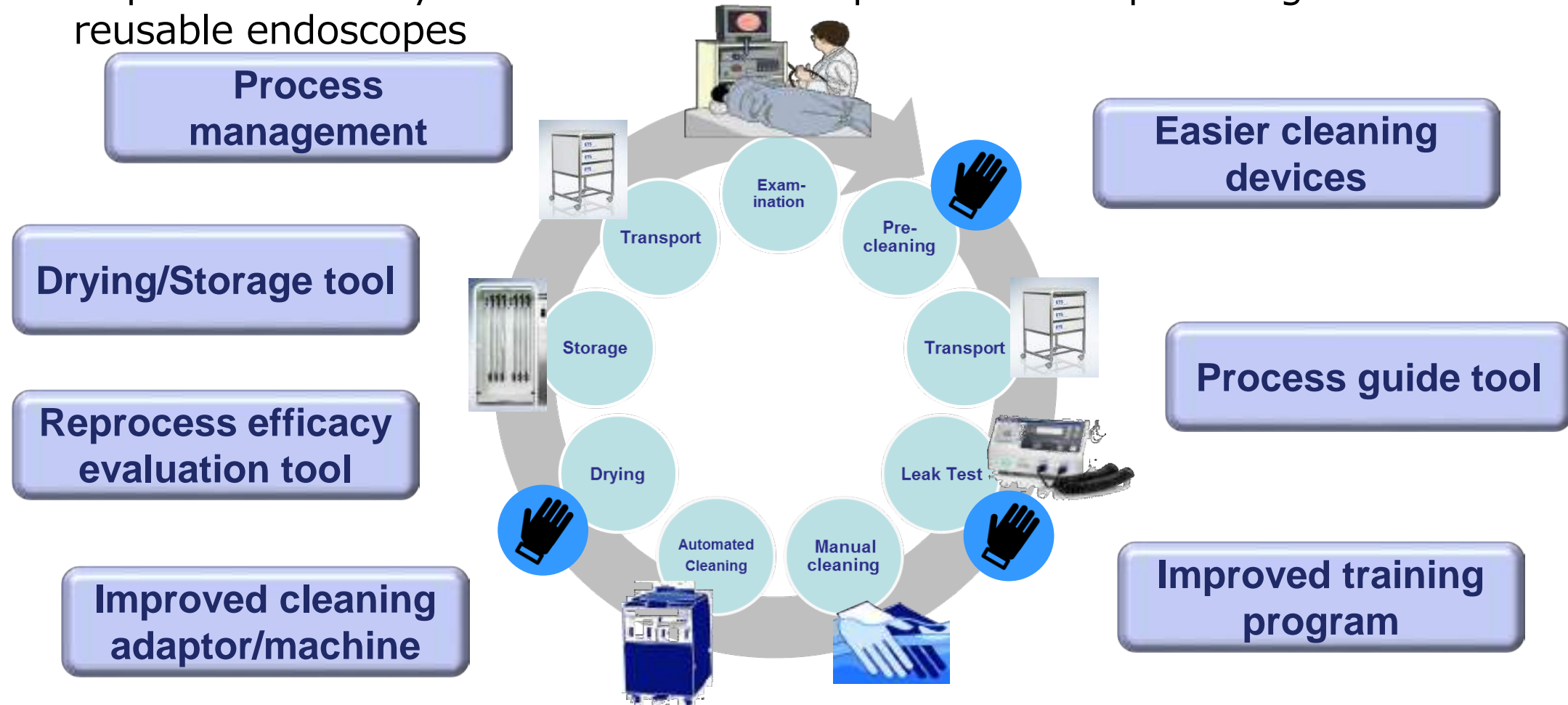
Research is being conducted through cooperation with several domestic and overseas institutions. (Image provided by Dr. Ryoichi Yamakawa of Kaetsu Hospital)

Efforts to mitigate infection risks

GI&R: Infection risk mitigation in reusable endoscopes

Offering comprehensive risk mitigating measures for our reusable endoscopes

- Improve the safety of medical staffs and patients while providing the value unique to reusable endoscopes

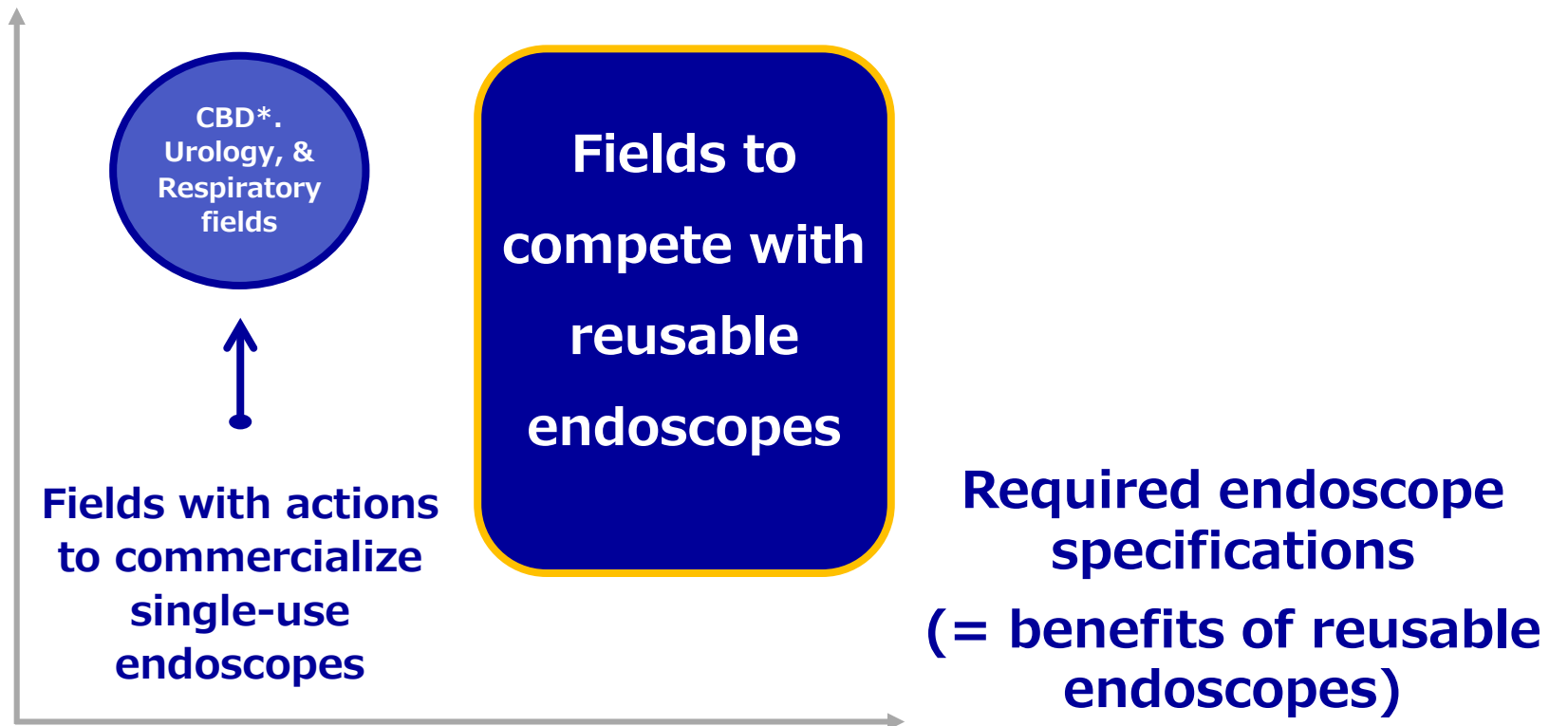


GI&R: Single-use endoscope

Introduce single-use endoscopes for fields which require high-level infection control

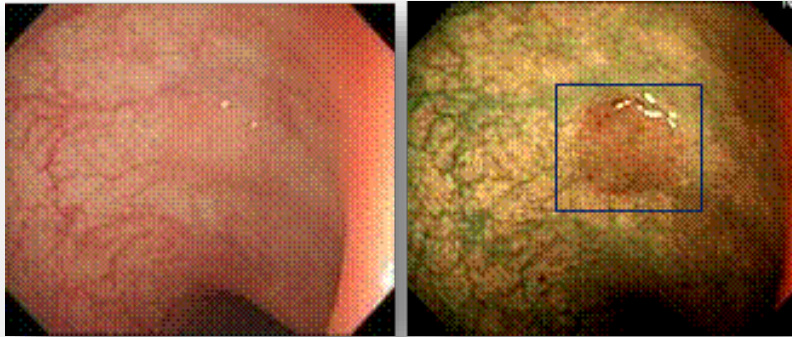
- Single-use endoscopes cannot offer diagnostic & therapeutic performance as well as insertability & maneuverability that reusable endoscopes can offer.
- However, we will develop & commercialize our own single-use endoscopes, only for fields with require high-level infection control, but not high-level specifications on endoscopes, in order to strengthen our portfolio.

Infection Control Level



GI&R : Olympus' view on Benefits of Reusable endoscopes

High image quality & Image enhanced endoscopy with NBI



*Narrow Band Imaging

High insertability

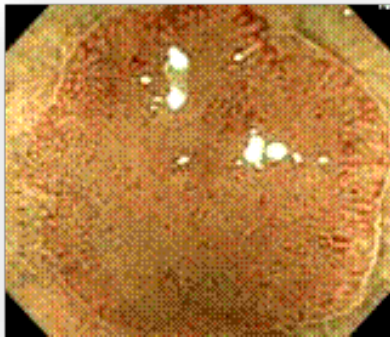


* "Passive bending section" +
"high force transmission
insertion section"

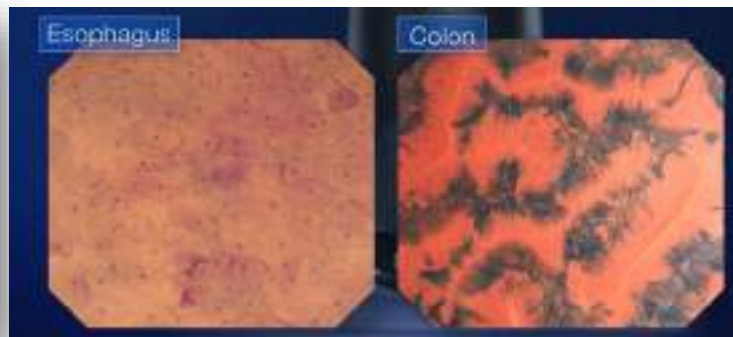
Cost benefit



High value-added functions



*zoom endoscopes



*ultra-zoom endoscopes (Endocyto)

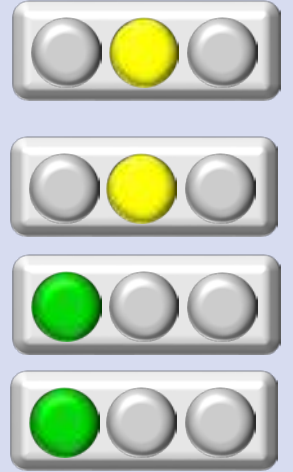
A broad lineup to meet diverse needs



General Surgery Business Unit (GSBU)

Strategic Initiatives for Each Business Unit: GSBU

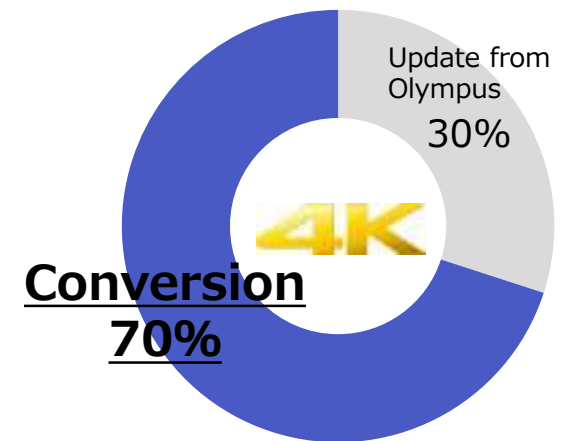
- Establish new de facto standard in surgical imaging market
- Secure No. 3 position in energy device market and encroach upon No. 2 and No. 1 positions
- Establish single-use device business model
- Fully leverage Olympus' strength in GI field



Progress in Addressing Strategic Challenges (Business Strategies)

Establish new de facto standard in surgical imaging market

- VISERA ELITE II, our main system for surgical endoscopy, has been newly introduced in the Europe and Japan market and is performing well
 - ✓ It is winning high praise as a competitive product that incorporates many physician's needs to support swift and accurate surgeries by the IR (infrared) and 3D observation
 - July 2018: The application of indocyanine green (ICG) to blood flow assessment in blood vessels and tissues is expanding in Japan
- Expand sales of 4K surgical endoscopy systems as strategic products for converting customers who mainly use products from competitor companies
 - ✓ Approximately 70% the sales of our 4K systems have been from customers converted to Olympus products



Progress and Issues in Addressing Strategic Challenges (Business Strategies)

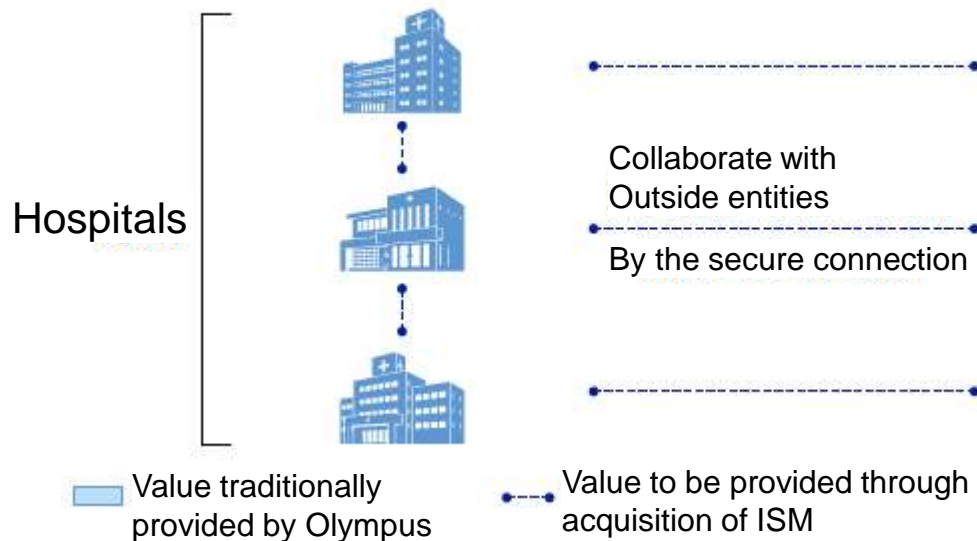
Establish new de facto standard in surgical imaging market

After ISM acquisition

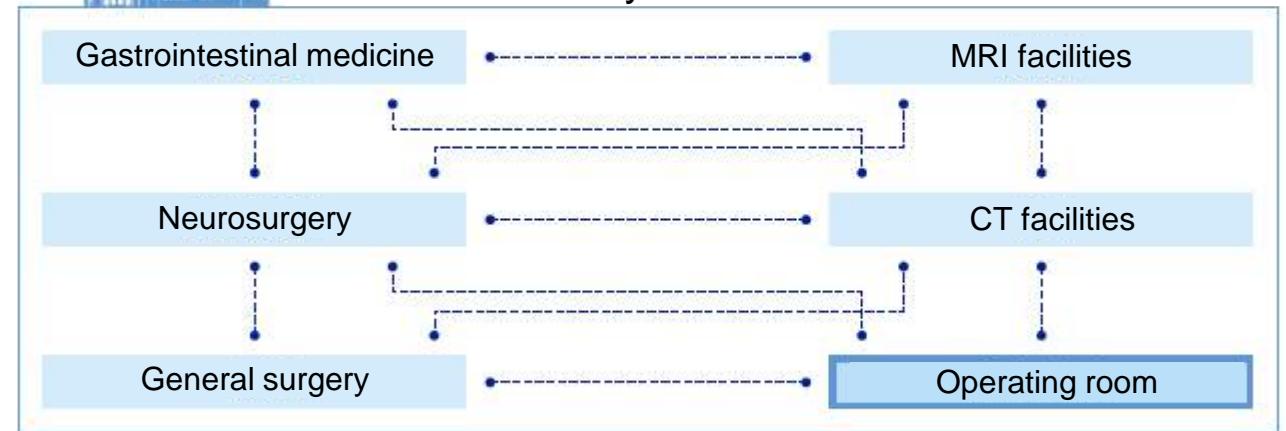
Gain IP-based image management solutions and systems integration operating foundation

- ✓ Systems can be built which convert various medical video signals to IP and network them to departments and labs inside and outside the hospital
- ✓ Obtain high technology to build robust security, to record and stream video inside and outside the hospital

Value to be Provided through Acquisition of ISM



Ability to develop systems for any department or examination facility



IP and 4K compatibility for various medical video signals

Progress and Issues in Addressing Strategic Challenges (Business Strategies)

Establish new de facto standard in surgical imaging market

[New Product] Launch of ORBEYE surgical microscope in the USA and Japan (October 2017)

- ✓ World-first 4K3D imaging provides high-resolution images and stereoscopic visual field to support precision surgery
- ✓ A 55-inch monitor is used for observation, facilitates team surgery and reducing surgeon fatigue
- ✓ Significant size reduction (95% smaller than the conventional model)



Winner of the Edison Award for technical innovation in a new product



Conventional surgery



Surgery using ORBEYE

ORBEYE surgical microscope

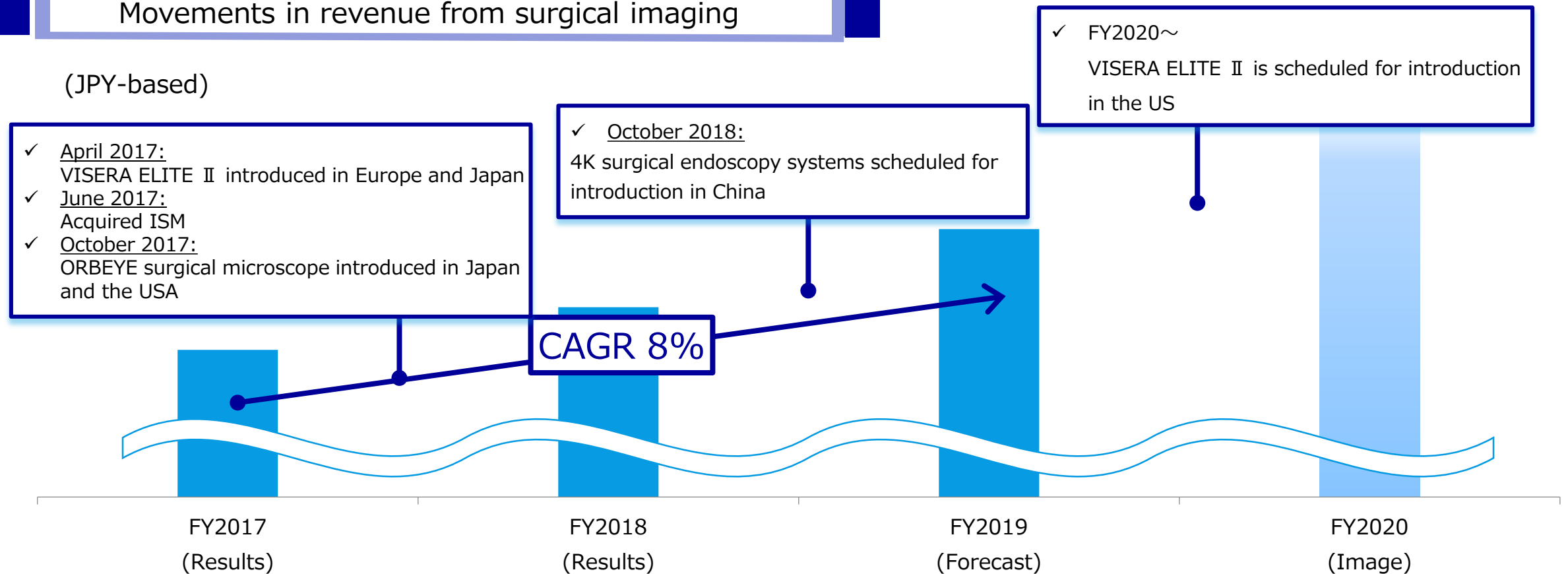
Progress and issues in Addressing Strategic Challenges (Business Strategies)

Establish new de facto standard in surgical imaging market

- Despite delays in new product introduction, and issues with quality and supply etc., **surgical imaging is achieving rapid growth (CAGR 8%)**
- Accelerate growth by introducing VISERA ELITE II in the US and stepping business with ISM and ORBEYE

Movements in revenue from surgical imaging

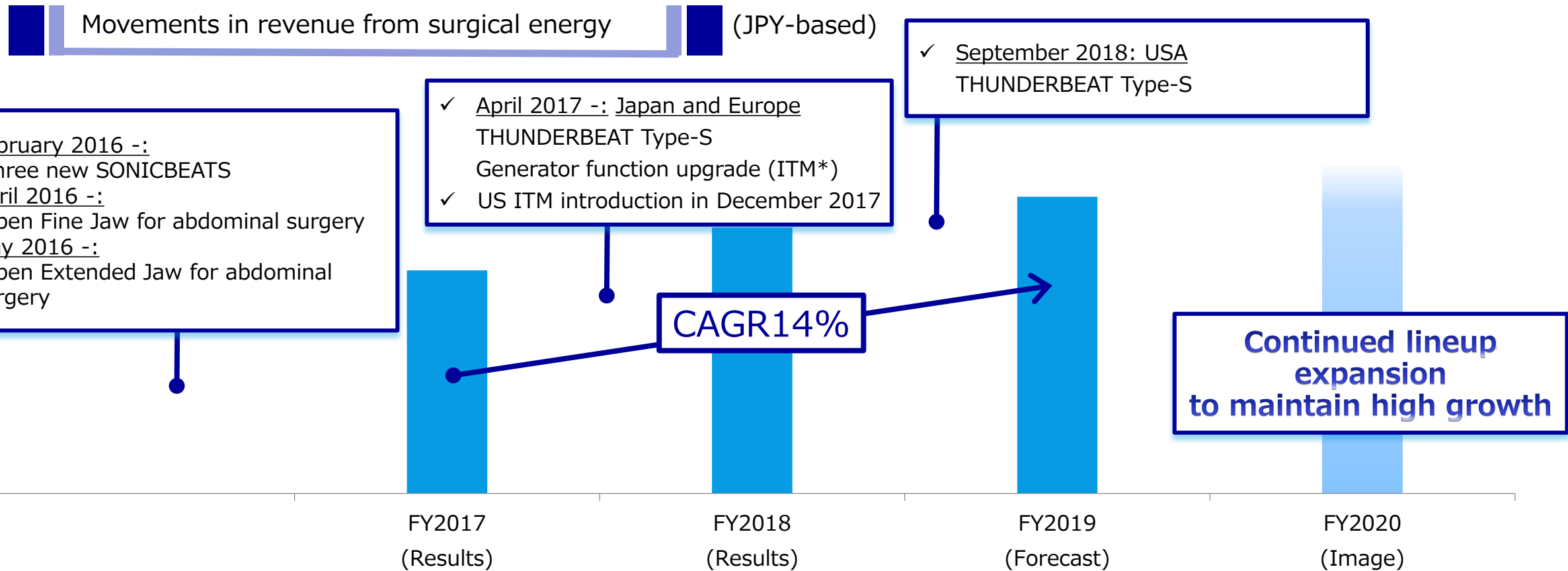
(JPY-based)



Progress and issues in Addressing Strategic Challenges (Business Strategies)

Secure No. 3 position in energy device market and encroach upon No. 2 and No. 1 positions

- Carry on expanding and enhancing the lineup of the THUNDERBEAT, to **achieve double-digit growth in surgical energy (CAGR 14%)**



Future direction to archive 16CSP targets

General Surgery Business Unit (GSBU)

- Slow progress in the first 2 years of 16CSP due to quality issues, delays in new product introduction, etc.
- The strategy is implemented successfully, continue to strengthen the activity to achieve the 16CSP target.

Surgical Imaging

- Make maximum use of ISM assets, continue to propose large-scale orders combined 4K/3D systems and multiple operating room integrations
- Introduce VISERA ELITE II in the US and the new Flex-3D globally
- Strengthen the value proposition for solid sales activities
- Introduce 4K in the Chinese market

Energy

- Boost the sales by continuing to expand the device portfolio and Strengthening the value proposition
- Strengthen the energy sales organizations in China, Asia, and emerging regions



Urology/ Gynecology Business Unit (UGBU)

Strategic Initiatives for Each Business Unit: UGBU

- Secure dominant shares in markets for flexible endoscopes and TURis products that leverage technological prowess of Olympus
- Strengthen urinary tract stone management business operations to expand market share
- Increase market share by leveraging existing products and technologies



Urology/ Gynecology Business Unit: The three fields constituting urology

Flexible endoscopes



Flexible fiber cystoscope



Flexible video cystoscope



Flexible video uretero-renoscope



Flexible fiber uretero-renoscope

TURis* electrodes



Prostate enucleation electrodes



Prostate evaporation electrodes



Stone treatment devices



Guide wires



Access sheath



Basket



Urinary tract stent



Laser fiber



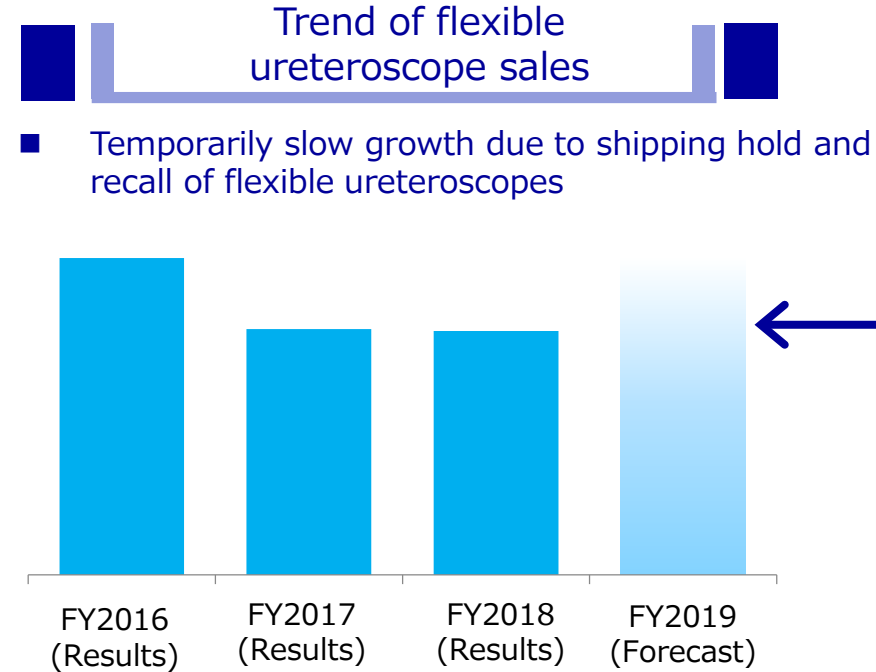
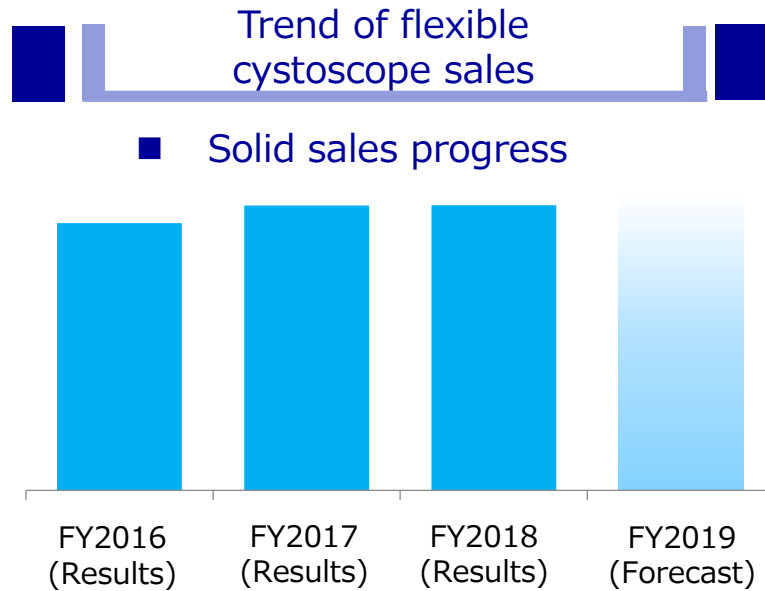
Lithotripsy System

*TURis: Transurethral Resection in saline

Progress on Business Issues (Business Strategy)

Flexible endoscopes

Progress of 16CSP



- Increased market share by utilizing the efficacy of NBI technology in bladder cancer diagnosis and treatment
- ✓ NBI is newly listed to EAU* Guidelines

- Get back on growth track by introducing new flexible uretero-renaloscopes

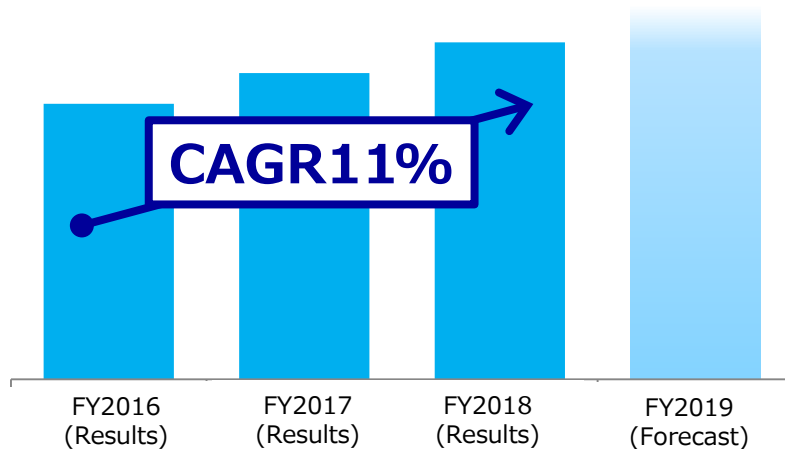
Urology/ Gynecology Business Unit

TURis electrodes

Progress of 16CSP

Trend of sales

- Sustained growth in all regions



TUEB* electrodes
(for transurethral prostate enucleation)



*TUEB : TransUrethral Enucleation with Bipolar

TURis electrodes



TURis: TransUrethral Resection in saline

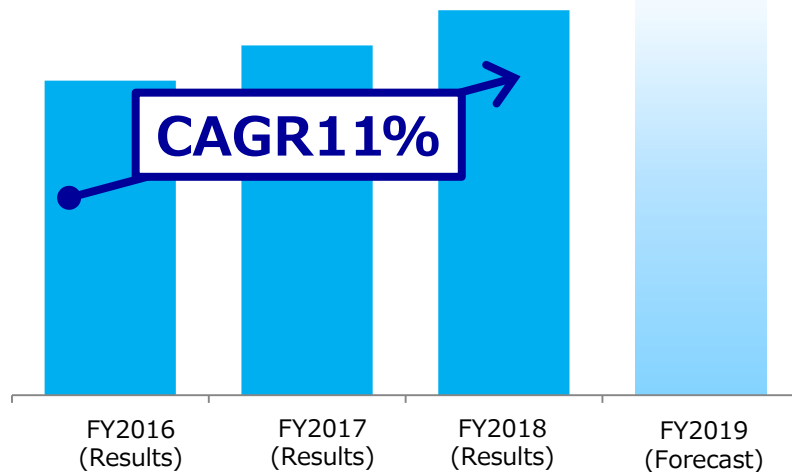
Increased market share by strengthening TURis competitiveness
and its appealing performance in the market

Urology/ Gynecology Business Unit

Stone treatment devices

Trends of sales

- Continued double-digit growth
- Steady progress towards target share



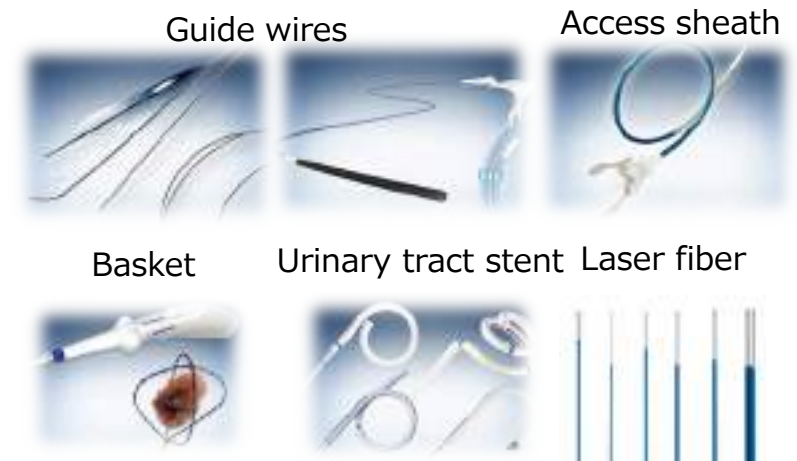
Progress of 16CSP

Expanding the product portfolio and enhancement of stone management product lineup

- Release of a laser lithotripsy system (March 2018)

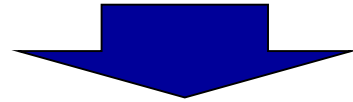


- Development and manufacturing of lithotripsy systems in-house*



Increase market share and accelerate business growth by expanding product portfolio to enhance product lineup

OUR PURPOSE
**Making people's lives healthier,
safer and more fulfilling**



Value to Be Provided by Medical Business



Endoscopes

Early diagnosis

Minimally invasive treatments

OLYMPUS

OLYMPUS Investor Day 2018
US Medical Business Presentation

Nacho Abia
Executive Officer
Regional Representative Officer, Americas
Olympus Corporation
September 5, 2018

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Agenda

- **Our Story in the Americas**
- **Our Groundwork for Success**
- **Our Medical Business**

Our Story in the Americas

Olympus Corporation of the Americas Overview

ESTABLISHED

1968

LAKE SUCCESS, NY



OVER 20
locations in North
and South America



CENTER VALLEY,
PENNSYLVANIA

5,300+
EMPLOYEES



Olympus Corporation of the Americas Financial Impact

OLYMPUS CORPORATION

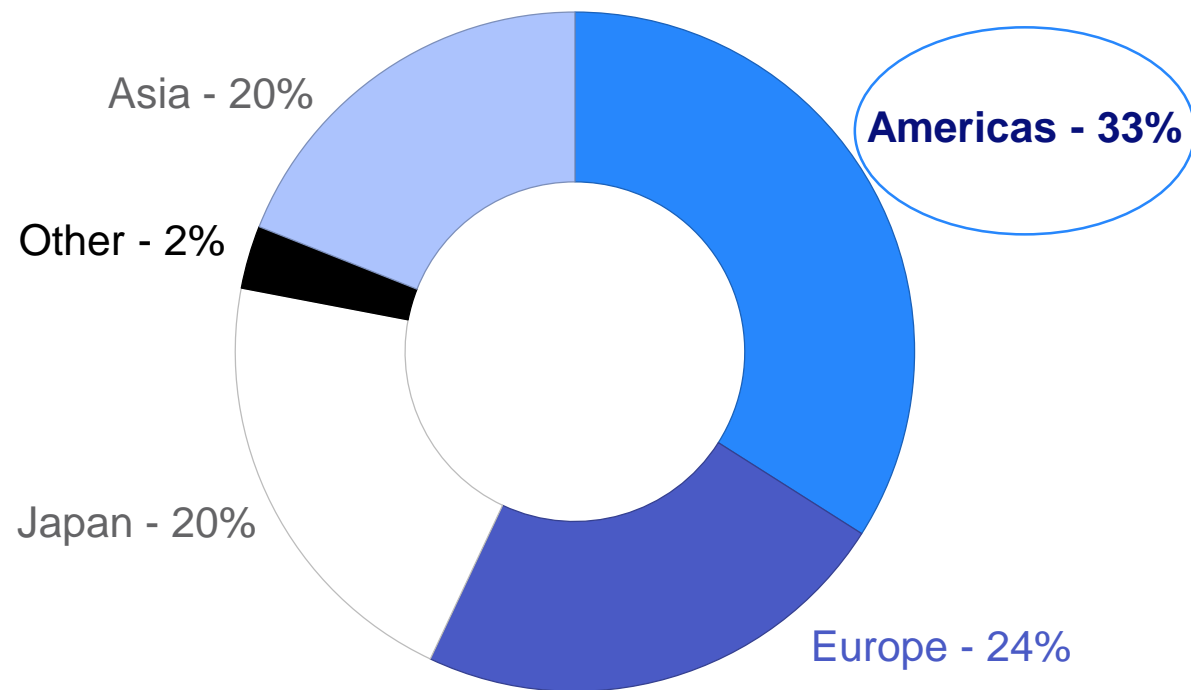
Approx. **\$7 billion**
NET SALES

OLYMPUS CORPORATION
OF THE AMERICAS

Approx. **\$2.6 billion**
NET SALES

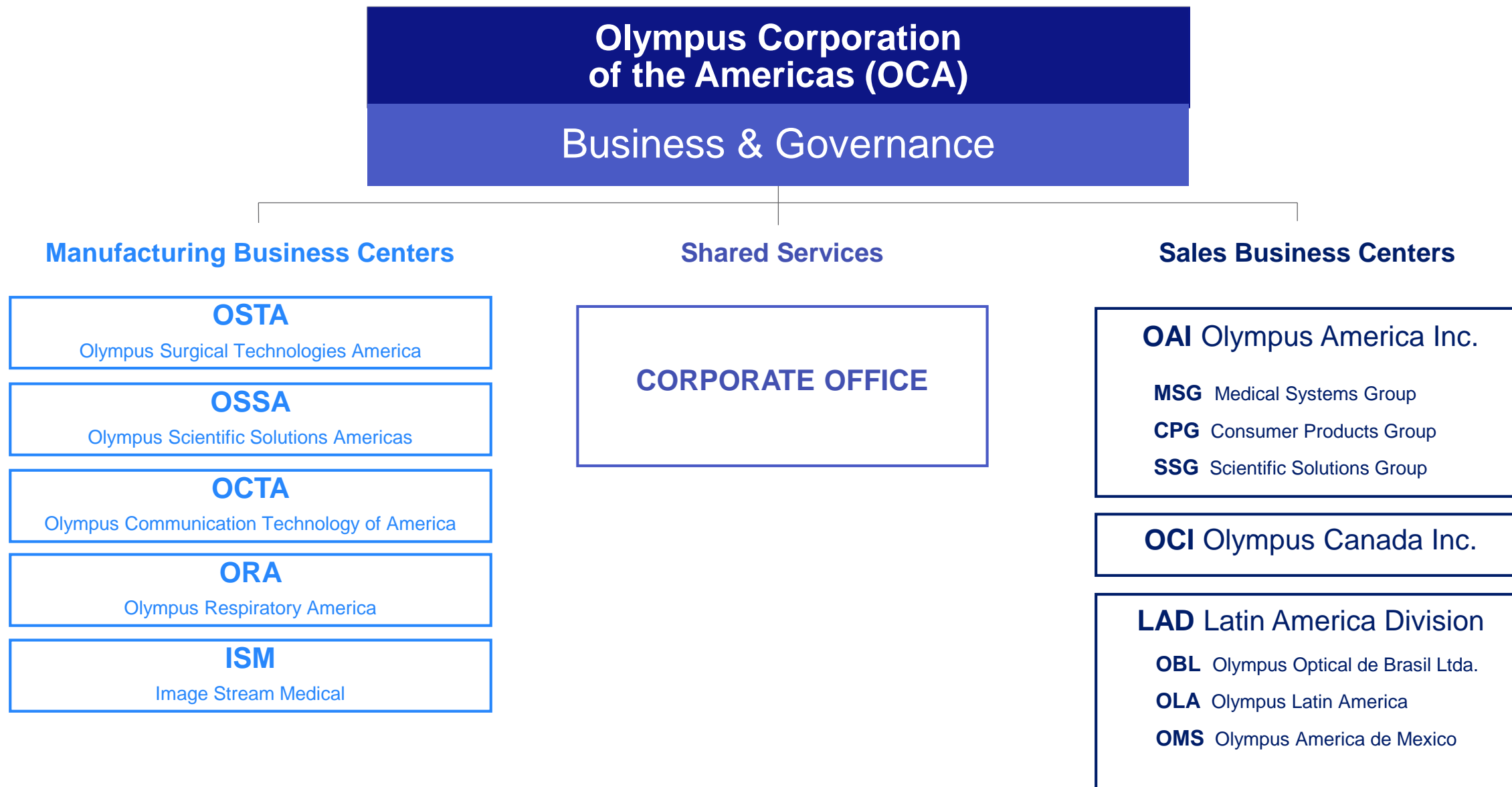
OLYMPUS

NET SALES CONTRIBUTION
BY REGION



33%* OCA'S CONTRIBUTION
TO TOTAL CORPORATION

Olympus Corporation of the Americas Structure



Our Groundwork for Success

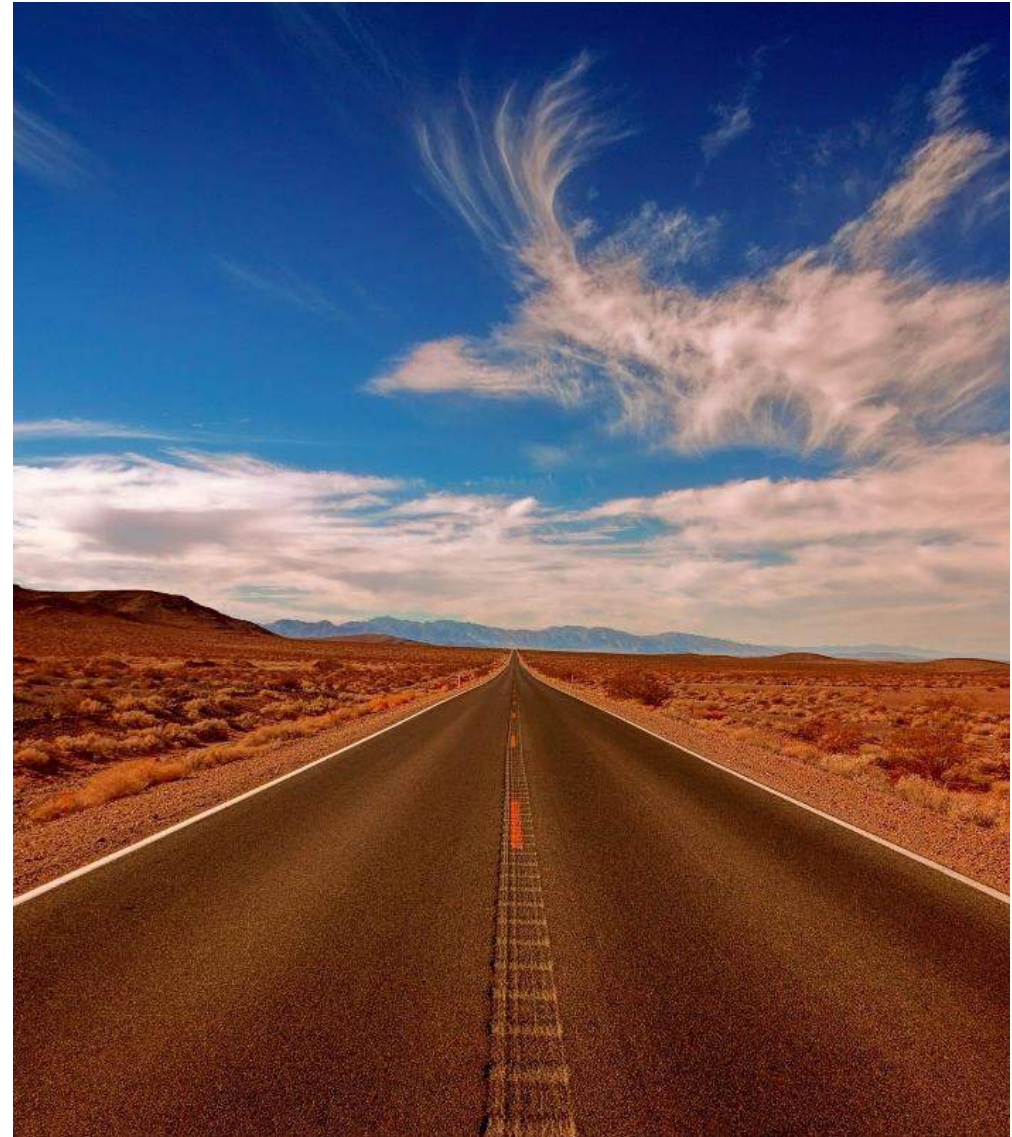
Investments

Efficiency

People

Integrity

Investments in Our Business



Investments Overview (April 2013 – March 2018)

OCA HAS BEEN ABLE TO
INVEST
IN LARGE SCALE
PROJECTS WHILE
MAINTAINING LEVEL
EXPENSES YOY

1 SAP
IMPLEMENTATION
Capital Investment +
Annual Cost (svc & maint)

2 NEW FACILITIES
Brooklyn Park
Quebec
Bartlett

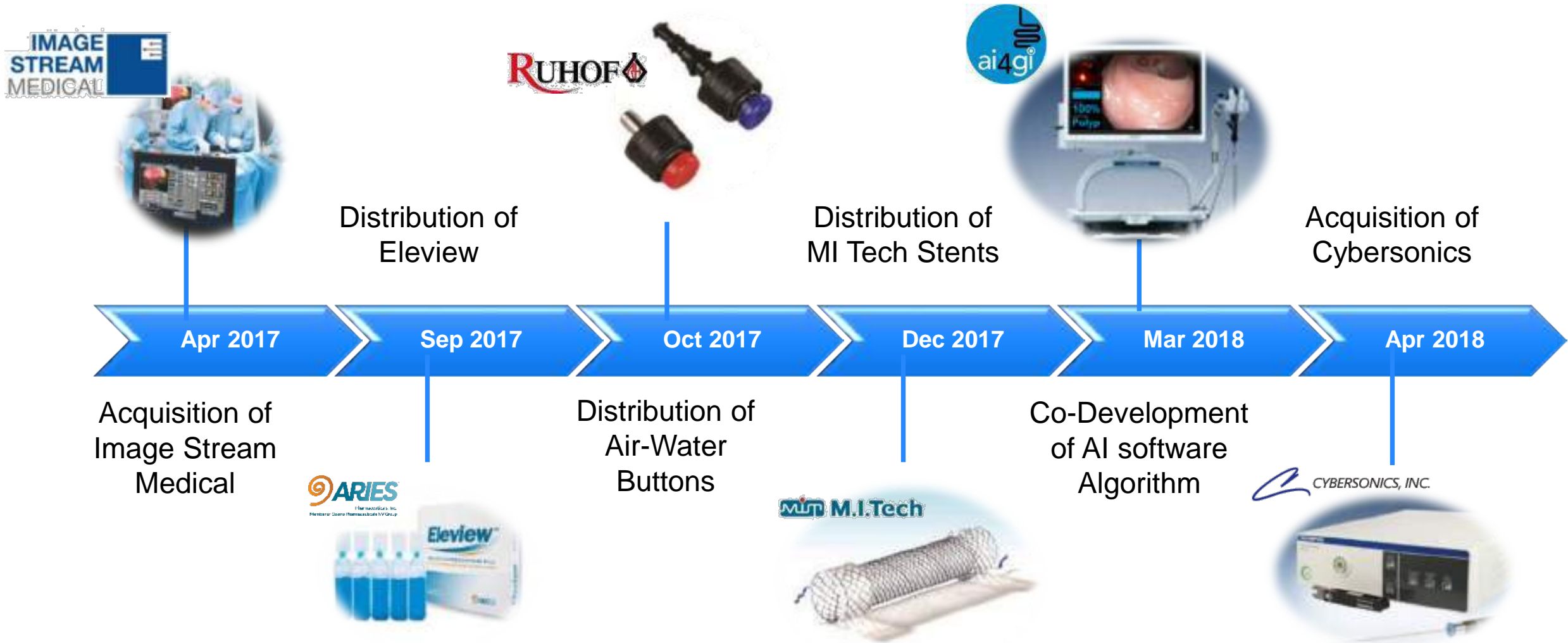
3 ADMINISTRATIVE
RELATED COSTS
Incurred over this period

4 OCA BRAND
ADVERTISING
Incurred over this period

5 ASSET
MANAGEMENT
Incurred over this period

6 SALES FORCE
Headcount and infrastructure

Investments in Business Development



Investments in Emerging Markets

Olympus Latin America Division (LAD)

Relaunched in February 2014

Encompasses:

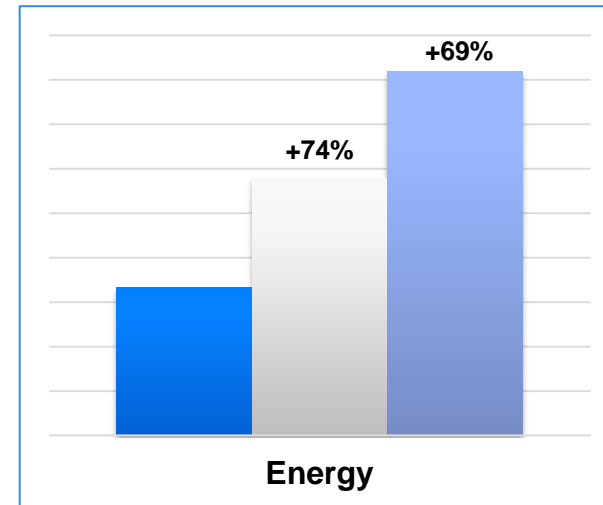
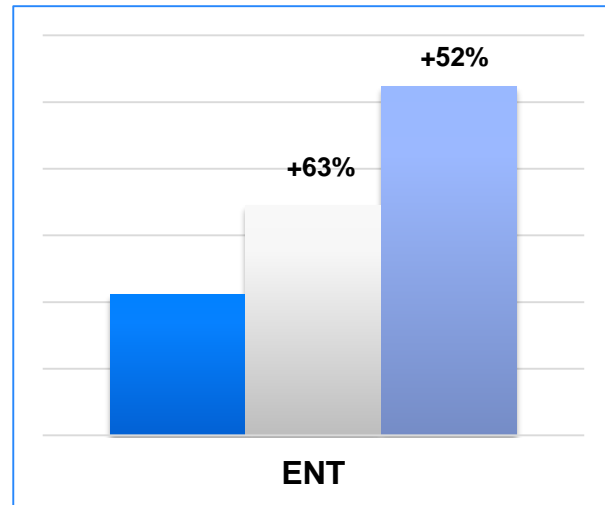
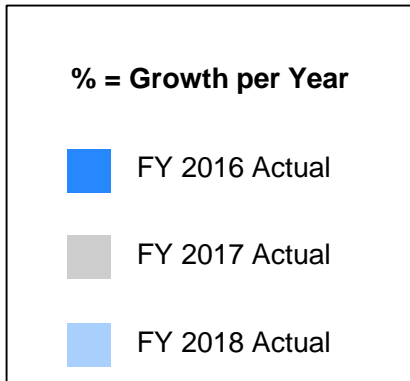
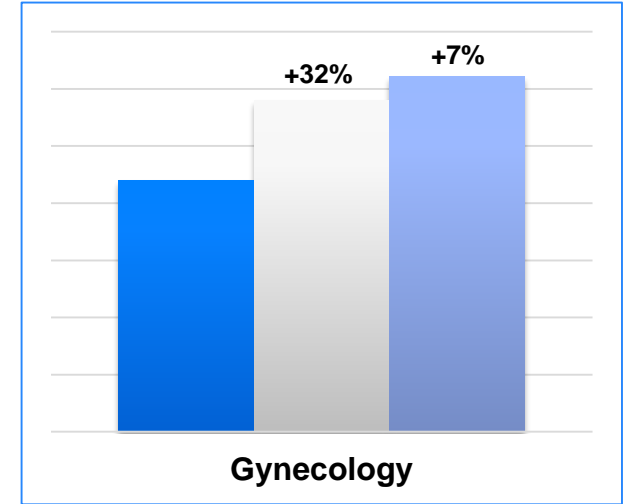
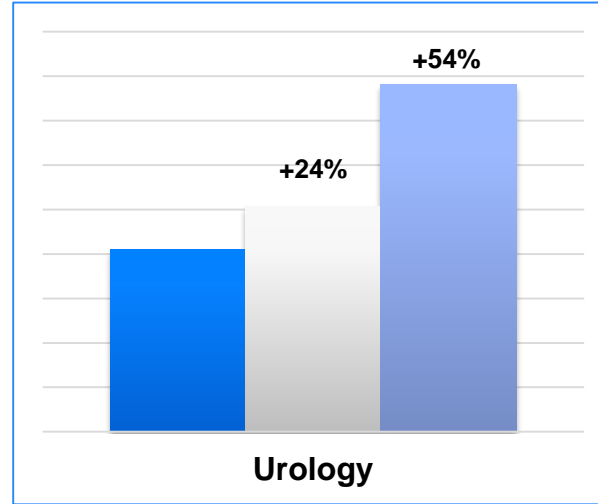
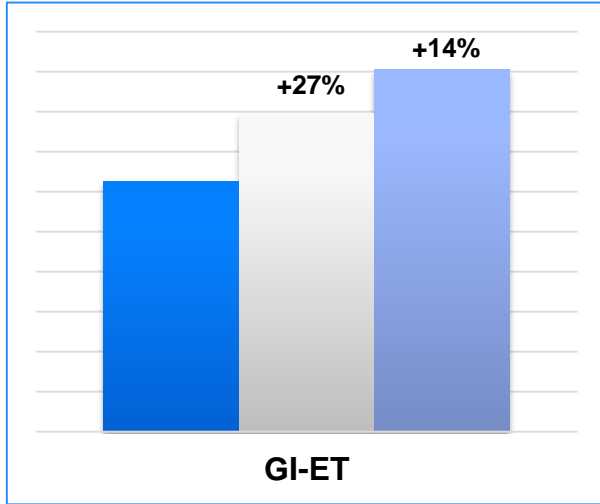
- Olympus Latin America (including Distributor relationships)
- Olympus Mexico
- Olympus Brazil

Achievements:

- Recruited and retained solid talent
- Strengthened corporate governance
- Achieved growth despite challenging environment

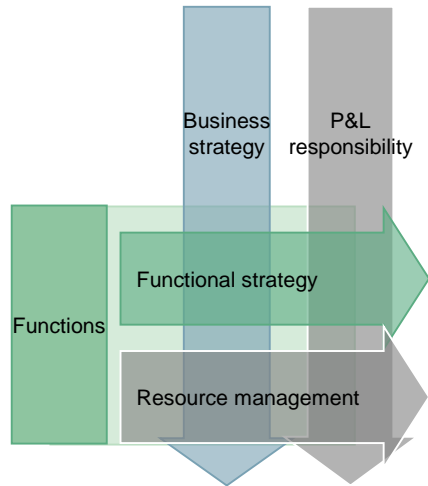


LAD Growth Potential



Efficiency





Globalization

**Organizational
Structure**

**Business
Process
Reengineering**

**E3
(Effective,
Efficient,
Excellent)**

One Olympus

People





True to LIFE



**Culture and
Employee
Experience**



Core Values



**Talent
Development**



Integrity

Doing Business the Right Way

Enhancement of Regulatory Programs

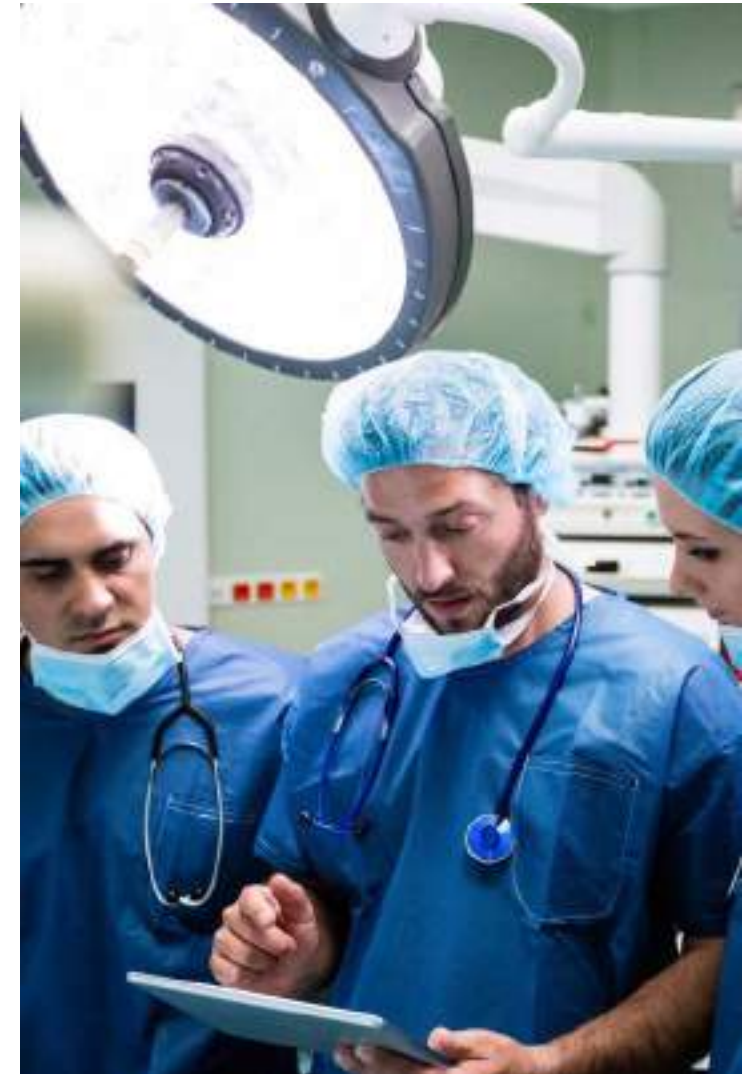
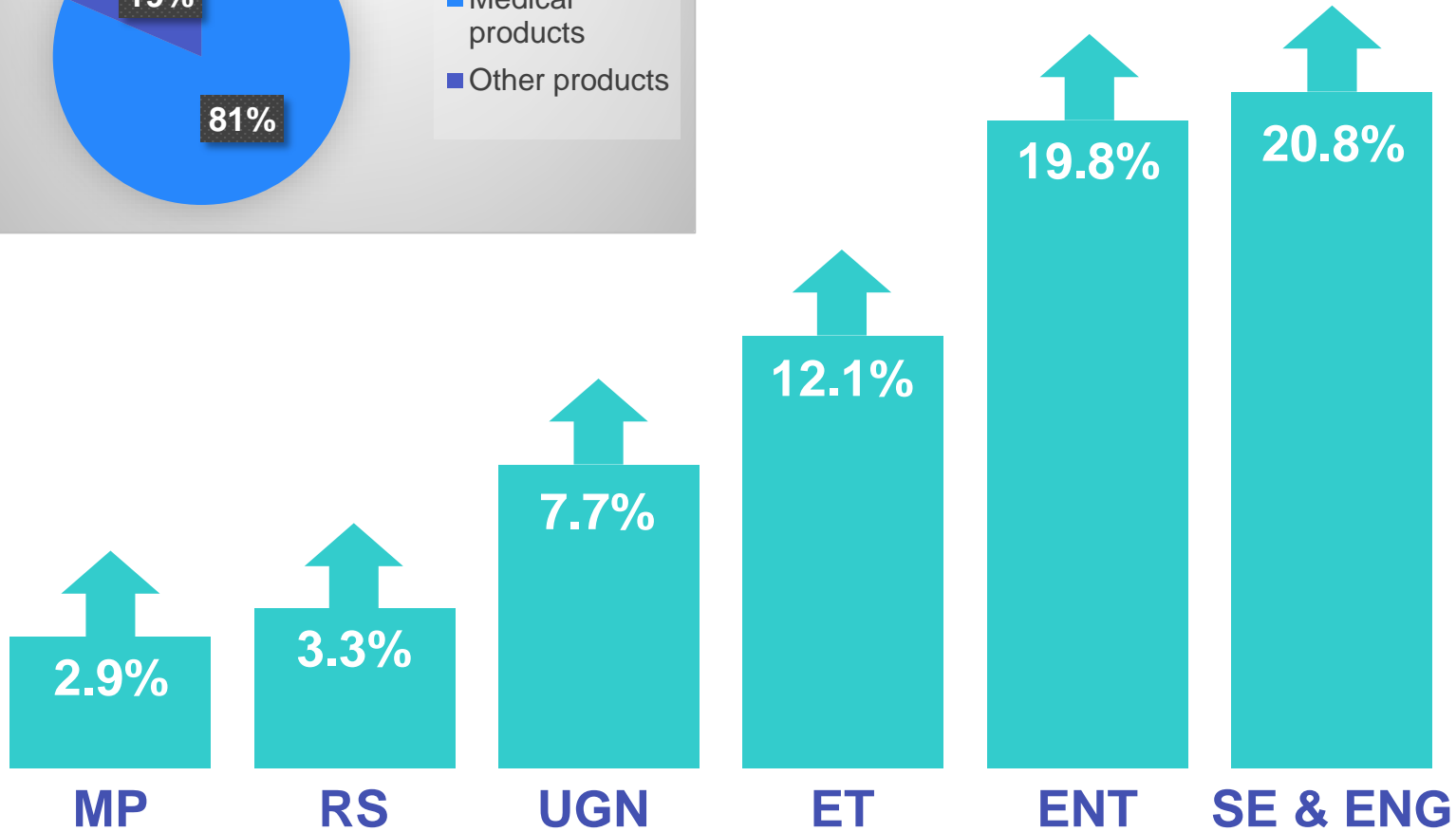
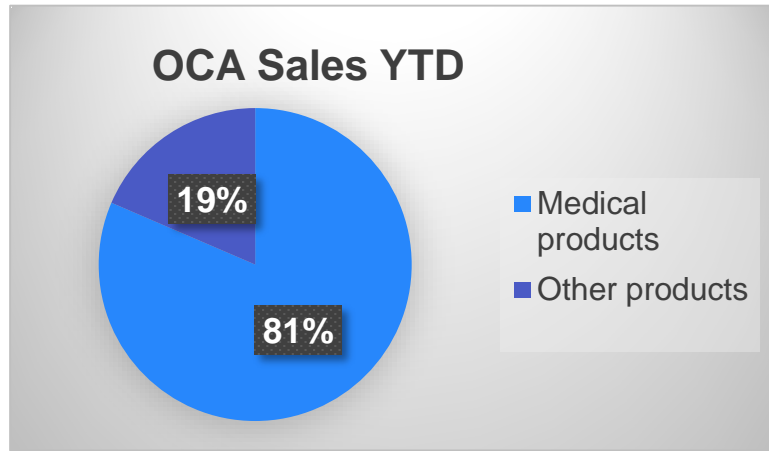
Stewardship through Monitoring

Strategic Focus on Infection Prevention

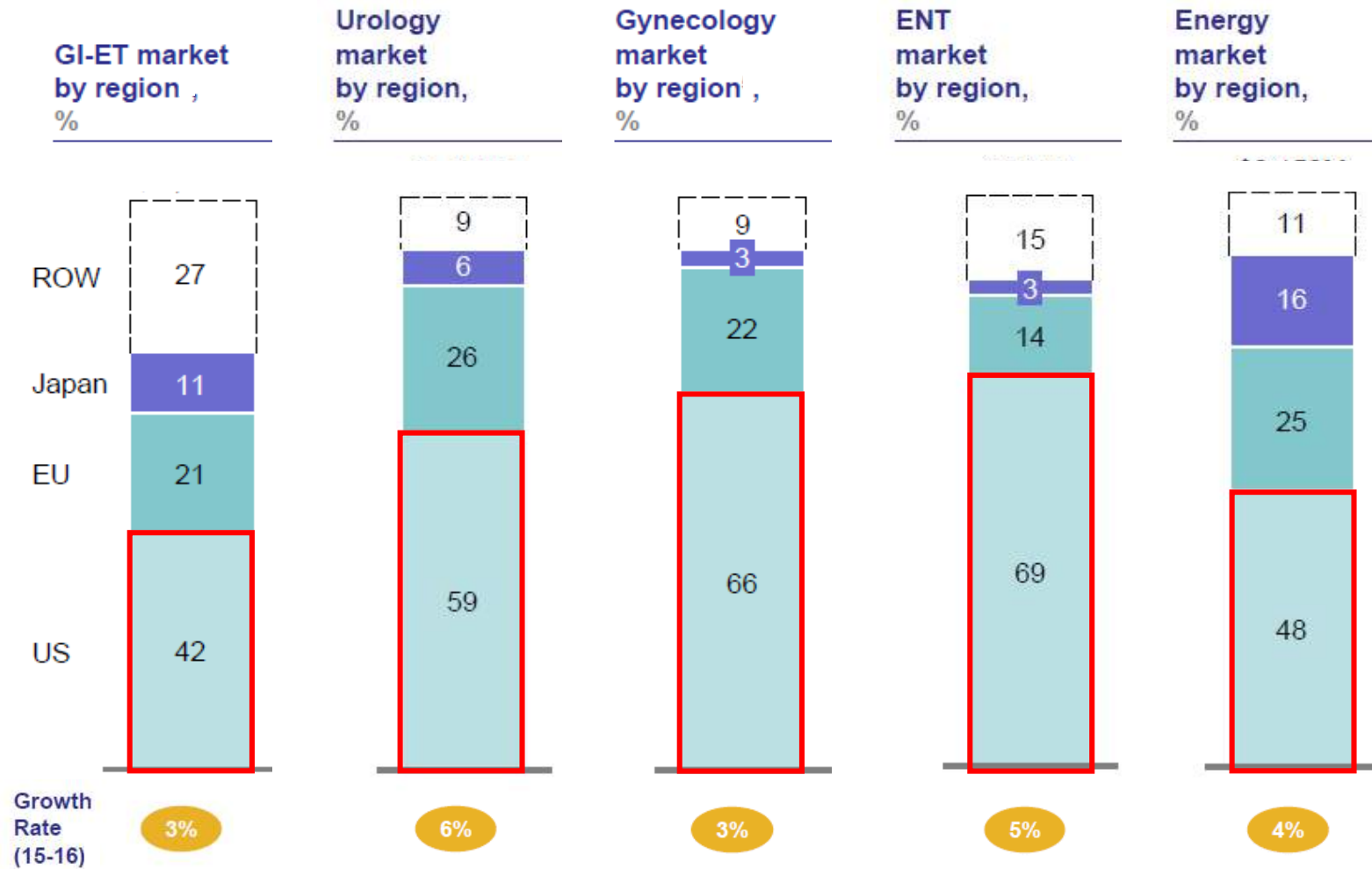


Our Medical Business

U.S. Medical Business Net Sales Growth (July 2017 – July 2018)



U.S. Healthcare Industry Trends



Source: McKinsey & Company

U.S. Healthcare Industry Trends Impacting Our Business

1. **Greater Focus on Hospital Networks**
2. **Shift to Value-based Medicine**
3. **Voice of the Customer**
4. **Patient, Provider, Payer**
5. **Triple Aim**

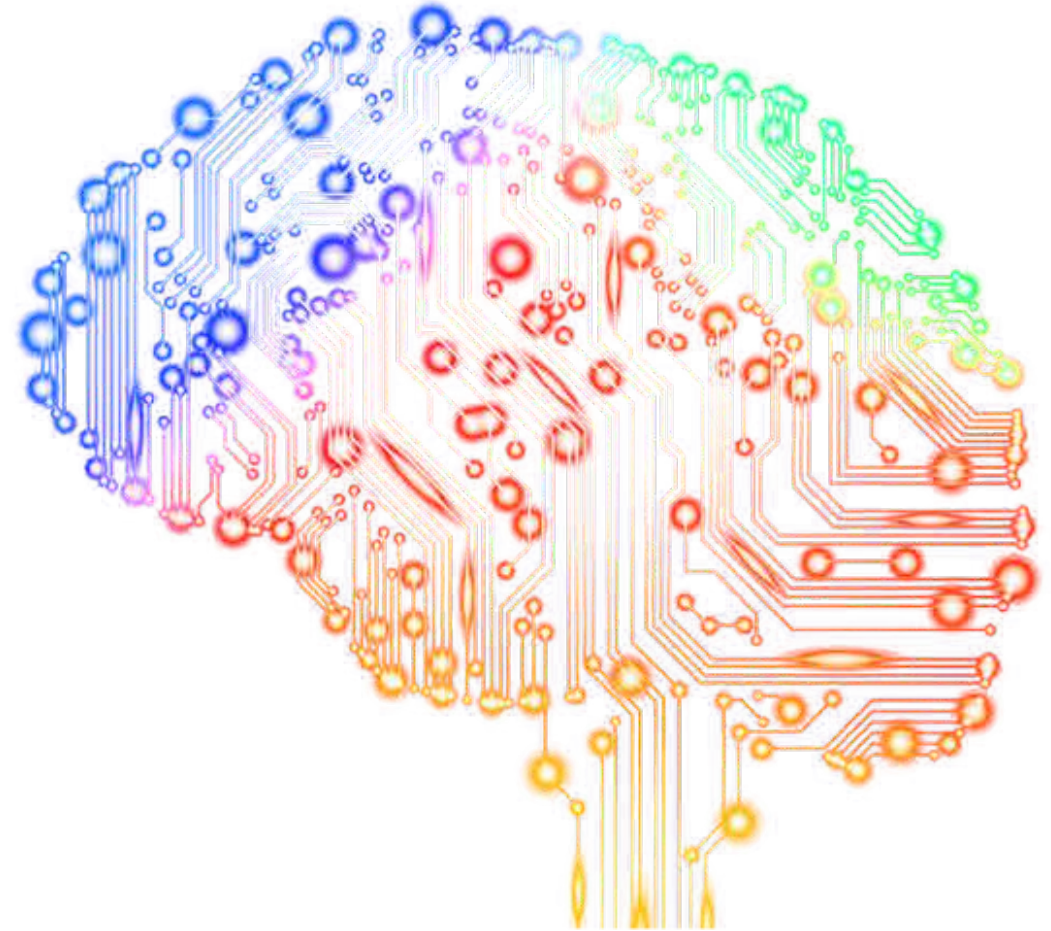


Complete Solution Partner



GI & Respiratory Business – Looking Forward

- 1. Therapeutic Intervention**
- 2. Infection Prevention**
- 3. Artificial Intelligence**



Surgical Business – Looking Forward

1. **Enterprise Integration and Image Management**
2. **Office-based Technology and Procedures**
3. **Big Screen Surgery**



In Summary

1. Olympus has been investing in the Americas over the last several years to secure future success while creating an efficient and talented operation.
2. Our extremely solid position in our traditional endoscopy business together with ambitious portfolio enhancement plans will be leveraged to grow in therapeutic disciplines and to realize our potential as a global medical technology provider.
3. We are in a perfect position to continue fulfilling our promise to patients of “Safer, Healthier and More Fulfilling Lives” while helping healthcare providers to increase their efficiency through our products and technology, and by doing this, increase Olympus Enterprise Value.



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OLYMPUS Investor Day 2018
Enhancement of Infection Prevention Activities

Yoshio Tashiro
Executive Officer, Medical Reprocessing Strategy
Olympus Corporation
September 5, 2018

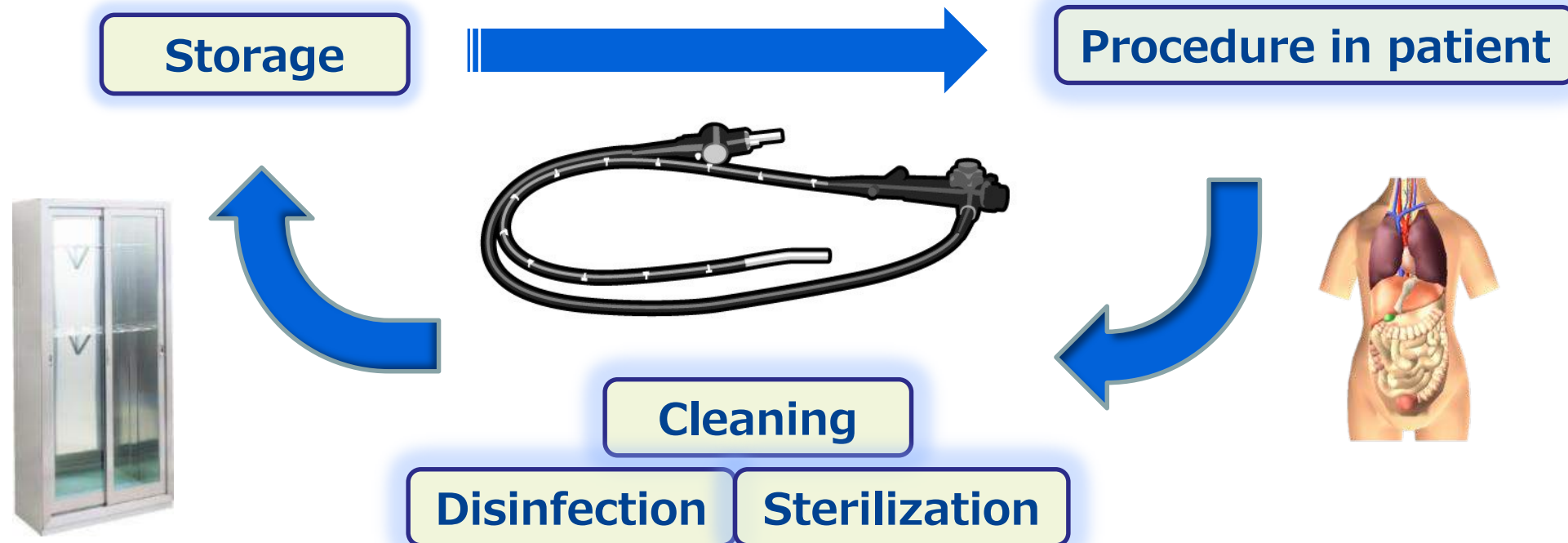
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Medical Device “Reprocessing”

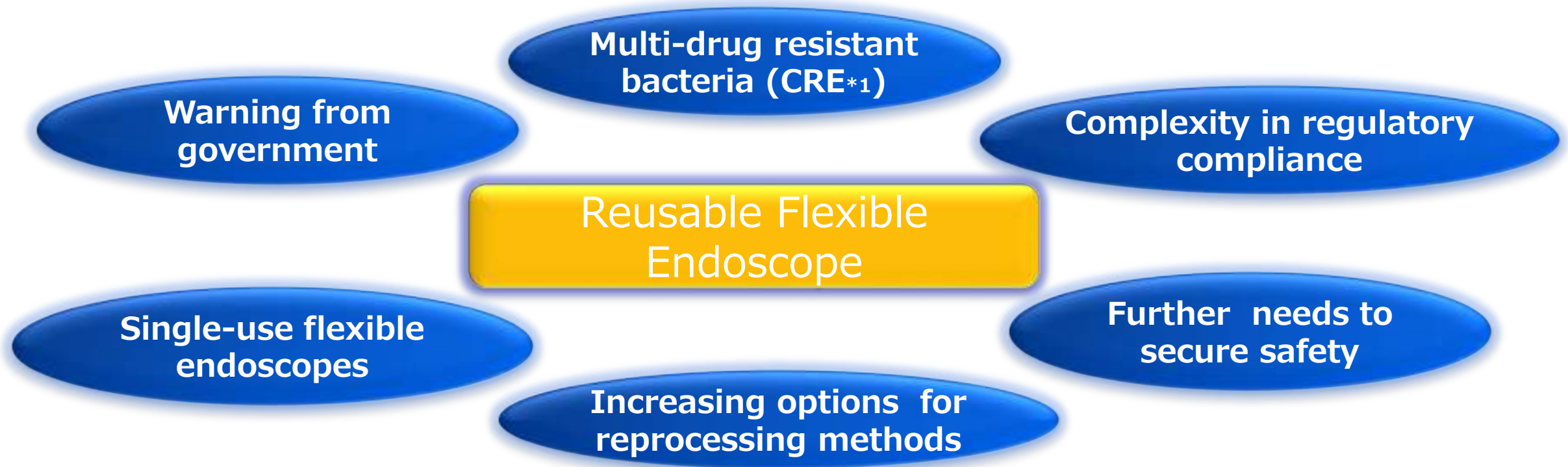
Reprocessing

Complete processes for cleaning, disinfection and/or sterilization in order to utilize a medical device again



“Reprocessing”

Environmental Changes at Endoscope Industries



Will show our intensive activities to adjust environmental changes

*1 CRE, which stands for carbapenem-resistant Enterobacteriaceae, are a family of germs that are difficult to treat because they have high levels of resistance to antibiotics. Healthy people usually do not get CRE infections – they usually happen to patients in hospitals, nursing homes, and other healthcare settings. Patients whose care requires devices like ventilators (breathing machines), urinary (bladder) catheters, or intravenous (vein) catheters, and patients who are taking long courses of certain antibiotics are most at risk for CRE infections. (CDC, <https://www.cdc.gov/hai/organisms/cre/index.html>)

Waning from Regulatory Authorities regarding

Infection risks with Duodenoscope

- ✓ The FDA has issued safety communications about the risk of multidrug-resistant bacteria transmission via endoscopes.
- ✓ In Japan, the Ministry of Health, Labor and Welfare has issued a notice based on the cases in the USA.

USA

▸ FDA, February 19, 2015

Design of Endoscopic Retrograde Cholangiopancreatography (ERCP) Duodenoscopes May Impede Effective Cleaning : FDA safety communication]

JAPAN

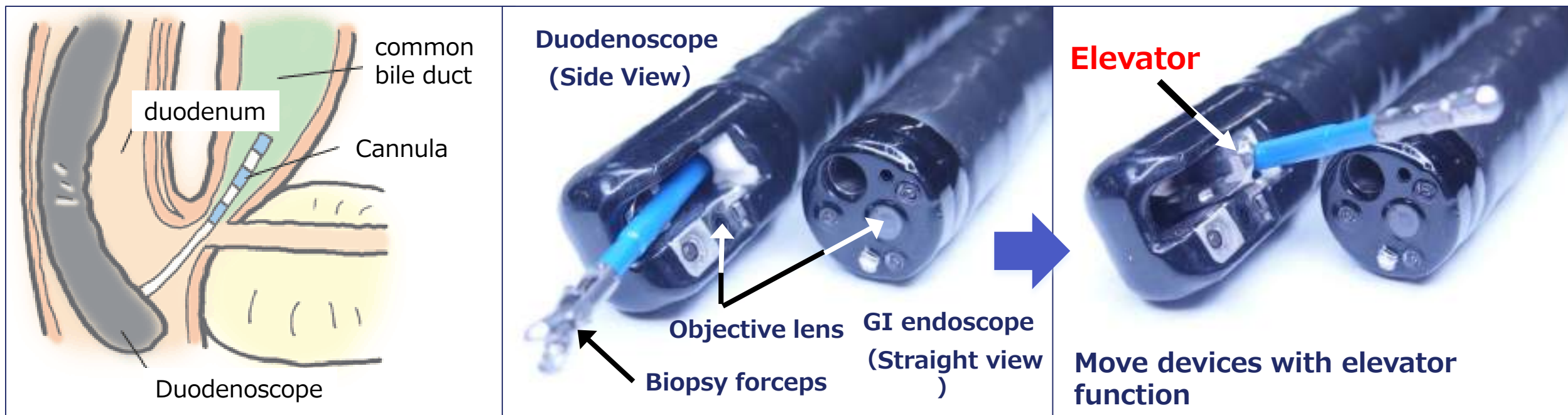
▸ MHLW, March 6, 2015

Potential outbreak of multi-drug resistant
Hospitals need to comply guidelines from the medical societies and instruction manuals

Duodenoscope

Pay attention on reprocessing process for the endoscope with elevator function

- Duodenoscope was developed for conducting ERCP procedure efficiently.
- Duodenoscope has a side viewing which is different from regular GI endoscope
- Elevator function lift elevator with endotherapy devices such as biopsy forceps



Our Approaches to Improve Safety

- 1. Provide *comprehensive solution* covering all reprocessing processes**
 - ✓ Develop/procure more effective/efficient endoscopy and reprocessing products
 - ✓ Develop/improve reprocessing methods to make a process easier to reduce mistakes
- 2. Enhancement of *training program* for the HCPs and *guide tools***
 - ✓ Reinforce external/internal thorough training for cleaning and disinfection technicians
 - ✓ Strict adherence to cleaning procedures and methods as dictated by tablets
 - ✓ Revise Reprocessing Manual for better understanding
- 3. Establish *testing capabilities* to validate reprocessing efficacy, efficiency and workability**
 - ✓ Reprocessing efficacy with a validation test using organic microorganisms or artificial soils
 - ✓ Compatibility/durability of the medical devices with chemicals or reprocessing machines
- 4. Enhance *proactive communication* with appropriate stakeholders**
 - ✓ Expand the audience for relevant new product and solution launches
 - ✓ Facilitate and participate in stakeholder discussions
 - ✓ Set a new organization taking a leadership to handle global reprocessing issues

1. Provide Comprehensive Solutions

- ✓ Secure safety for all patients or HCPs who might have a potential infection risks
- ✓ Plan to deliver multiple solutions that addressing issues comprehensively at all reprocessing processes



Develop Easier Handling Endoscopes/Cleaning Adaptors



Detachable Disposable Distal Cap



New Cleaning Adaptor

- Provide devices, endoscope or cleaning adaptor, with easier handling/cleaning structures



Cleaning /Disinfection

New additional functions on cleaning /disinfection machine

- Provide more efficient automated endoscope preprocessor



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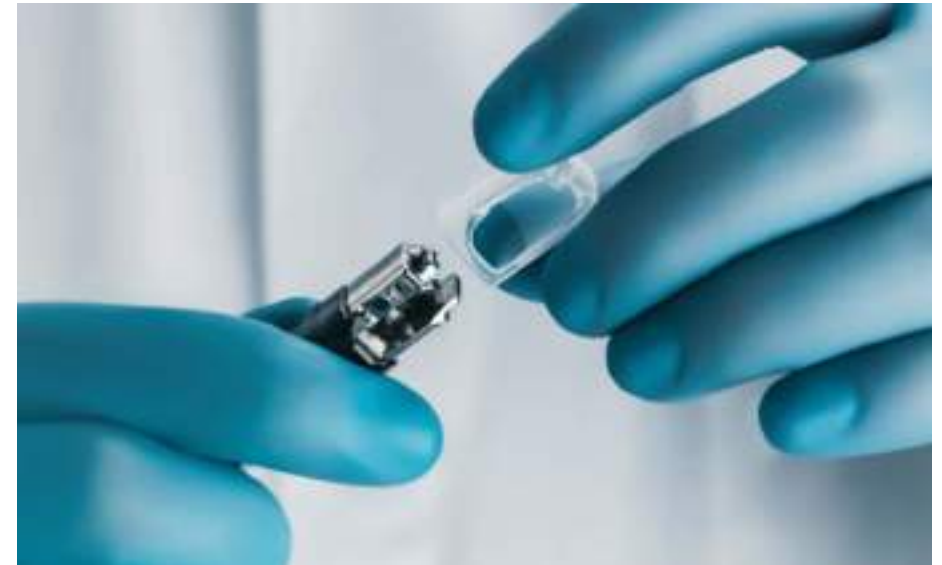
Product Development for New Duodenoscope

Features

- New duodenoscope is a side-viewing scope characterized by high-resolution imaging and narrow band imaging (NBI) capabilities.
- Post-procedure, reprocessing is performed by detaching the disposable distal cap and cleaning and disinfecting the tip of the scope.
- In addition, we have developed a new adaptor that can be attached to the tip of the duodenoscope to inject a cleaning solution, meant to improve cleaning efficiency.



Tear open the cap along the cut



Detach the cap completely from the distal end of the endoscope

Items for Reprocessing Efficacy Evaluation and Drying/Storage

Cleaning Efficacy Evaluation Device

- Provide a quick evaluation tool for cleaning efficacy



Sampling & Culturing Kit

- Provide supporting tools to evaluate reprocessing efficacy



Storage Cabinet with Drying Function

- Provide an item to keep the endoscope clean and dry until next procedure



Evaluation
/Drying-Storage

Reprocessing Process Management (Software base system)



Process management

Reprocessing Documentation, Workflow and Asset Management System
With Unifia connecting and collecting data from reprocessing and storage devices has never been easier. Unifia's wireless scanner technology puts the ability to capture data from virtually all automated endoscope reprocessors, storage cabinets, leak testers and bio burden test kits in the palm of your hand. OER-Pro users can gain greater insight into their reprocessing times, scope serial numbers and HLD temperatures.

3. Supporting Tools and Training Program Enhancement

Enhanced training programs



- Develop and continue reprocessing training program for HCPs to provide an opportunity to be trained.

Tablet for guiding processes



- Provide guiding tools to make reprocessing process more visible/ intuitive and improve efficiency
- Revise Reprocessing Manual for better understanding

3. Enhancement of Reprocessing Tests Capabilities

4.0 billion Japanese Yen was invested to enhance function

- Compatibility tests with detergent, disinfectant, reprocessing/sterilization machines
- Validation tests for reprocessing, cleaning, disinfection or sterilization, efficacy



Working on establishment of the testing capability to meet various regulatory requirements

4. Enhance Communication with Stakeholders

- **Patients/HCPs safety first**

Prioritize safety for patients or HCPs by reducing potential infection risks.

- **Collaborations with stakeholders**

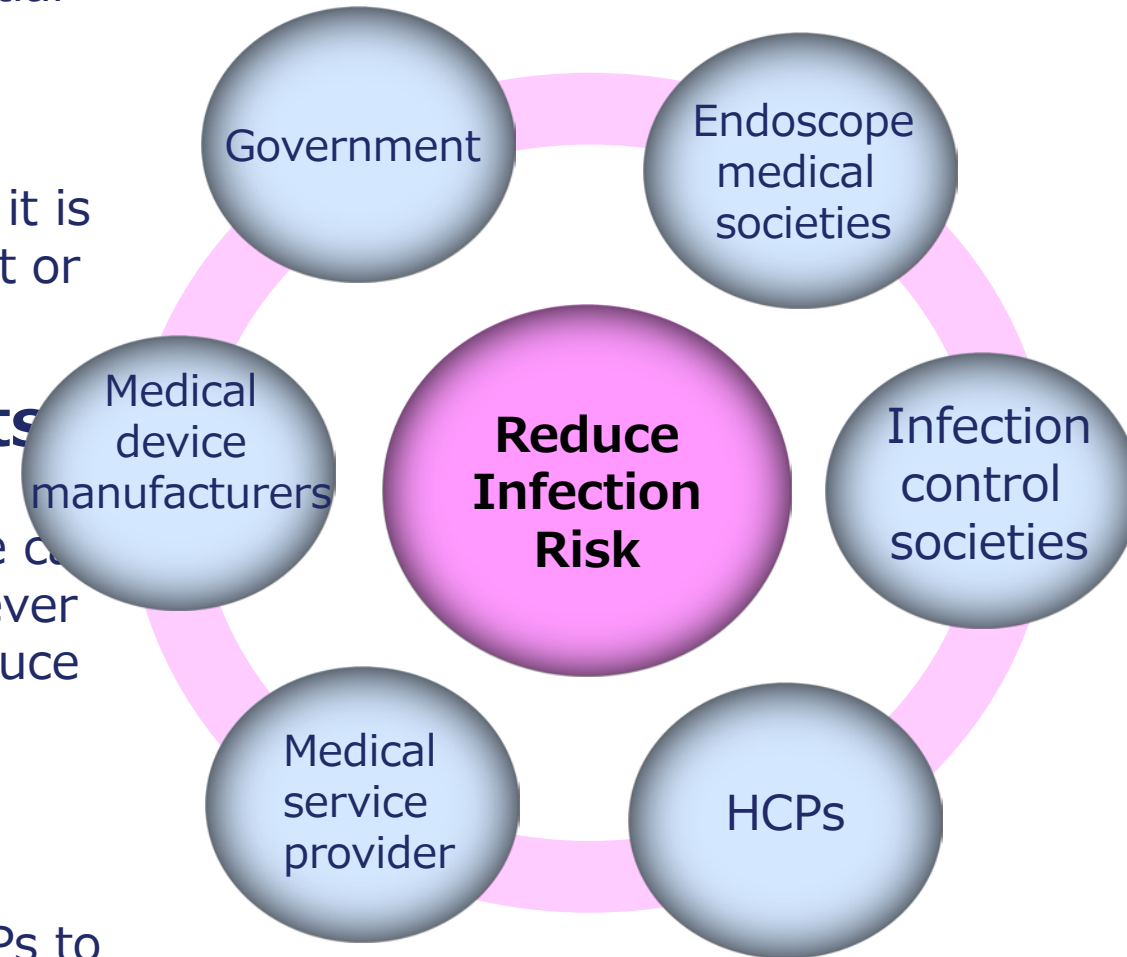
With the best efforts by Medical device manufacturers, it is important to collaborate closely with HCPs, government or medical societies.

- **Balancing between risks and benefits**

Risks of using medical devices can't be eliminated completely. HCPs may decide whether a medical device can be used by weighing potential risks and benefits. However manufacturers need to continue their best effort to reduce or mitigate risks.

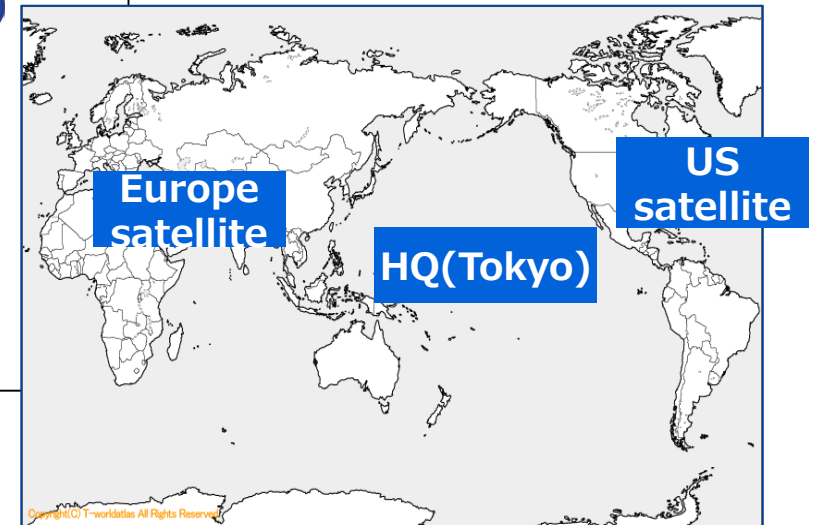
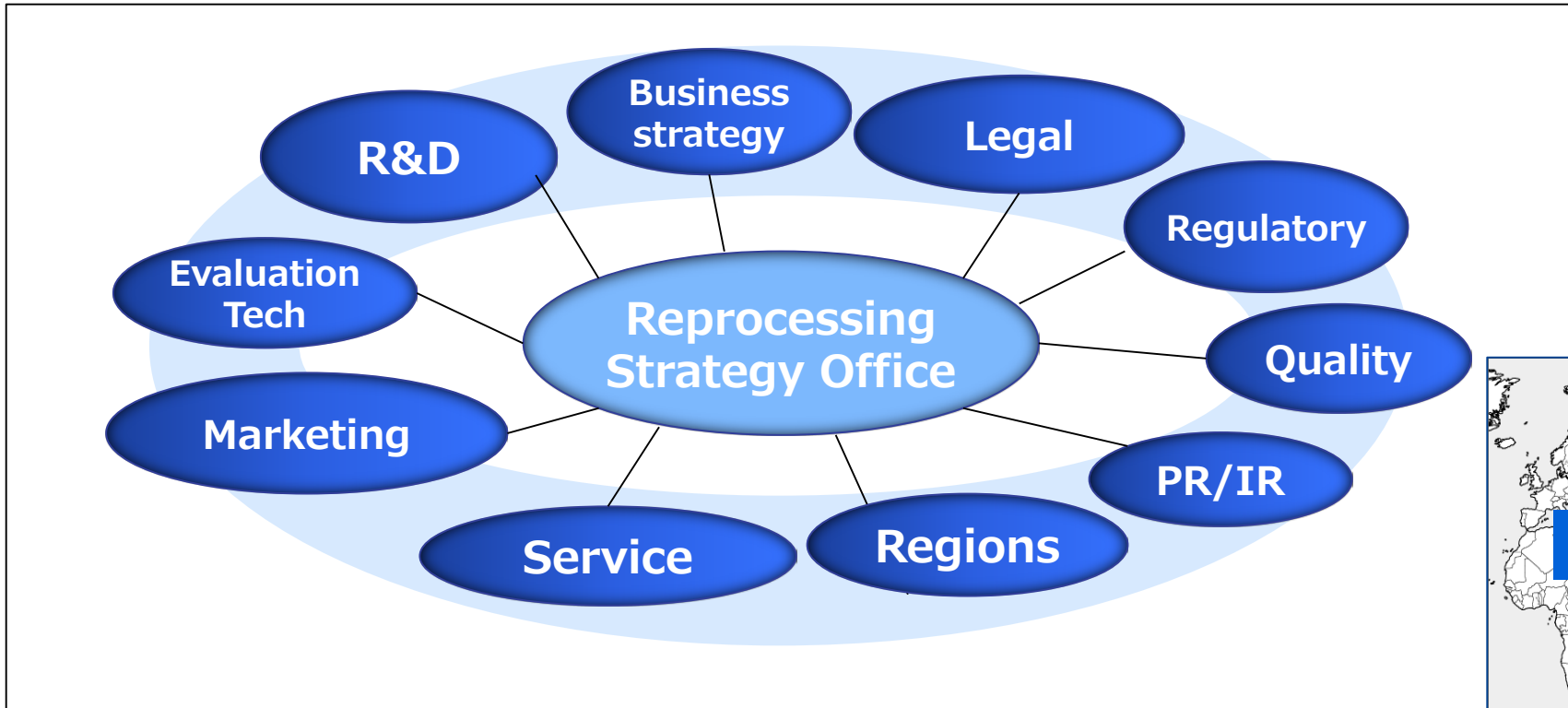
- **Risk management**

Evaluate potential risks by hazard analysis method and implement risk mitigation actions. Collaborate with HCPs to address potential risks and take actions for risk mitigation.



Enhancement of Organization

Enhancement of internal collaborative structure



**Executive Officer, Medical Reprocessing Strategy:
Yoshio Tashiro**

**Enhancement of
global team structure**

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Summary

- When developing, manufacturing or distributing medical devices, our first priority must be safety for patients and HCPs.
- The medical use of endoscopy is well established and continues to expand to better diagnose and treat patients. Drug-resistant bacteria are an emerging threat to patients. We are analyzing all reprocessing processes to address this issue.
- Need to review all processes including storage, transportation and others beyond “cleaning” or “disinfection” until a device is delivered to the next patient. All potential risk factors need to be reviewed and comprehensive solution must be considered.
- In order to secure safety of medical device, medical device manufactures will make a best effort to provide HCPs with safe and dependable devices. And then, they will collaborate with stakeholders like HCPs, government or medical societies together in order to enhance infection control programs.

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OLYMPUS Investor Day 2018
Financial Strategy

Yasuo Takeuchi
Vice President & CFO
Olympus Corporation
September 5, 2018

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Review of Financial Strategy – Progress at the end of March 2018 (Outlook)

Key Points	Actions	Progress
<ul style="list-style-type: none"> ■ <u>Increase profitability (profit attributable to owners of parent)</u> 	Strengthen financial position	<ul style="list-style-type: none"> ✓ Equity ratio target of 50% forecast to be achieved ahead of schedule due to reduction of interest-bearing debt
	Improve credit ratings	<ul style="list-style-type: none"> ✓ Issuer rating raised to single A, an increase of two levels during 16CSP (R&I)
	Diversify funding sources	<ul style="list-style-type: none"> ✓ Fund procurement costs down (issuance of publicly available corporate bonds)
<ul style="list-style-type: none"> ■ <u>Improve asset efficiency</u> 	Reduce fixed assets	<ul style="list-style-type: none"> ✓ Appropriate control of cross-holdings ✓ Downsizing of balance sheet (revenue of U.S. lease receivables and reorganization and sell off of fixed assets globally)
<ul style="list-style-type: none"> ■ <u>Control financial leverage</u> 	Improve shareholder returns	<ul style="list-style-type: none"> ✓ Increase cash dividends gradually, targeting total return ratio of 30%

Financial strategy has progressed in line with 16CSP

Management Goals

		<u>FY2018 (Results)</u>	<u>16CSP Management Goals</u>
ROE	Capital Efficiency	14%	15%
Operating Margin	Profitability	10.3%	15%
Equity Ratio	Financial Soundness	45%	50%
EBITDA	Business Growth	+ 7% (¥133.9 billion)	Double-digit growth

■ Continue efforts toward achieving ROE 15%

- ✓ Equity ratio target is expected to achieve by selling off cross-holdings and reducing interest-bearing debt
- ✓ Operating margin is midway, but we continue to aim achieving target and secure 30% of total return ratio as planned
- ✓ Recognize EBITDA is an issue. Support investment for acceleration of growth from financial aspect.

(financial base·diversified funding etc)

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OLYMPUS Investor Day 2018 Business Reforms and Innovation Technologies

Haruo Ogawa
Chief Technology Officer and
Head of R&D Group
Olympus Corporation
September 5, 2018

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Agenda

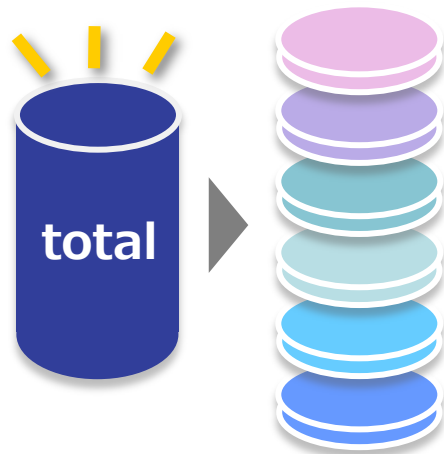
- Progress of Business Process Reengineering (BPR)
- Innovation activities to react our risks
- OLYMPUS X (Cross) Innovation

1. Progress of BPR : R&D Productivity Improvement

Choosing development themes based on ROI etc. / Proper resource allocation

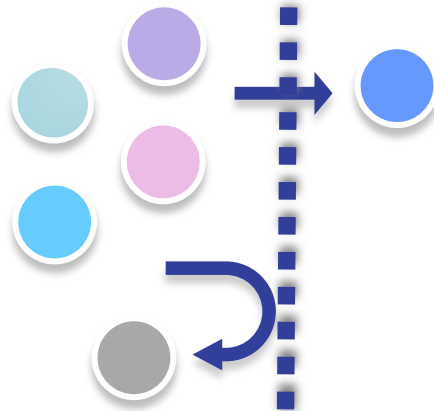
1

Determine R&D budgets in top-down manner



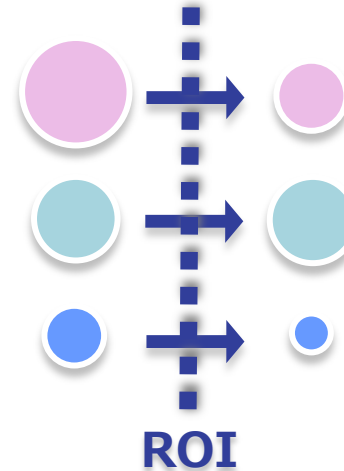
2

Stringently manage conditions for selecting R&D themes based on stage-gate process



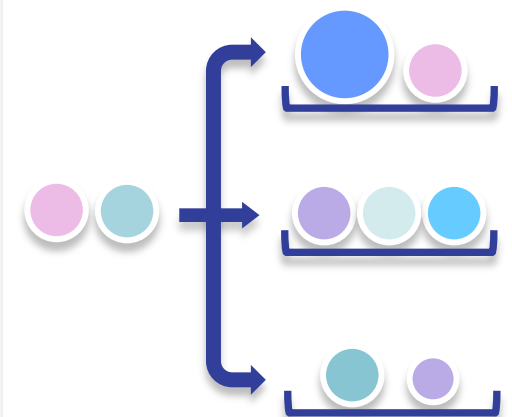
3

Optimize R&D expenditures for each theme



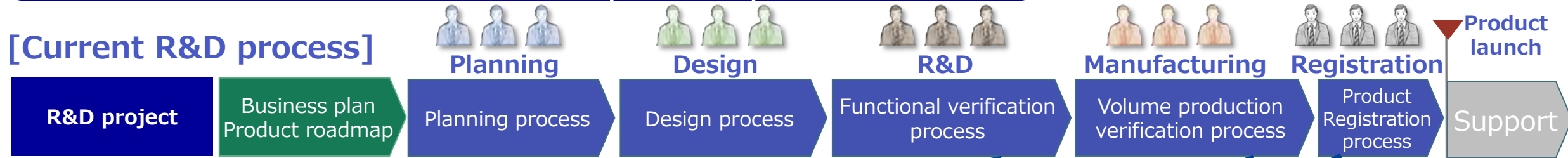
4

Evaluate priority of each theme

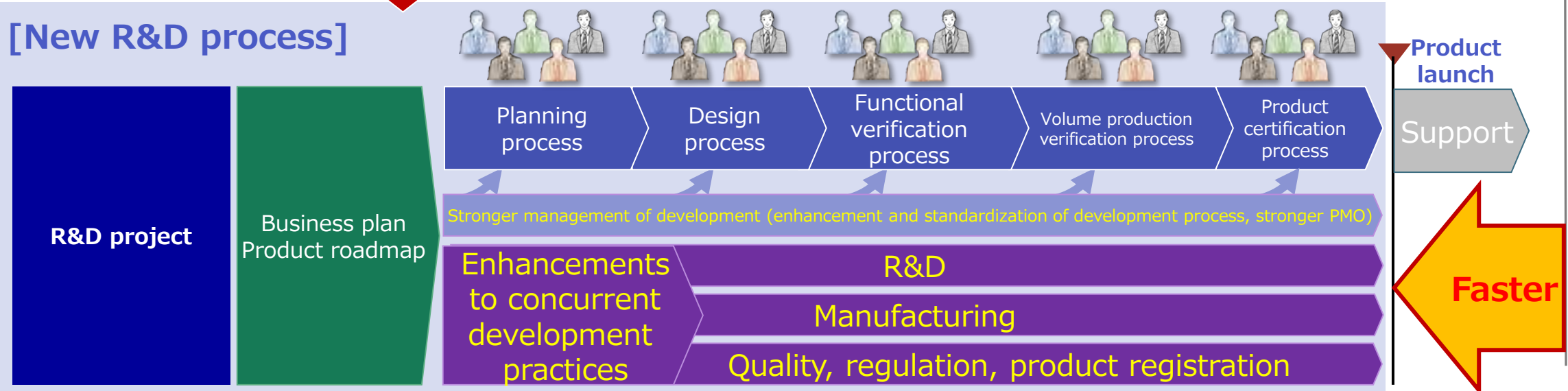


1. Progress of BPR : R&D Productivity Improvement

Faster development through revision and enhancement of development process



Development rework occurs due to inadequate process and resource management



Stronger management of development (enhancement and standardization of development process, stronger PMO)

1. Progress of BPR: Surgical Energy Devices Examples of New Product Development

Two practices from the imaging business to be used in the development of disposable therapy devices

	Reusable products	Disposable products
Q: Quality	Emphasis on quality to withstand repeated use Emphasis on durability and suitability for reprocessing	Ensure quality appropriate to single-use product Ensure safe disposal as medical waste
C: Cost, manufacturing practice	Emphasis on added value and skills (craftsmanship)	Emphasis on cost, use of automatic assembly for volume production
D: Delivery	Emphasis on quality, establishment of product platforms for medium and long term	Short delivery times, time-critical product development

1. Progress of BPR: Surgical Energy Devices

– Examples of New Product Development

Two practices from the imaging business to be used in the development of disposable therapy devices

This is how we do it here
(Imaging business developer)



I'll look into it straight away
(Therapy device developer)

Target 1: Reduce time and cost to produce final prototype

(1) Initiatives for improving design efficiency

- [1] Improve design infrastructure
- [2] Adopt design quality delivery (DQD)
- [3] Improve how drawings are annotated
- [4] Greater transparency in drawing schedule management

● **30% shorter lead time**

Target 2: Eliminate rework by reviewing product standards of final prototype

(2) Initiatives for eliminating rework in review

- [5] Adopt interim characteristics charts
- [6] Start using problem reports

● **40% reduction in prototype cost**

2. Innovation activities to react our risks

Establishing a Technology Innovation Office
under the direct jurisdiction of the CTO
(The organization consists mainly of several “Fellows”
under the new HR system.)

Extraction of
innovation technologies

Extraction of
challenges and solutions

Promotion of
open innovations and
academic-industrial alliance

Risk analysis

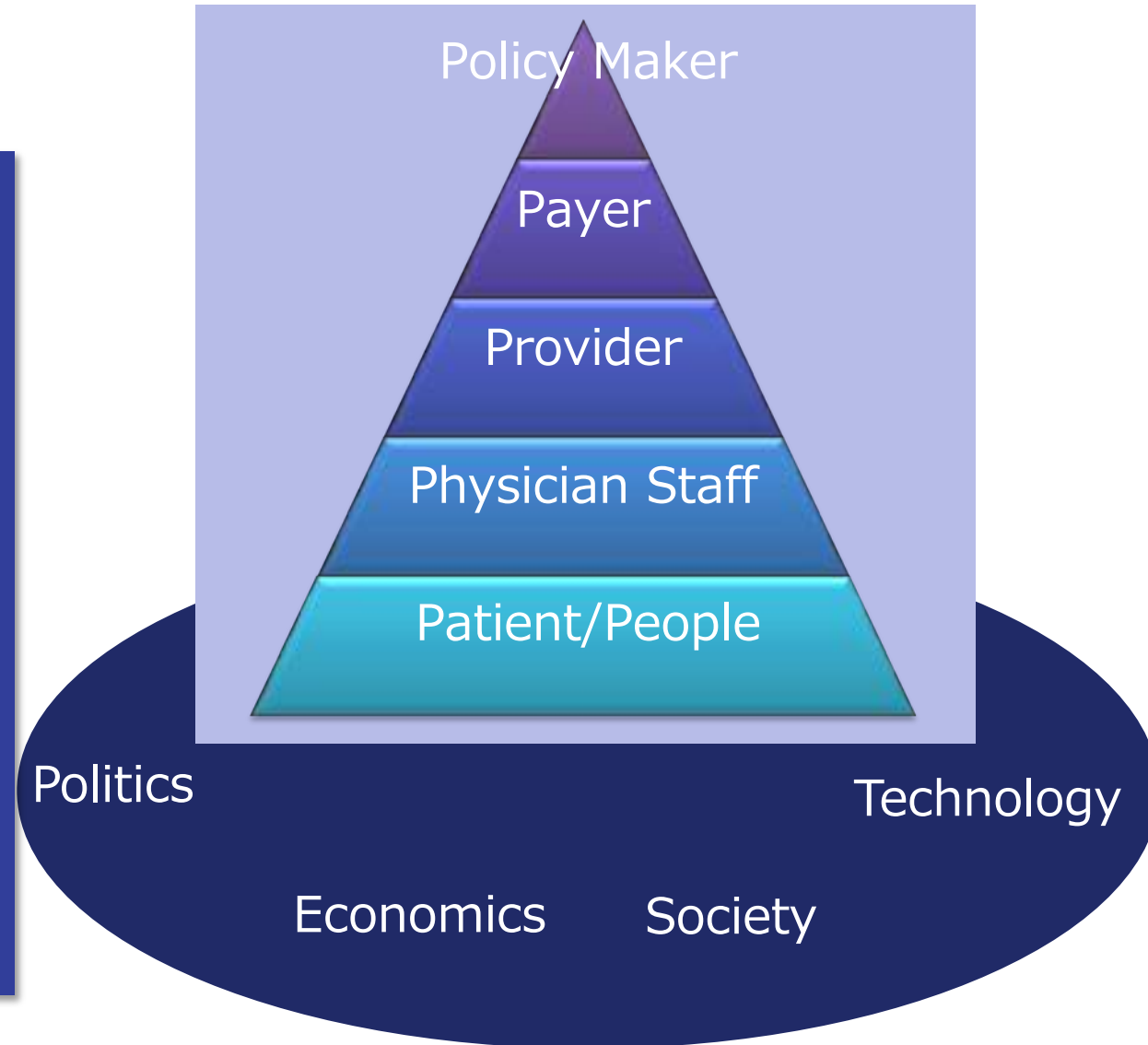
Provision of opinions
to the top management



2. Innovation activities to react our risks

Concrete Efforts

- 1) environmental analyses :
PEST / 5P analyze
- 2) Extract innovation tech.
- 3) Risk analysis
- 4) Extract our Challenges /prioritize
- 5) Establish Strategic Option
- 6) Establish Action Items
- 7) CXO level decision
- 8) Call for alliance or open innovation





OLYMPUS X^{CROSS} INNOVATION

ANSERS BEYOND SIGHT

SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD



Pick up the “GOOD HEALTH AND WELL-BEING” and “SUSTAINABLE CITIES AND COMMUNITIES”

Three Frameworks

**[1] Future of medical testing to
protect way of life**

- Intelligent Sensing

[2] Future of surgery

- Information Rich

[3] Future of endoscopic examination

- Workflow

Targeted innovation

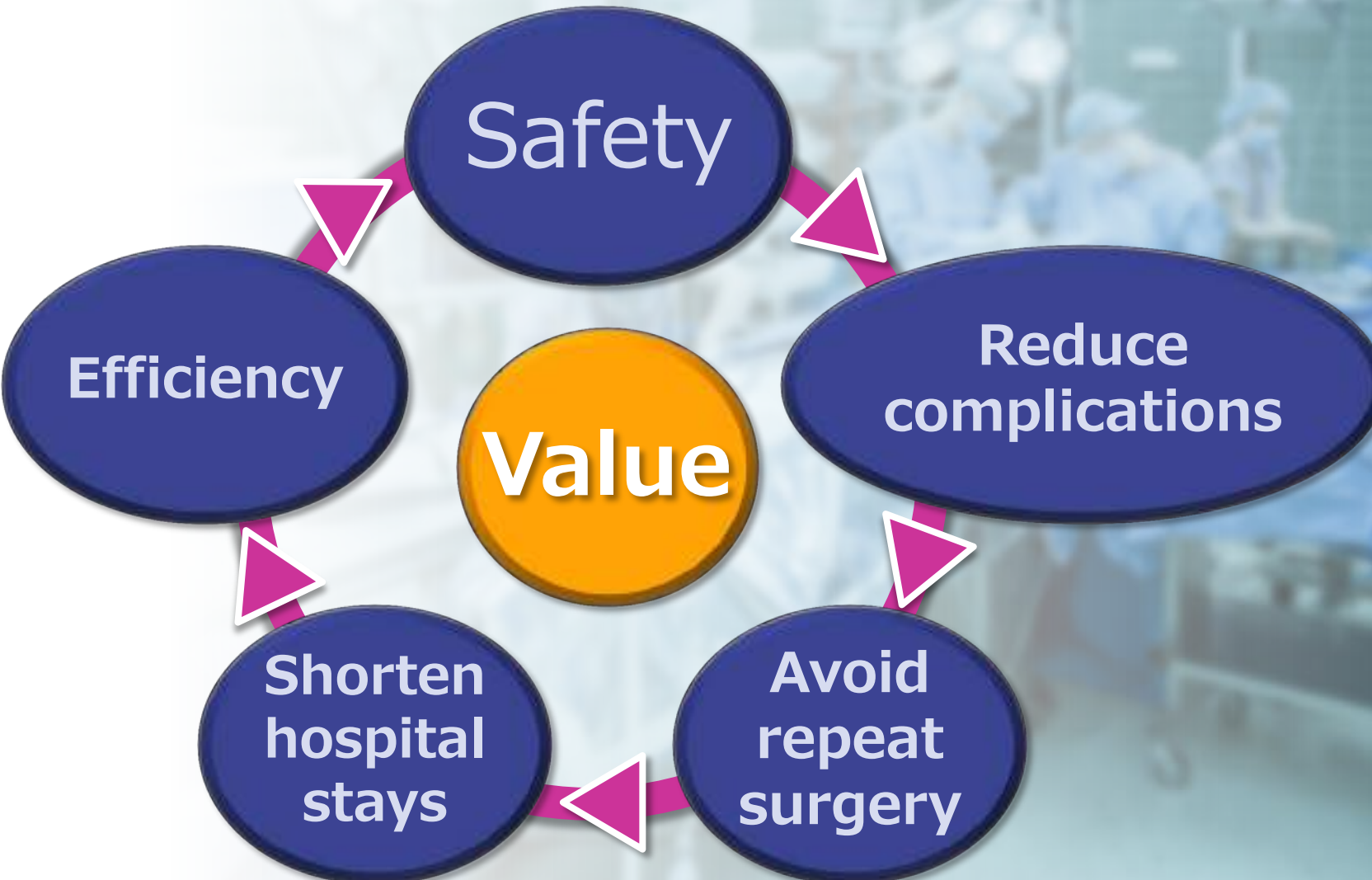
Future of Surgery

**Kazuhiro Gono, Chief Fellow
Technology Innovation Office
Olympus Corporation**

Medical
services
Quantity



Medical
services
Value

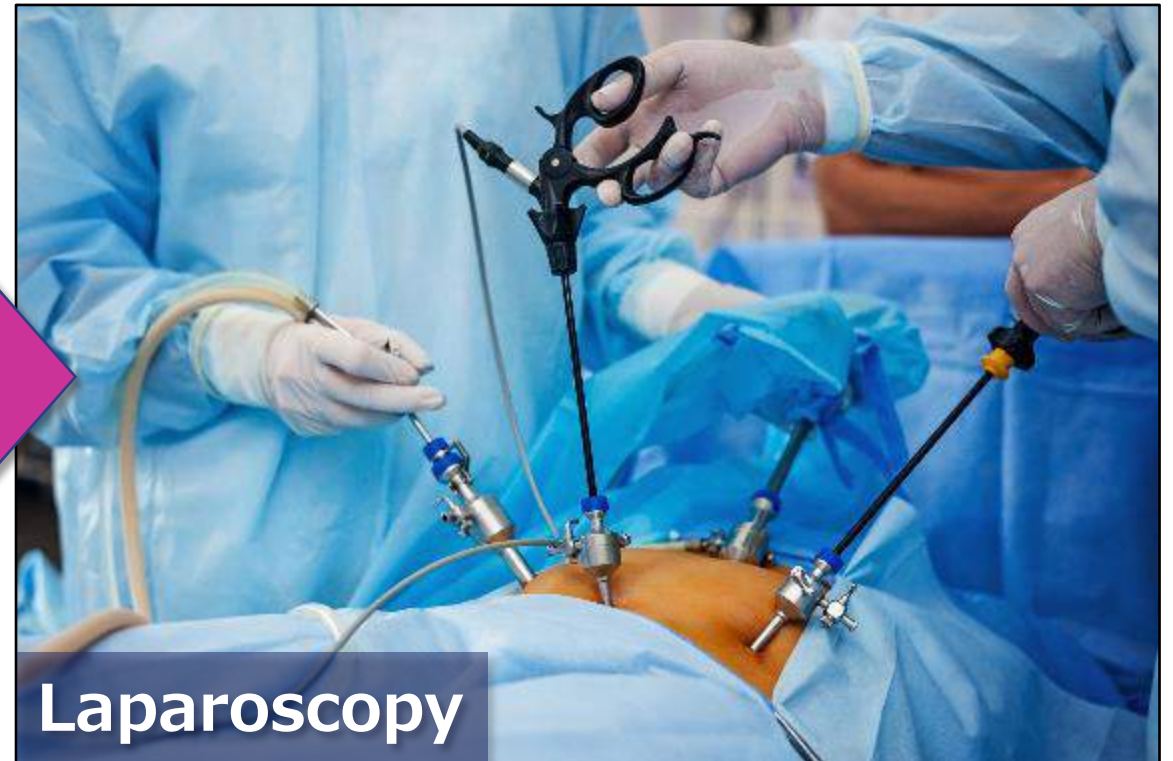


Surgery Innovation 1

Making laparoscopy less invasive than Open surgery



Open surgery



Laparoscopy

Surgery Innovation 2

Advances in devices

Imaging
Surgical imaging



Surgery
Surgical energy devices



Surgery Innovation 3

Integration and robotics

Productivity



Precision



Surgery Innovation 4

Connectivity and information support

Information Rich

A large dark blue circle with a pink border containing the white text "AI". The background features a network of white icons connected by lines, including a heart with an ECG line, a first aid kit, test tubes, a clipboard, pills, a stethoscope, a syringe, a monitor, and a person with a stethoscope. The overall scene is a blurred image of a surgeon in an operating room.

AI

A large dark blue circle with a pink border containing the white text "IoT". The background features a network of white icons connected by lines, including a heart with an ECG line, a first aid kit, test tubes, a clipboard, pills, a stethoscope, a syringe, a monitor, and a person with a stethoscope. The overall scene is a blurred image of a surgeon in an operating room.

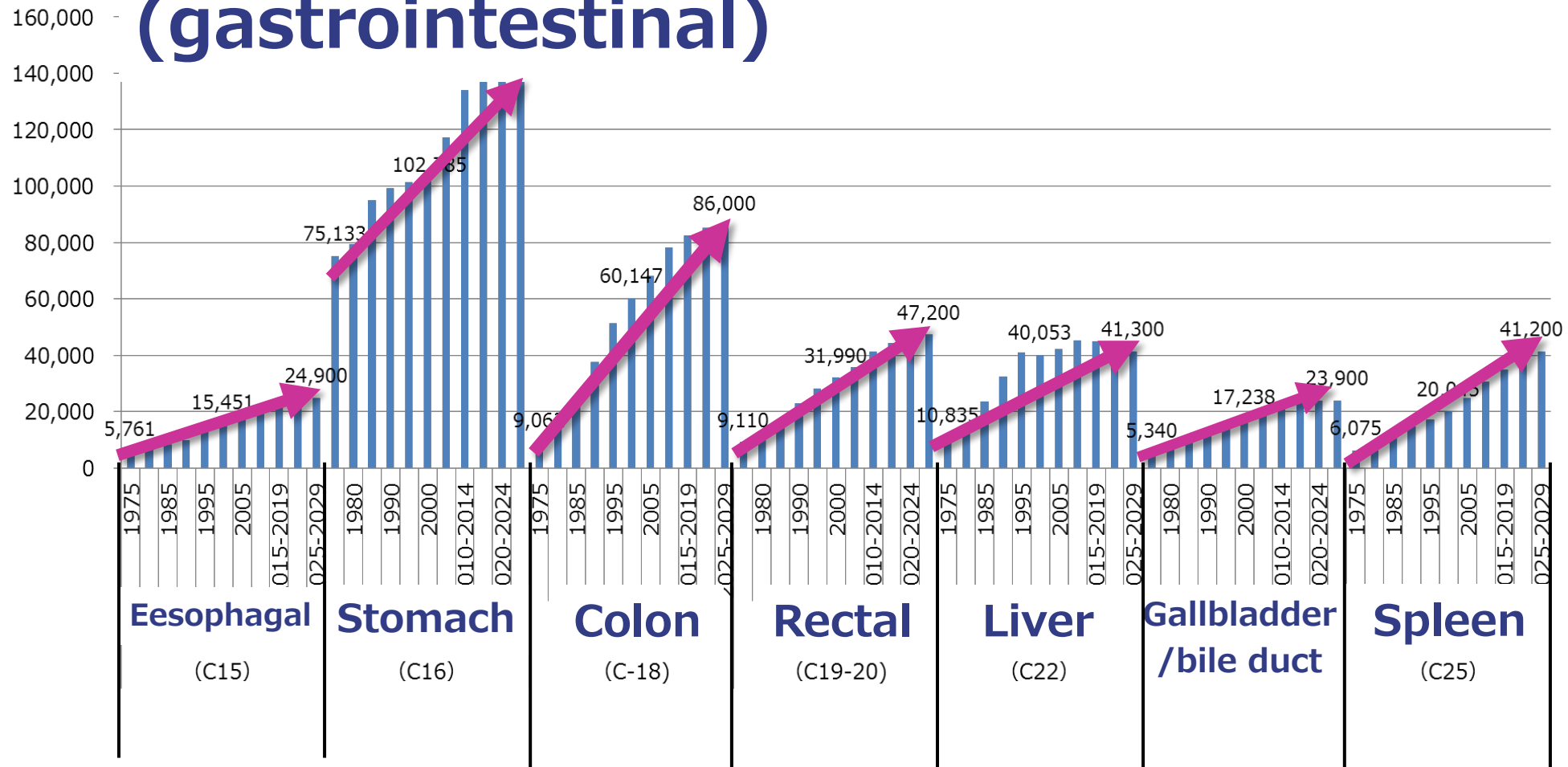
IoT

Targeted innovation

Future of Endoscopic Examination

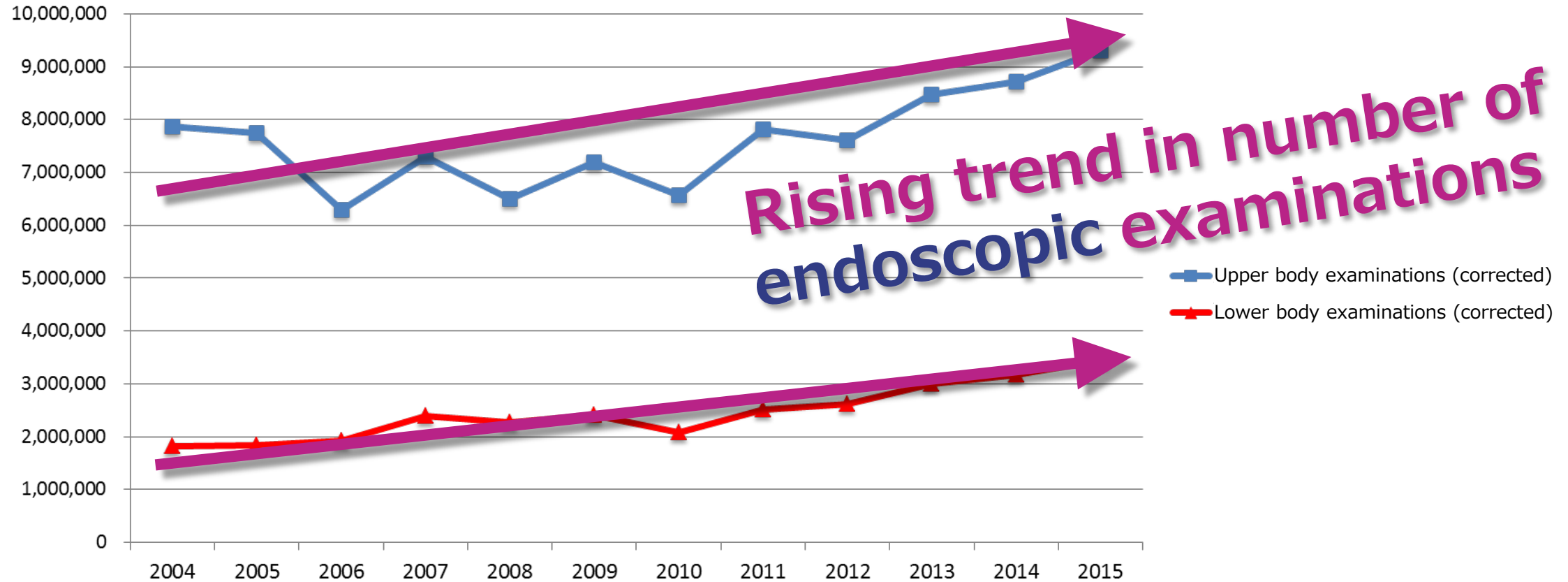
Tetsuo Nonami, Chief Fellow
Technology Innovation Office
Olympus Corporation

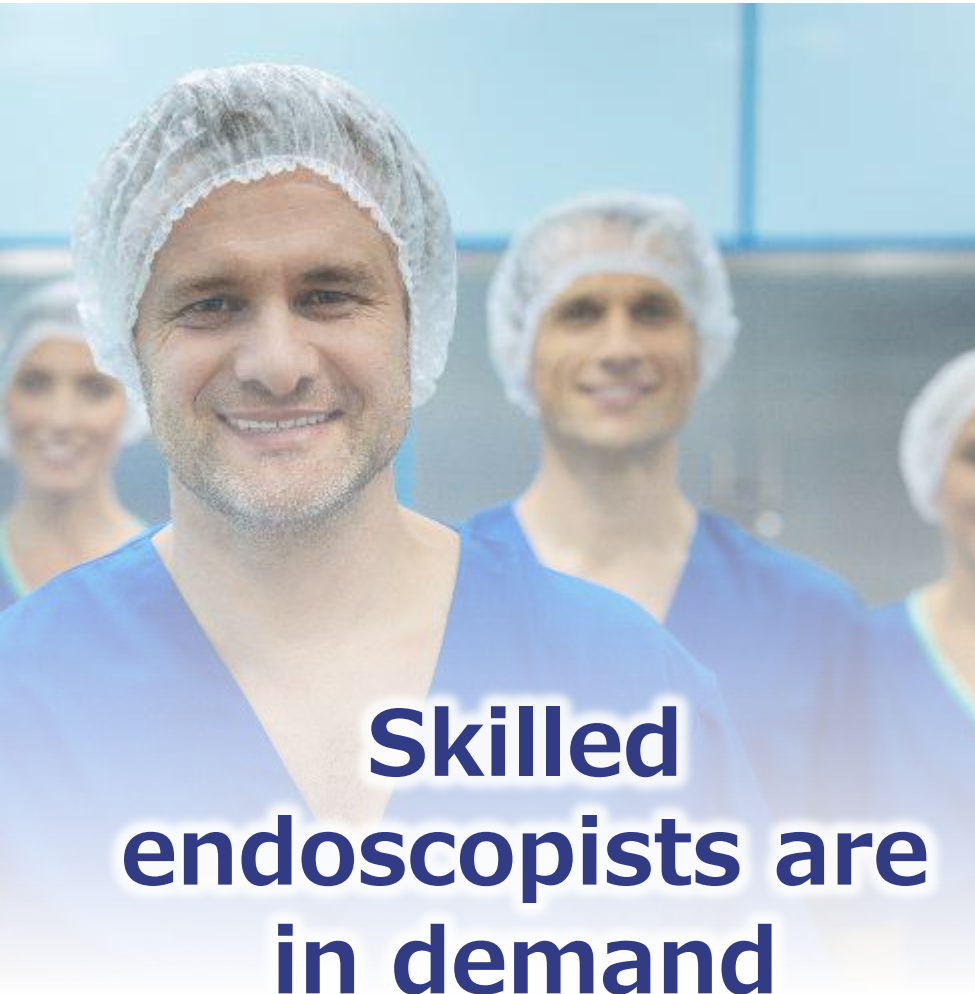
Projected cancer cases up to 2029 (gastrointestinal)



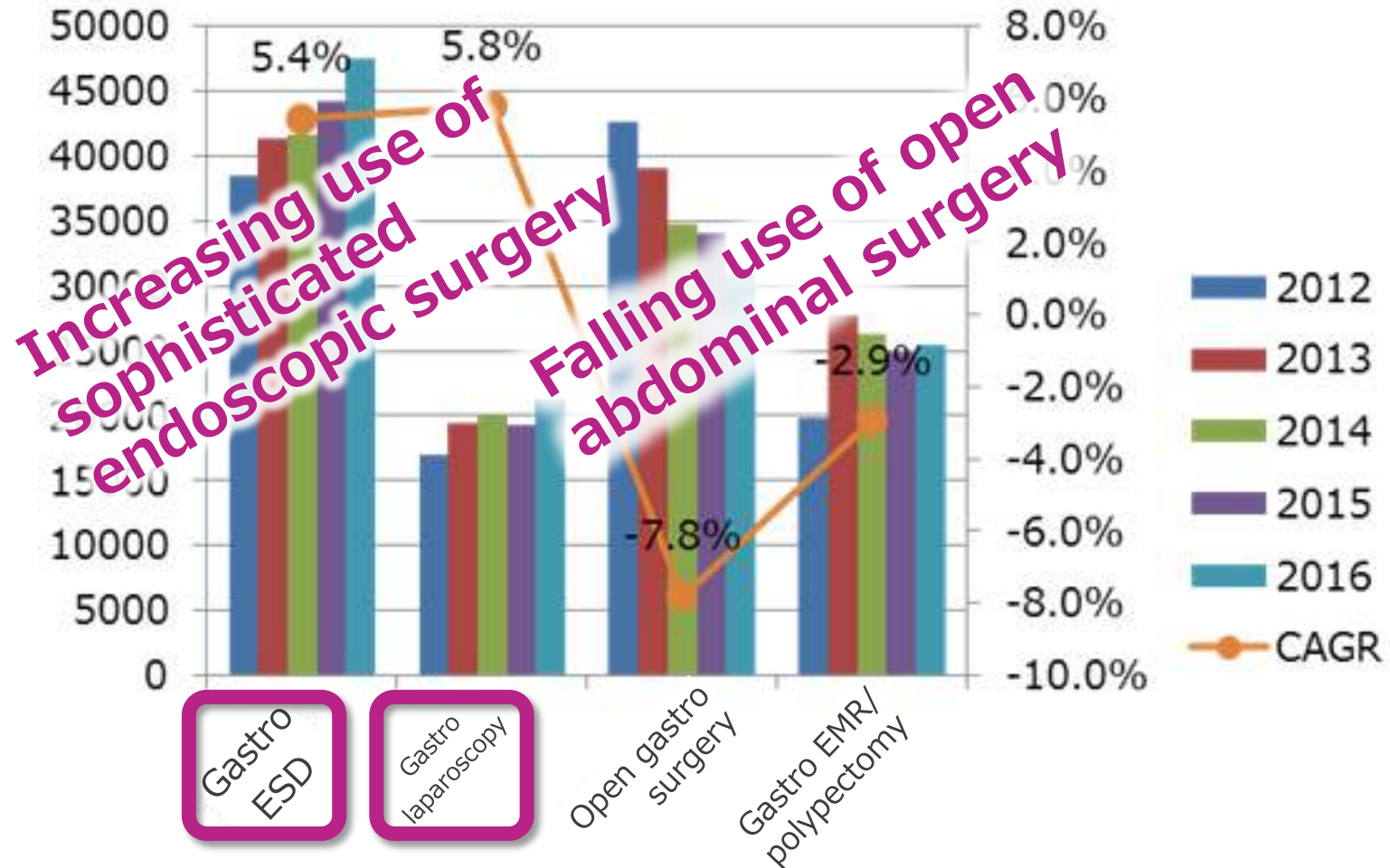
Source: Cancer information service, reported cases and statistics (1975–2010)
cancer_incidence (1975-2012), 2010–2029 cancer_prediction (2010-2029)

Number of gastrointestinal endoscopic examinations in Japan (conducted under health insurance)



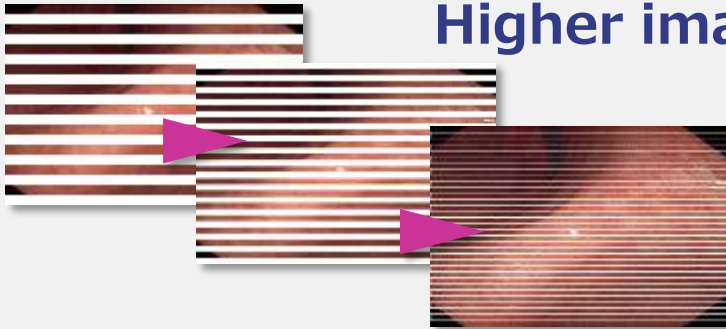


No. of surgical treatments for gastrointestinal malignancies

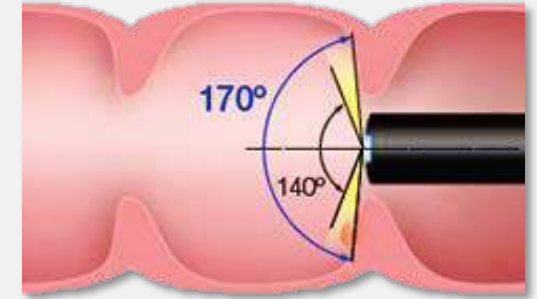


Advances in endoscopy

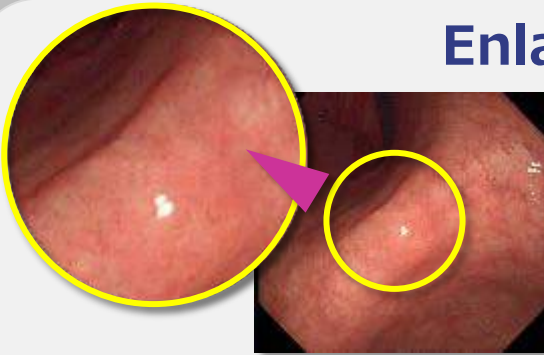
Higher image definition



Wide angle



Enlargement



Passive bending

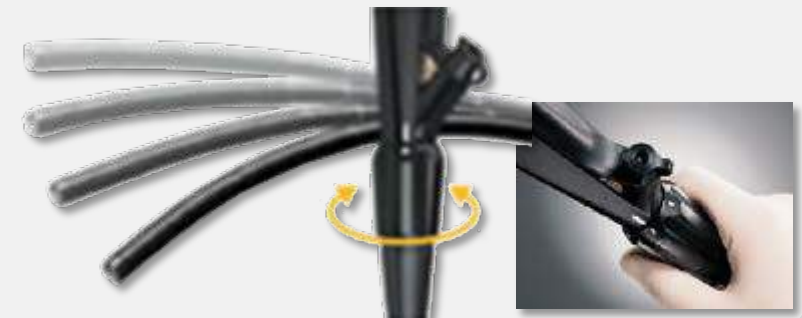


NBI



Images provided by Dr. Yasushi Sano of Sano Hospital

Variable stiffness



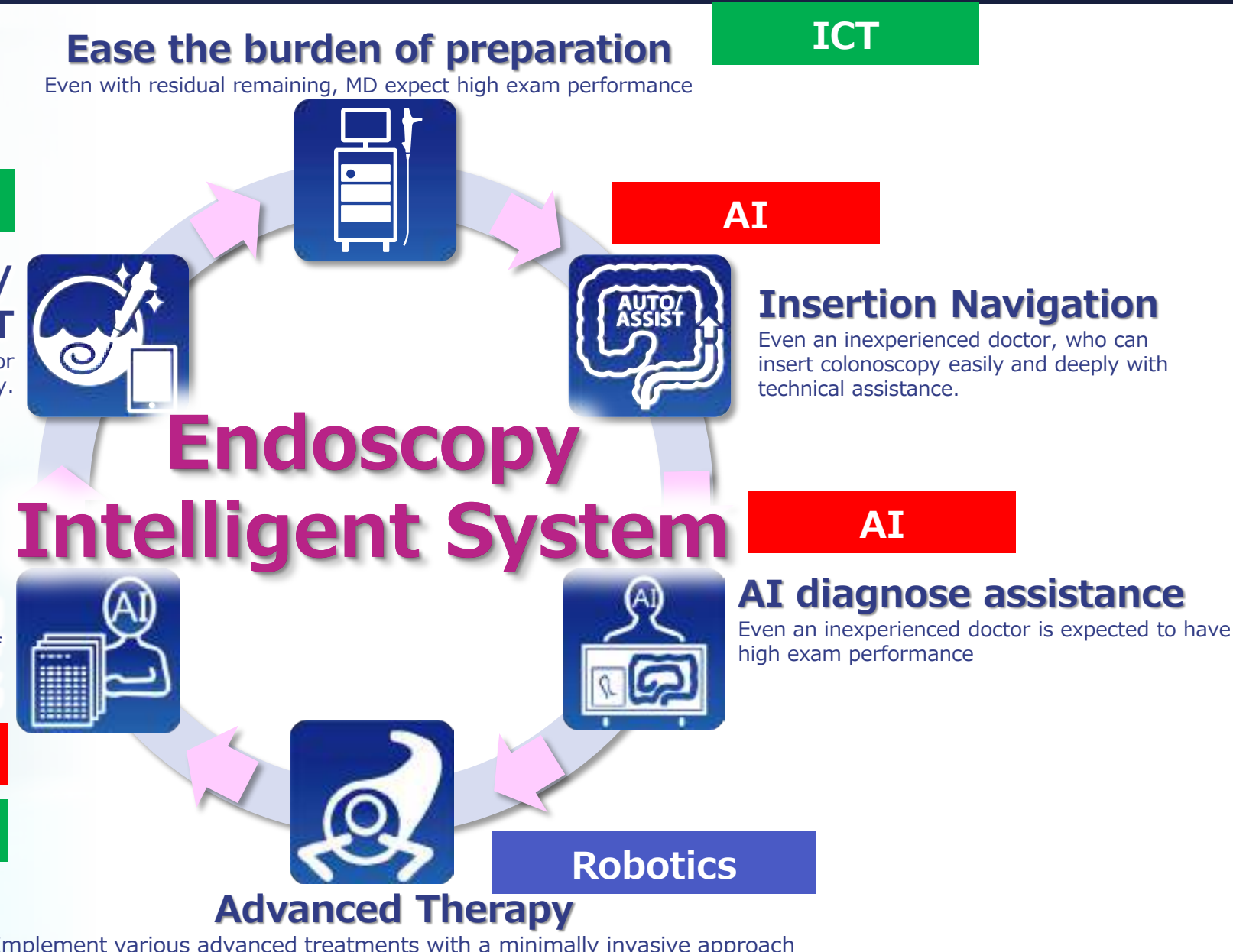


The FDA has issued safety communications about the risk of multidrug-resistant bacteria transmission via endoscopes.

In Japan, the Ministry of Health, Labor and Welfare has issued a notice based on the cases in the USA.

- As the population ages, the number of **endoscopic examination/ treatment is growing.**
- Global cost pressure: **Efficient endoscopic exam is required.**
- Demand of **skilled endoscope physician is growing.**
- **High demand** of reaction for **infection risk** via the endoscope.





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