

A blue-tinted photograph of a stethoscope resting on an ECG (heart rate) grid. The stethoscope's chest piece and tubing are visible, and the background shows the characteristic grid and waveform of an ECG strip.

3

Shinjiro Sato  
President,  
Cardiac and Vascular Company

Cardiac and  
Vascular  
Company

# Business Overview: Cardiac and Vascular Company

Cardiac and Vascular Company (C&V)		FY15 Sales	FY14 to 15 Growth	Major Products
	TIS	177 B JPY	15%	<ul style="list-style-type: none"> <li>• DES</li> <li>• PTCA Balloon</li> <li>• Access Devices</li> </ul>
	Neurovascular	26 B JPY	26%	<ul style="list-style-type: none"> <li>• Coil</li> <li>• Flow Diverter</li> <li>• Aspiration Catheter</li> </ul>
	CV	42 B JPY	7%	<ul style="list-style-type: none"> <li>• Oxygenator</li> <li>• Heart Lung Machine</li> <li>• Blood Parameter Monitoring</li> </ul>
	Vascular	14 B JPY	4%	<ul style="list-style-type: none"> <li>• Grafts</li> <li>• Frozen Elephant Trunk Device</li> <li>• AAA Stent Graft</li> </ul>
		259 B JPY	13%	

# Mid- to Long-term Vision

---

Recognized globally as a

**“Top brand”**

among cardiac and vascular  
companies



- Be within the **top three players** in each market where we participate
- Gain world-class trust from customers for overall **quality** (in product, supply, and service)



# Market Dynamics and Opportunities



Market Environment:  
Headwind



Business Opportunities

Market



Slowing demand in  
developed markets

US as a new frontier for C&V



Price pressure

Strong demand in emerging markets



Evidence-driven

Improved treatment efficacy by  
devices with high quality and usability

Industry



Consolidation

Niche market, less competition



Tighter quality  
regulations

Highly valued, world-class QMS



Shifting business model

Opportunities to differentiate strategy

# Mid- to Long-term Growth Strategy: C&V Company

## Key initiatives to execute the strategy

Market dynamics  
and  
C&V's strengths

Evolve a balanced “Advanced and Platform” model

Further develop global frontiers

Leverage synergies across four businesses

Gain a competitive edge through innovation

Strengthen operational capabilities and infrastructure

Recognized globally as a

**“Top brand”**

among cardiac and vascular companies

# Competitive Advantage #1

Evolve "Advanced and Platform"

Uniquely positioned with a differentiated portfolio  
(achieving a balance between therapeutic and platform products)

Advanced  
(Therapeutic)

Platform  
(Differentiated)

Little to no focus on  
commoditized segments

## Therapeutic Devices

Advanced devices,  
embolics, etc.

Coil and  
Stent

Stent  
Graft

DES

DCB

Embolic  
beads

## Support Devices

Differentiated  
ones to maximize  
efficacy of  
advanced therapy

Guidewire

Sheath

Vascular  
closure

Oxygenator

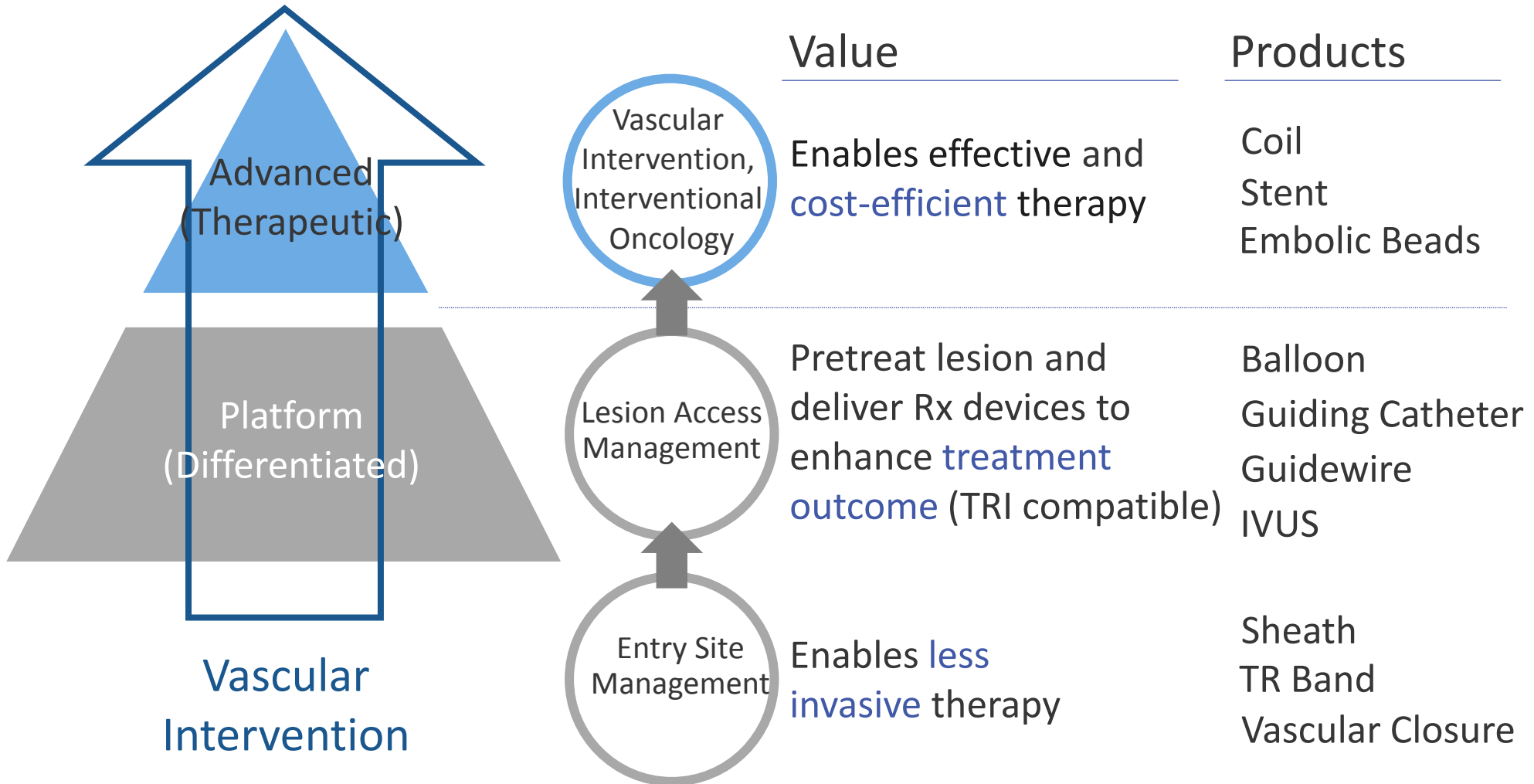
IVUS

TRI

# Competitive Advantage #2

Evolve "Advanced and Platform"

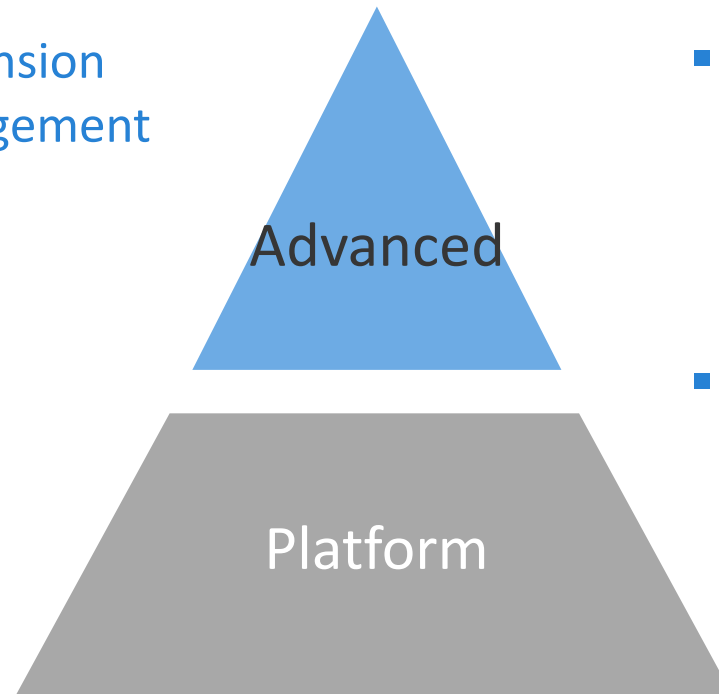
Our focus: Provide a vertically integrated solution for vascular intervention



## Achieve balanced growth in the Advanced and Platform products portfolio

- DES: Selective expansion and life cycle management

- Comprehensive neurovascular products offering



- Peripheral: Comprehensive products offering and leverage TRI approach

- Expand Interventional Oncology products lineup

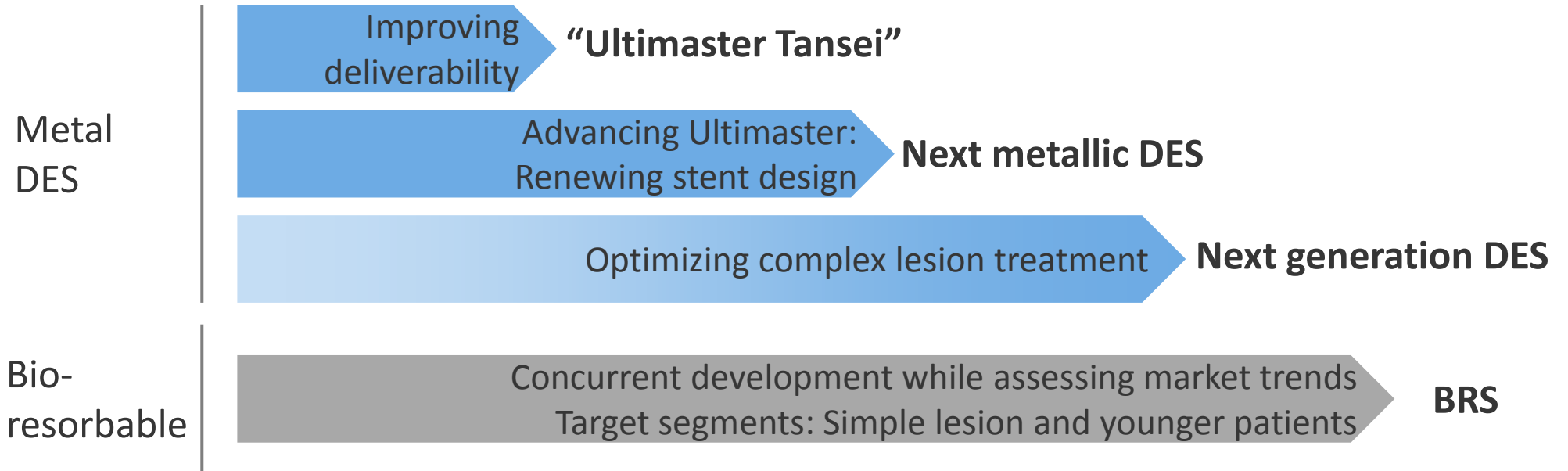
- Strong No.1 in access segment
- No.1 in oxygenator market share



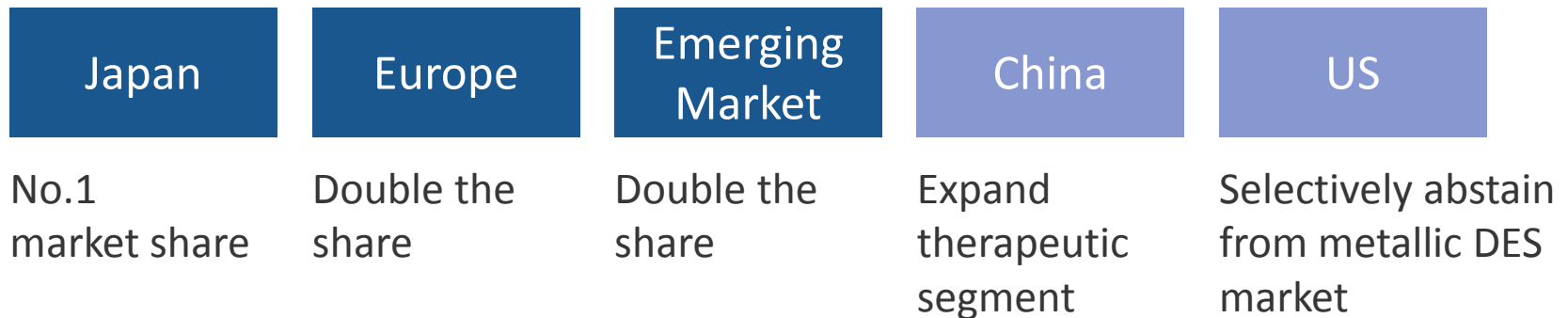
# Strategic Expansion of DES

Evolve “Advanced and Platform”

## Product pipeline



## Regional Targets



## Peripheral

### Expand the product offering

- Offer products from access to stent
- Develop a variety of therapeutic devices
- Complement with strategic partnerships

Major upcoming product:  
Drug Coated Balloon

Pursue R2P approach (TRI)

## Interventional Oncology (IO)

### Expand further comprehensive offerings

- Offer access and therapeutic devices
- Offer a range of therapeutic options

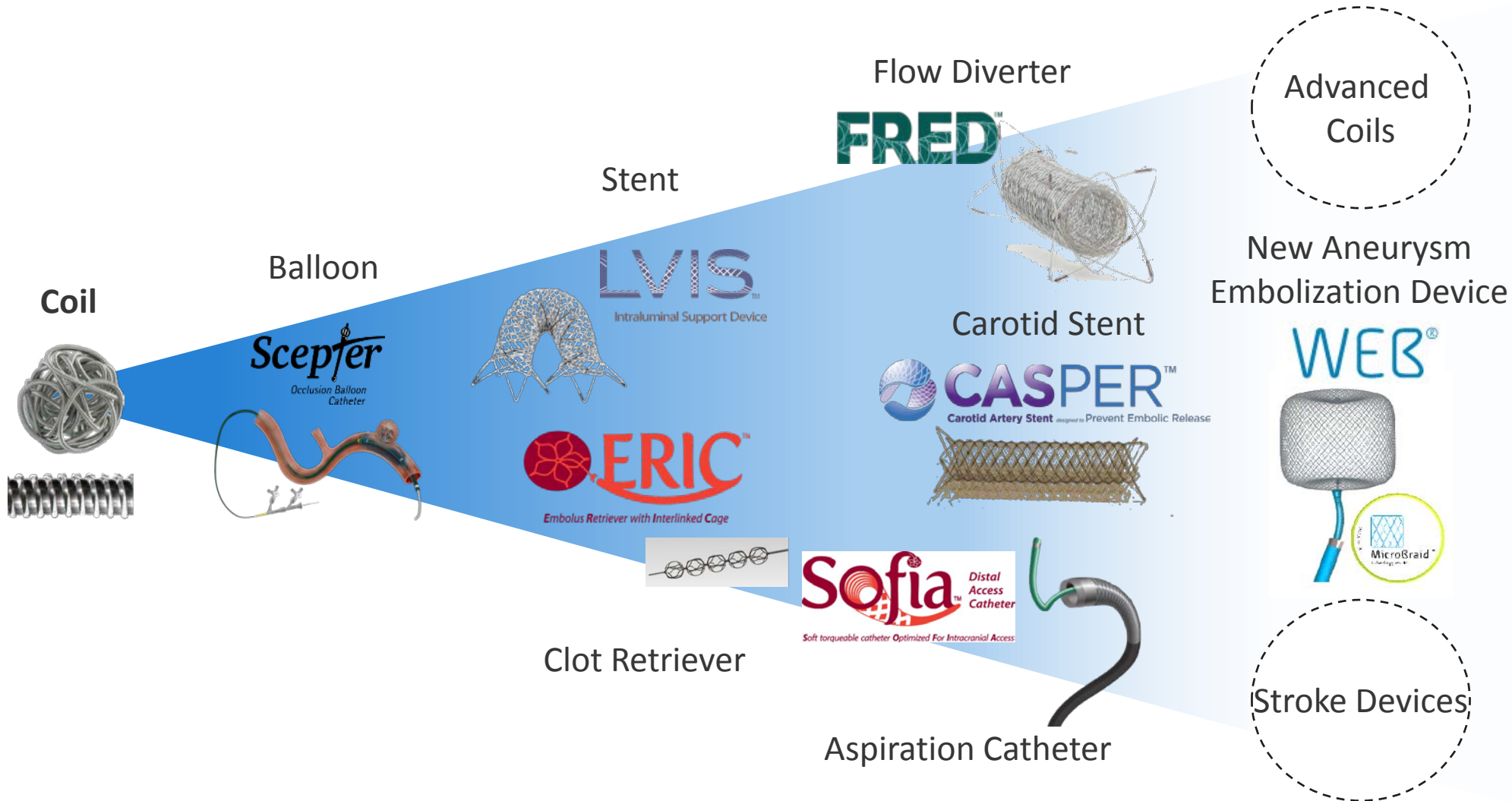
Pursue RAVI approach (TRI)

**CA-IS : US R&D for vascular interventional products located in California**  
Leverage MicroVention technologies (drug coating and polymer)

# Offer Full Range of Neurovascular Products

Evolve "Advanced and Platform"

## Total Neurovascular Company: Expand non-coil and stroke devices



# Prioritize Investment

Further develop  
the global frontiers

Significant growth opportunities in large markets such as US, China, and emerging markets

US

- Enter and expand therapeutic product offerings in peripheral and neurovascular markets
- Extend access product line and get further TRI approach penetration
- Expand R&D and manufacturing capabilities

China

- Expand therapeutic product offerings in peripheral, interventional oncology and cardiovascular surgery markets
- Launch a new renal denervation catheter
- Improve capability for regulatory requirements and optimize the supply chain

Emerging Markets

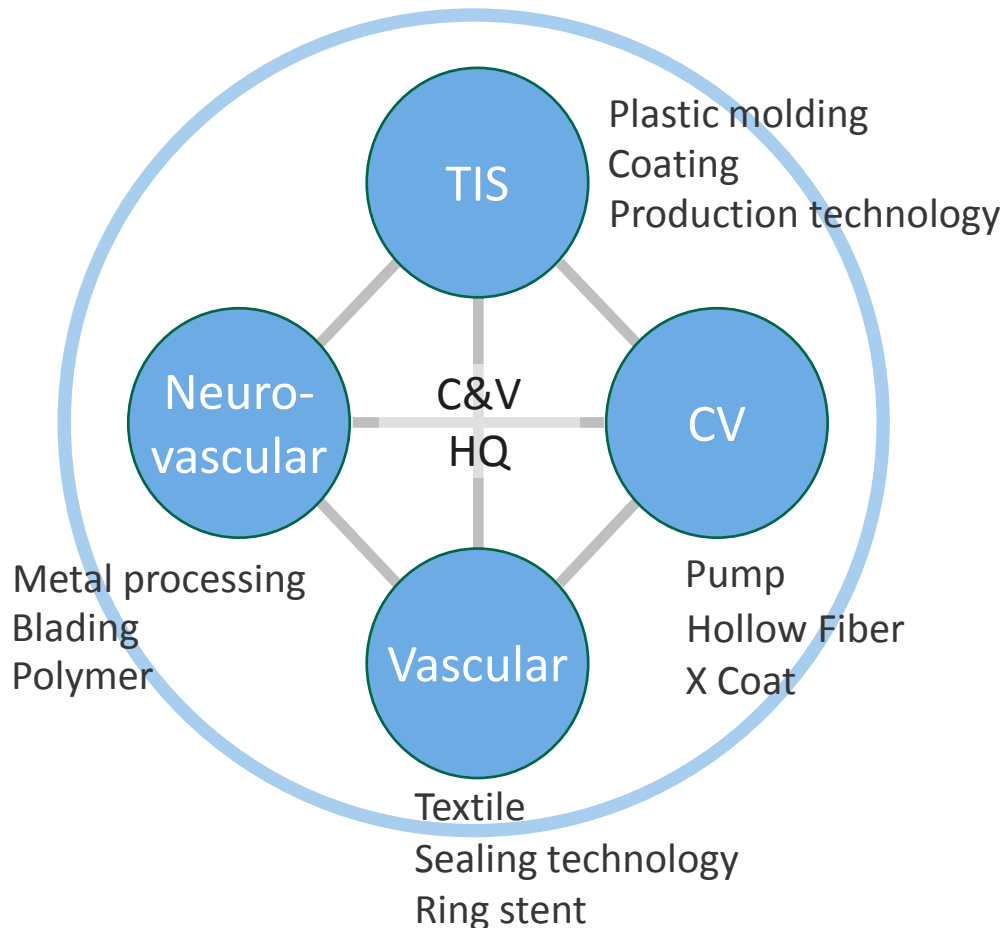
- Achieve balanced expansion of advanced and platform products (incl. DES)
- Pursue strategic investment for long-term growth
  - ✓ **India:** Market with demographic dividend
- Explore opportunities in 1) middle tier markets, and 2) specialized products for emerging markets

# Create Synergies across Four Businesses

Leverage synergies across four businesses

- 1) Share best practices, 2) Utilize technologies and sales channels, 3) Optimize R&D and production, 4) Collaborate on projects in adjacent markets

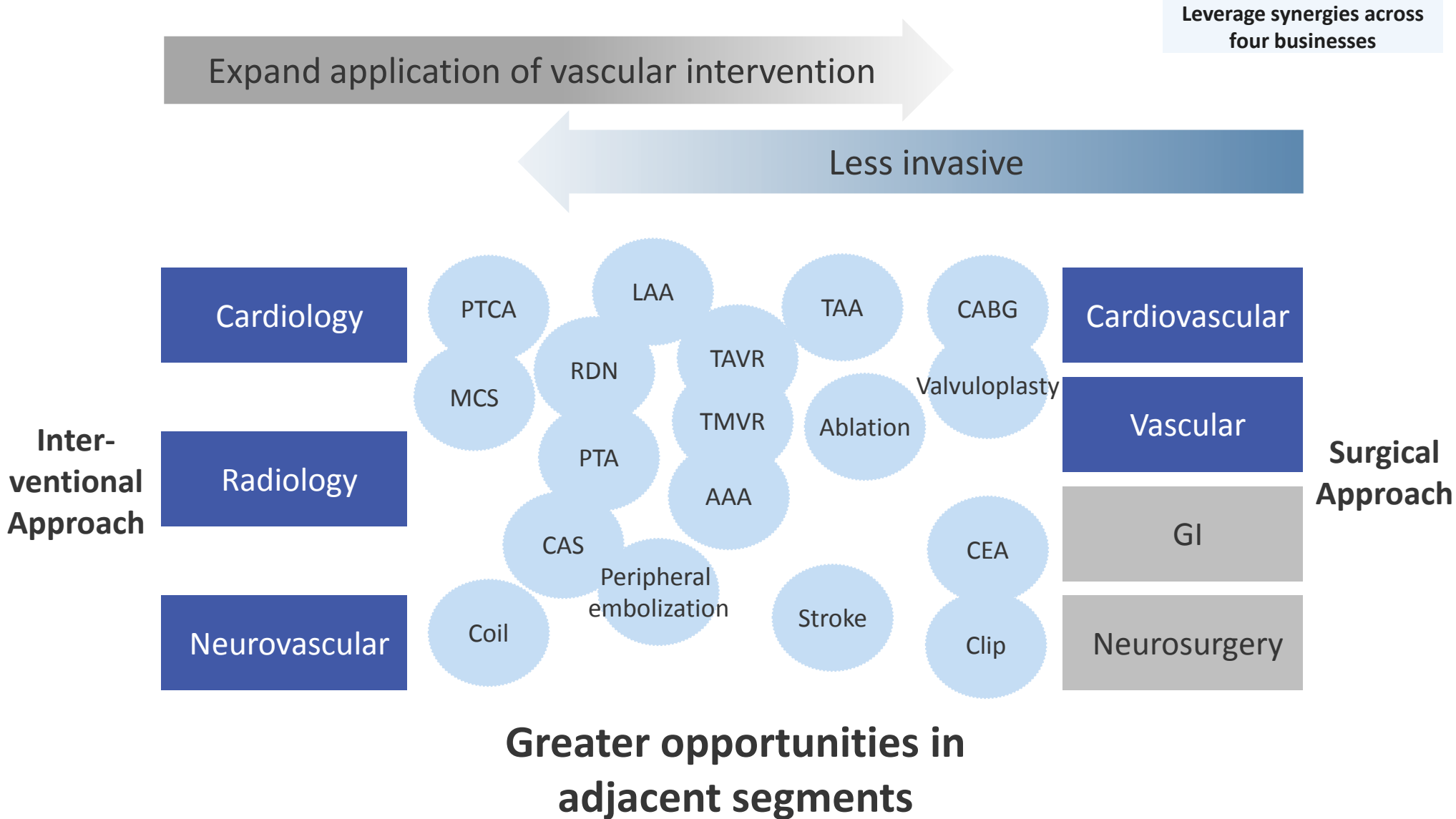
## Core technologies



## Opportunities to leverage synergies



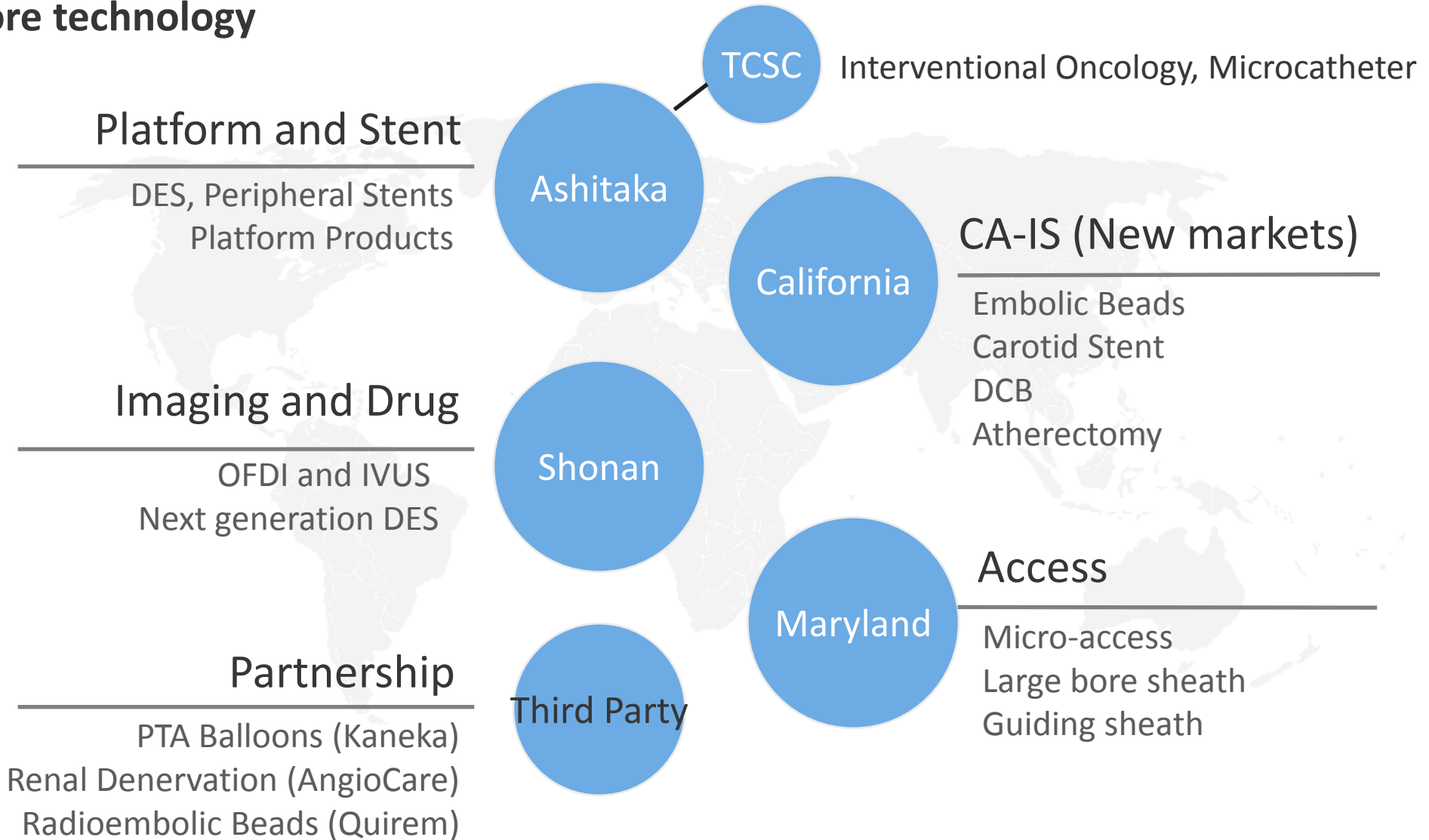
# Leverage Our Technologies and Channels to Gain Opportunities That Arise from Expanding Less Invasive Treatments



# Accelerate Innovation Globally (TIS)

Gain a competitive edge  
through innovation

Faster development, closer to the market, by the organization with the  
core technology

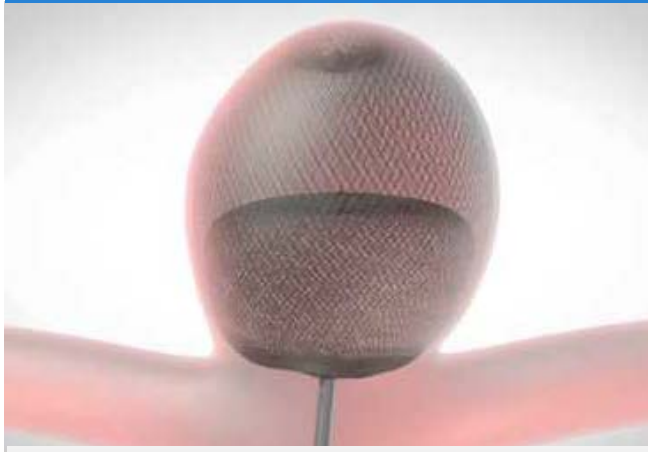


# Upcoming Innovative Products

Gain a competitive edge  
through innovation

Expected to achieve first-to-market in the US

Aneurysm Embolization Device  
*WEB*  
(MicroVention)



New aneurysm embolization device along with conventional coil products

**Single and quick deployment** shortens procedure time

Expanded indication for complex procedures

Frozen Elephant Trunk Device  
*Thoraflex Hybrid*  
(Vascutek)



A hybrid device combining a conventional vascular graft and a stent graft for thoracic aorta surgery

Thoraflex hybrid enables two separate surgeries to be combined into **one surgery**

New oxygenator  
*NX*  
(CV)



An oxygenator featuring the **world's smallest priming volume**

Cost-competitive product

Potentially lowers the risk of infection



# Optimize R&D and Production Site

Strengthen operational capability and infrastructure

Define roles for each factory as R&D driven, mass production, and category focused to achieve stable supply and cost competitiveness



## Glasgow

R&D and production for vascular grafts and stent grafts



## Ashitaka

R&D and production for TIS and CV products

## Yamaguchi

Production for TIS

## Clinical Supply Co., Ltd.

Production for Interventional Oncology



## California

R&D and production for Neurovascular  
R&D for peripheral intervention products (CA-IS)

## Ann Arbor:

R&D and production for Heart Lung Machine

## Maryland:

Production for TIS and CV



## Vietnam Factory

Mass production for TIS and Vascular



## Costa Rica

Mass production for Neurovascular

Advance production technologies

# Establish the Platform to Accelerate the Growth

Strengthen operational capability and infrastructure

## Pursue strategic investment

### R&D: 130+ B JPY

- Invest in intervention products development in US
- Leverage US and Japan strengths
- Launch Ashitaka Innovation Center (tentative name)

### CAPEX: 80+ B JPY

- Expand Yamaguchi factory
- Expand Costa Rica factory
- Expand Vietnam production capability

## Strengthen Organizational Capabilities

### Strengthen HQ

- Strengthen a TIS global HQ function
- Develop clinical capabilities including medical affairs
- Hire, develop and promote global talent

### Expand US R&D

- Launch a full clinical affair team
- Transfer some R&D function to Maryland factory
- Develop a new imaging system at the Michigan site



# Establish World Class Quality

Strengthen operational capability and infrastructure

## Product

- Quality of Products
- Quality of QMS
- Quality for patients
- Usability for customers

## Supply

- Stability in supply
- Size Variation
- Speed to launch new products

## Service

- Clinical support
- Customer centric sales
- Enrich clinical evidence



Establish  
Quality Brand



# Product Pipeline

Mid-term  
FY17 to FY19

Long-term  
Beyond FY20

TIS

- New Ultimaster
- New PTCA Balloon
- PTCA Balloon for US market
- Radioembolic beads
- Peripheral therapeutic devices for radial access
- Drug Coated Balloon

- Next generation DES
- New imaging system
- New closure device
- Renal denervation catheter
- Atherectomy
- Devices for structural heart disease

Neuro-vascular

- New aneurysm embolization device “WEB”
- Flow diverter “FRED”
- Stroke devices

- Advanced “WEB”
- Advanced Coil
- Coated stent

CV

- New generation oxygenator NX

- Next generation blood gas parameter monitoring “CDI”

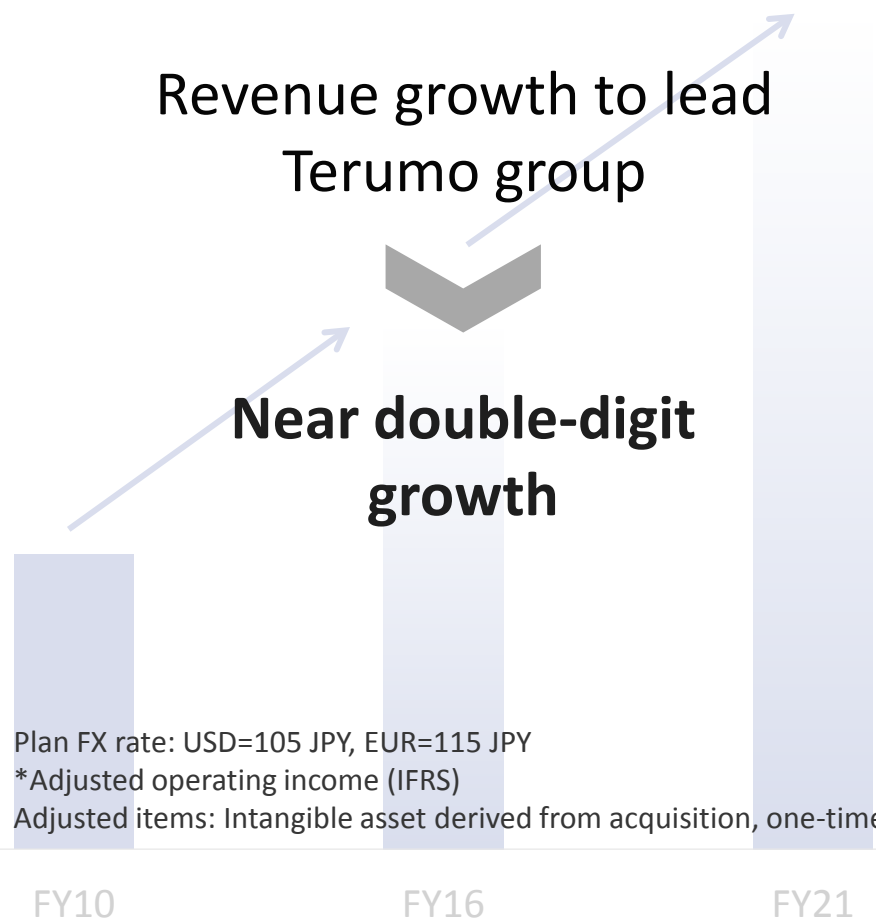
Vascular

- Next generation stent graft “Anaconda LP”
- New vascular graft “Triplex Advanced”

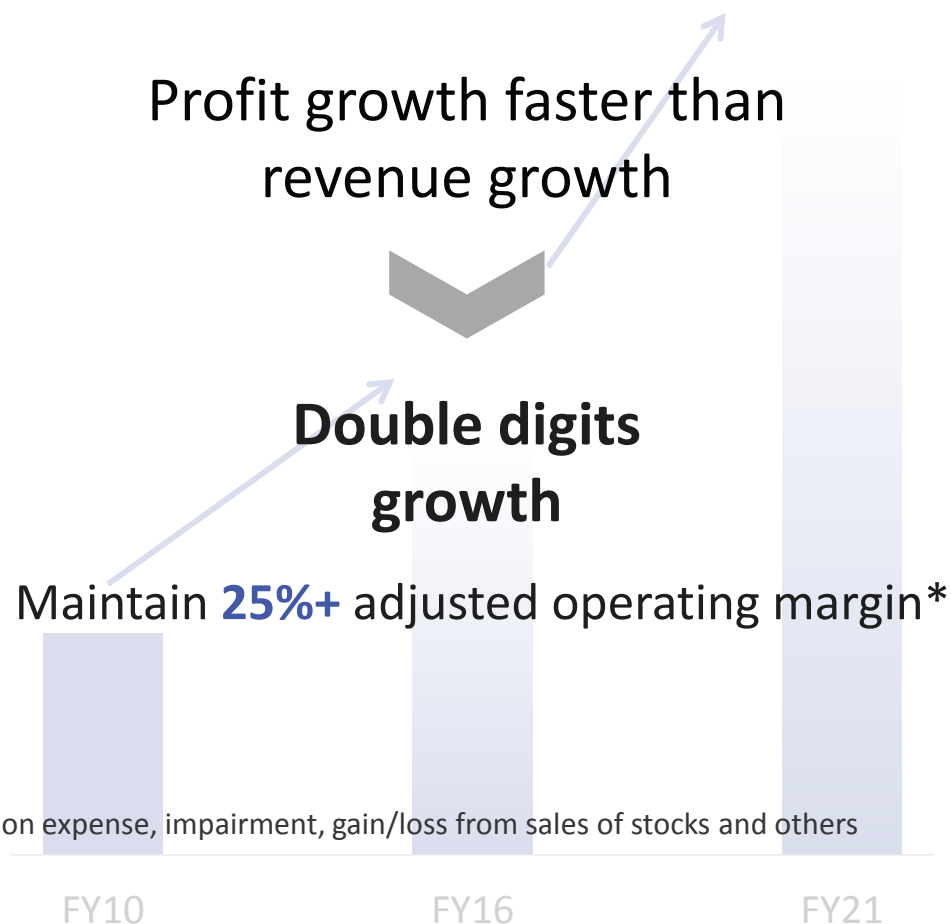
- Frozen Elephant Trunk device “Thoraflex Hybrid”

# Sales and Operating Income Targets toward FY21

## Sales

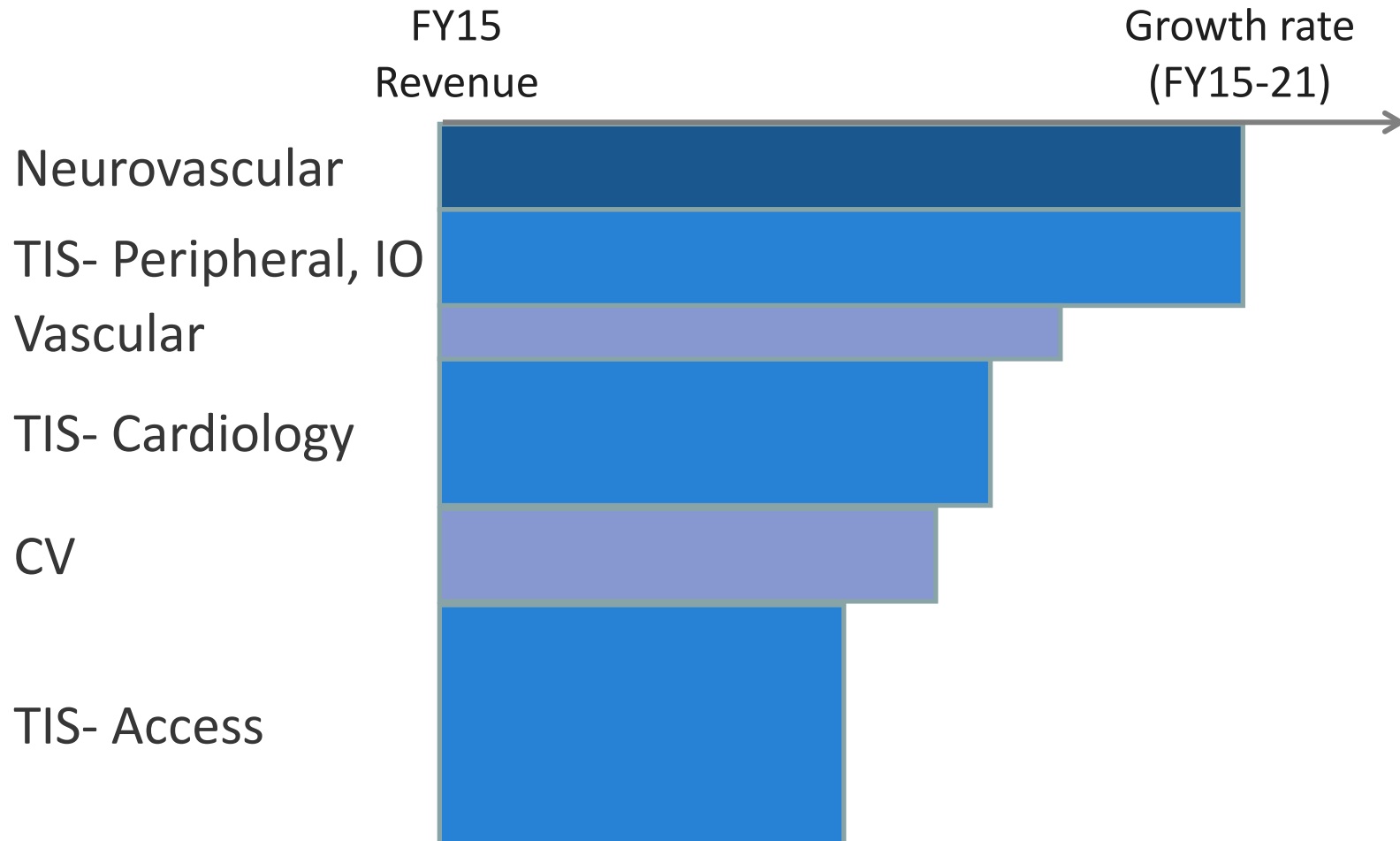


## Operating Income\*



# Growth Drivers

Neurovascular, Peripheral and IO lead the growth, and CV and Vascular improve their profitability



# Beyond FY21

Mastery in Intervention

Integrated solution  
(Leveraging TRI)

Stroke  
Heart Failure  
AF

Artery-to-Vein

Diversify  
therapeutic  
technologies

Mastery in Globalization

Expand US  
infrastructure  
and product  
offerings

Achieve dominant  
presence in  
emerging markets

Establish multi-  
site R&D and  
production

Global  
branding

Mastery in  
Quality and  
Manufacturing

Achieve No.1  
production cost

World-Class  
QA, RA, and CA

Evolution of  
business model





# Disclaimer

---

The information that Terumo discloses and the forward-looking statements including financial projections are based upon our assumptions using information available to us at the time and are not intended to be guarantees of future events or performance. Accordingly, it should be noted that actual results may differ from those forecasts or projections due to various factors. Factors affecting actual results include, but are not limited to, changes in economic conditions surrounding Terumo, fluctuations of foreign exchange rates, and state of the competition.

The market share information in this presentation is partly derived from our own independent research.