A Clear Vision For Life®

Ophthalmology: Our Singular Focus

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Santen's Core Values

By focusing on ophthalmology, Santen develops unique scientific knowledge and organizational capabilities that contribute to the well-being of patients, their loved ones and consequently to society.

Ophthalmology: Our Singular Focus

- Growing ophthalmology market
- Specialized in ophthalmology
- Santen’s growth strategy
- Pursuing unmet medical needs in ophthalmology
- Expanding global partnership alliances

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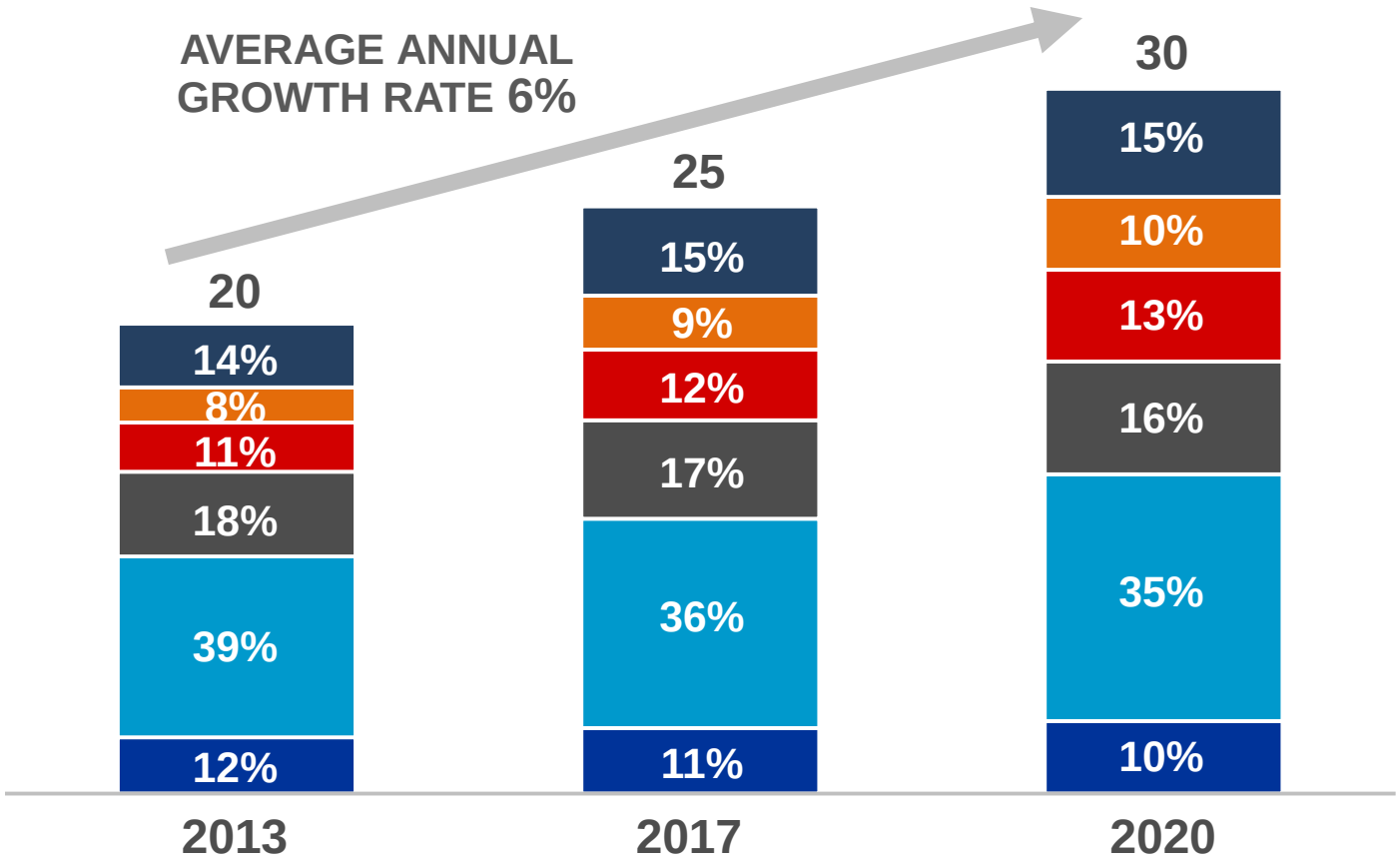
Market Outlook:
Continuing Growth Led by Emerging Markets

Global Prescription Ophthalmic Market

(USD billions)



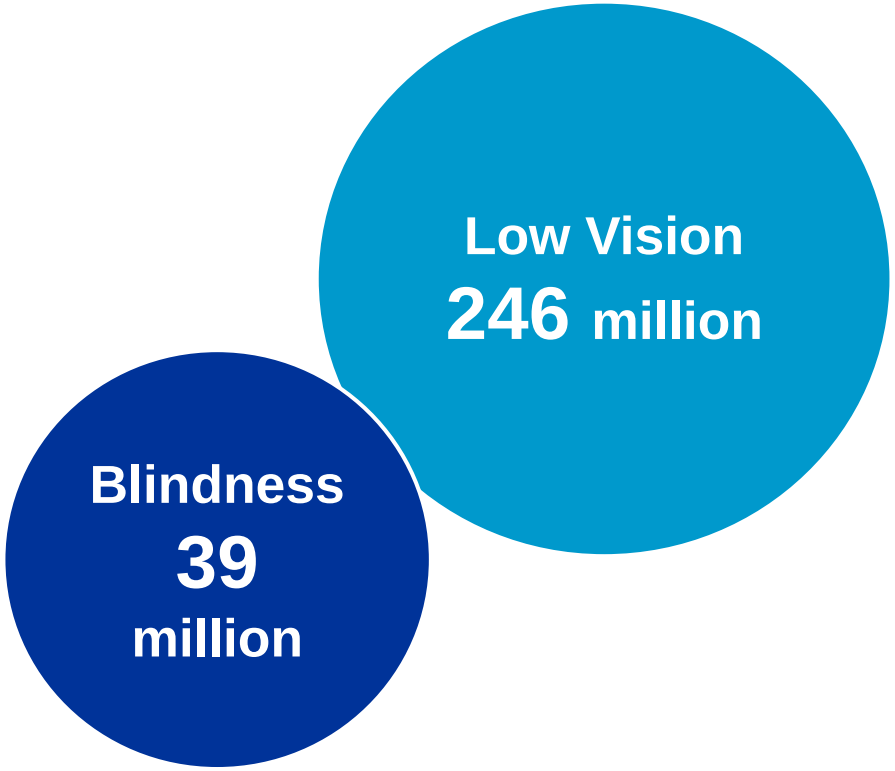
	AVERAGE ANNUAL GROWTH RATE
REST OF WORLD	8%
ASIA	11%
NORTH, E. EUROPE, RUSSIA	9%
W. EUROPE*	4%
U.S.	5%
JAPAN	4%

Source: Santen estimation
*UK, France, Germany, Spain, Italy

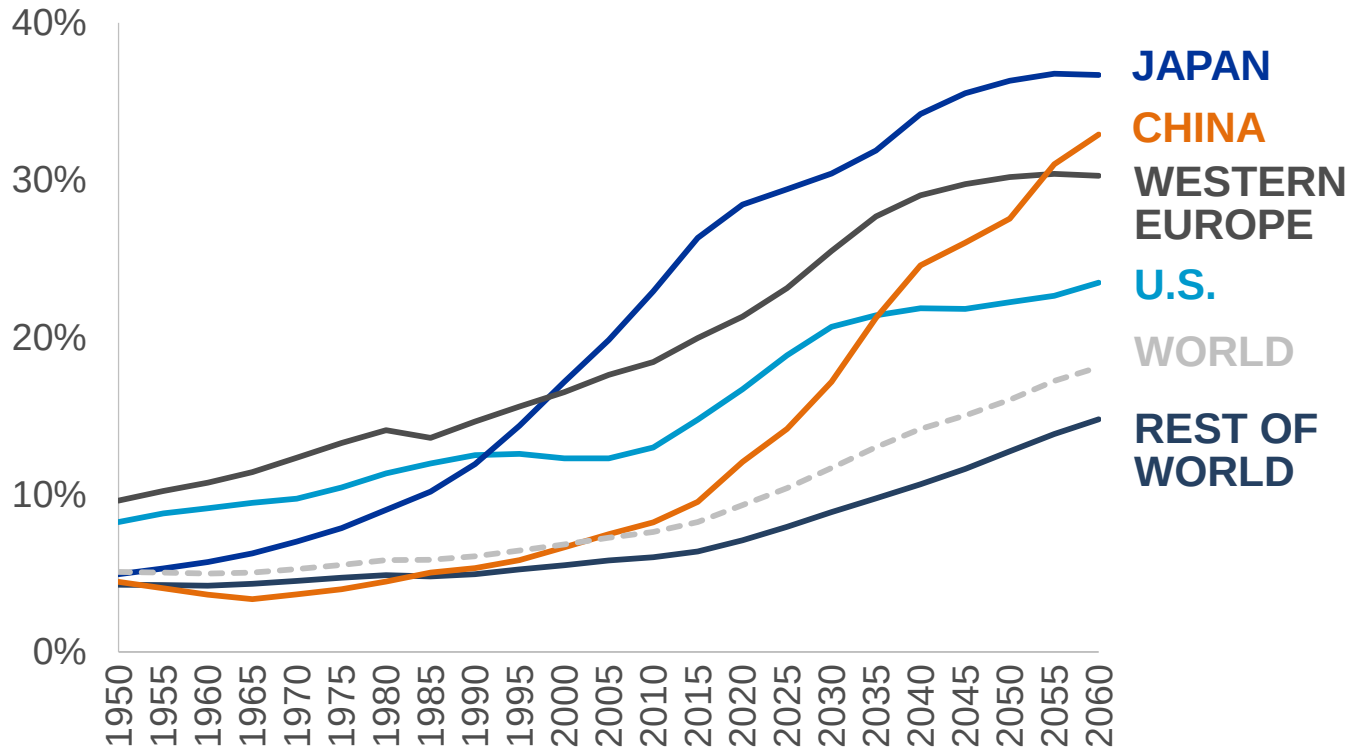
Vision Problems Expected to Increase as World Populations Age

World Population Suffering from Visual Impairment:

285 million



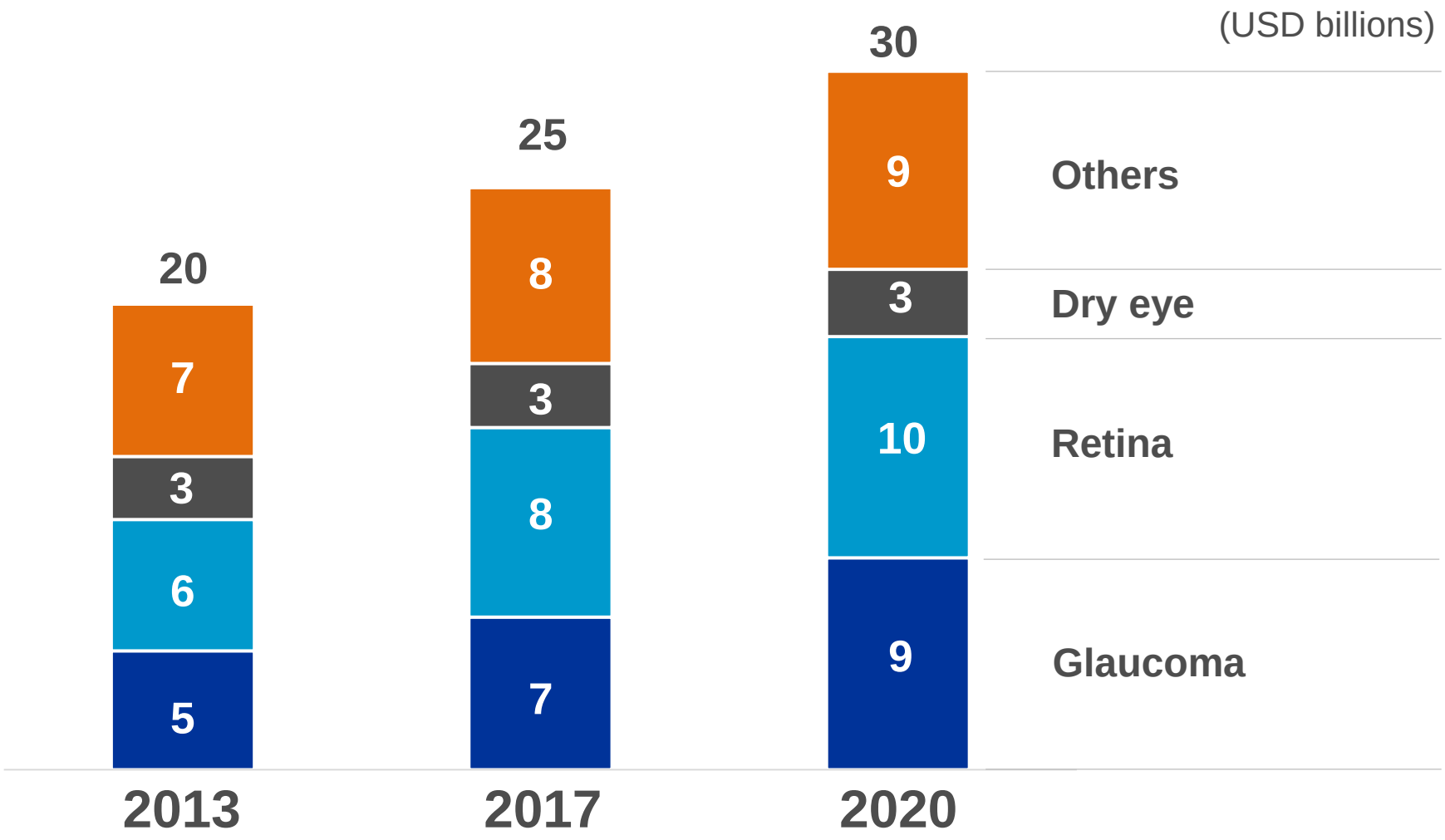
Population Aged 65+



Source: United Nations, World Population Prospects: 2015 Revision

Santen is Focused on the High Growth Areas: Dry Eye, Glaucoma and Retina

Global Market Forecast by Disease Category



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Covering All Ophthalmic Therapeutic Areas

Santen provides total solutions in ophthalmic therapeutic areas to improve of quality of life

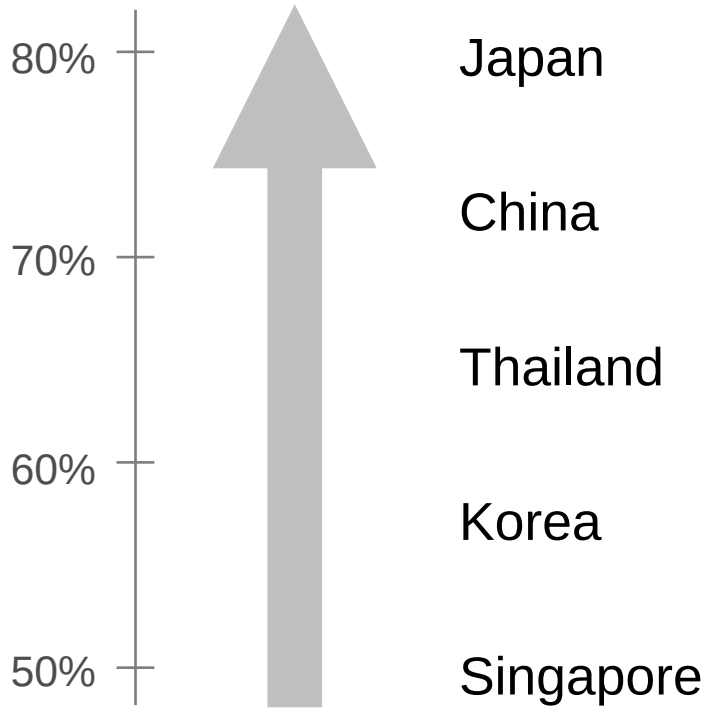
Company	Retina	Glaucoma	Dry eye	Infection	Allergy	Cataract
Santen	✓	✓	✓	✓	✓	✓
Alcon/Novartis	✓	✓	✓	✓	✓	✓
B&L/Valeant	✓	✓	✓	✓	✓	✓
Allergan	✓	✓	✓	✓	✓	
Pfizer	✓	✓				
Genentech	✓					
Regeneron/Bayer	✓					
Abbott/Solvay	✓		✓			✓
Sanofi	✓				✓	

Source: Publicly available information

Customer Satisfaction Leadership – Santen is Transferring This Strength Beyond Asia to EMEA

Customer Satisfaction in Japan and Asia

(Percentage of Doctors Evaluating Santen as #1 or #2)



Japan

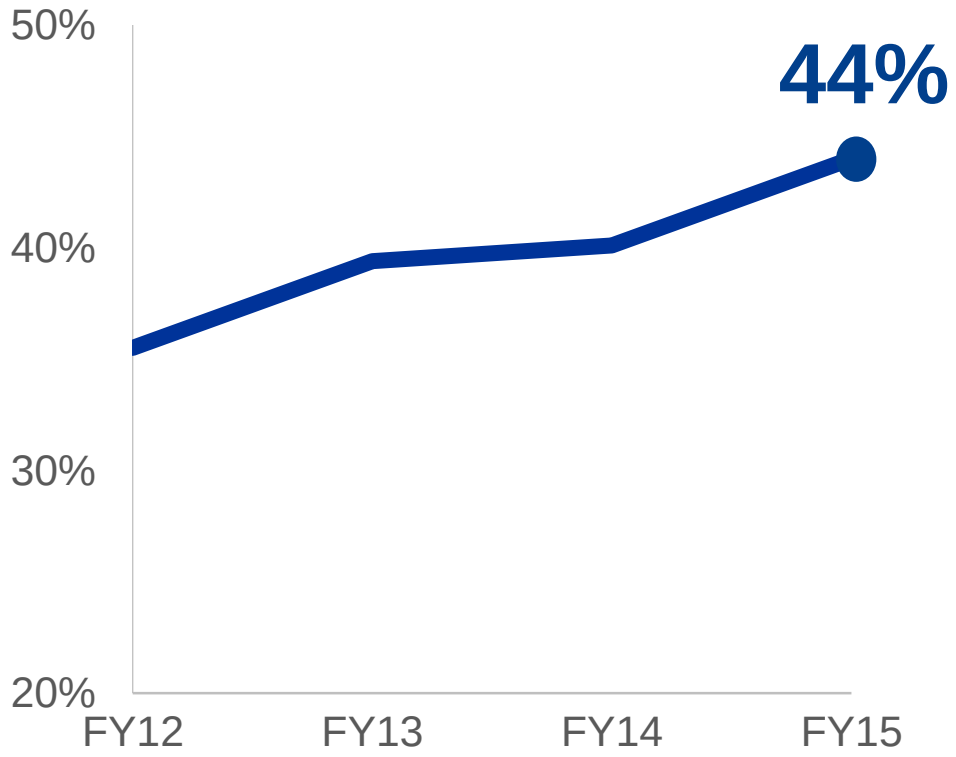
China

Thailand

Korea

Singapore

Market Share Leader in Japan



Source: Approximations of external data integrated by Santen

Source: ©2016 IMS Health; Calculated based on IMS-JPM 2001-2015 data, reprinted with permission

In Addition to Organic Growth, Santen Is Proceeding with Further Ophthalmology Specialization with Maximum Business Synergy

2012

Novagali Pharma acquisition

- Strengthened R&D, including Novasorb® formulation technology
- *IKERVIS* (now launched in several European countries)
- Supported growth in global business platform

2014

Merck ophthalmology product acquisition

- Acquired product revenue 21.6 billion yen (FY15)
- Reinforced global presence
- Accelerated EU and Asia growth
- Increased profitability
- Expanded key glaucoma franchise

2015

Anti-rheumatic (RA) pharmaceutical business divestment

7% RA
93% Op

100%

Ophthalmology

- 45b yen received to support future investment

2016

InnFocus acquisition: enhanced pipeline with *InnFocus MicroShunt* glaucoma implant device

- Santen to enter high growth glaucoma device area
- *MicroShunt* U.S. launch expected in 2020/2021
- CE marked in Europe
- Develop globally

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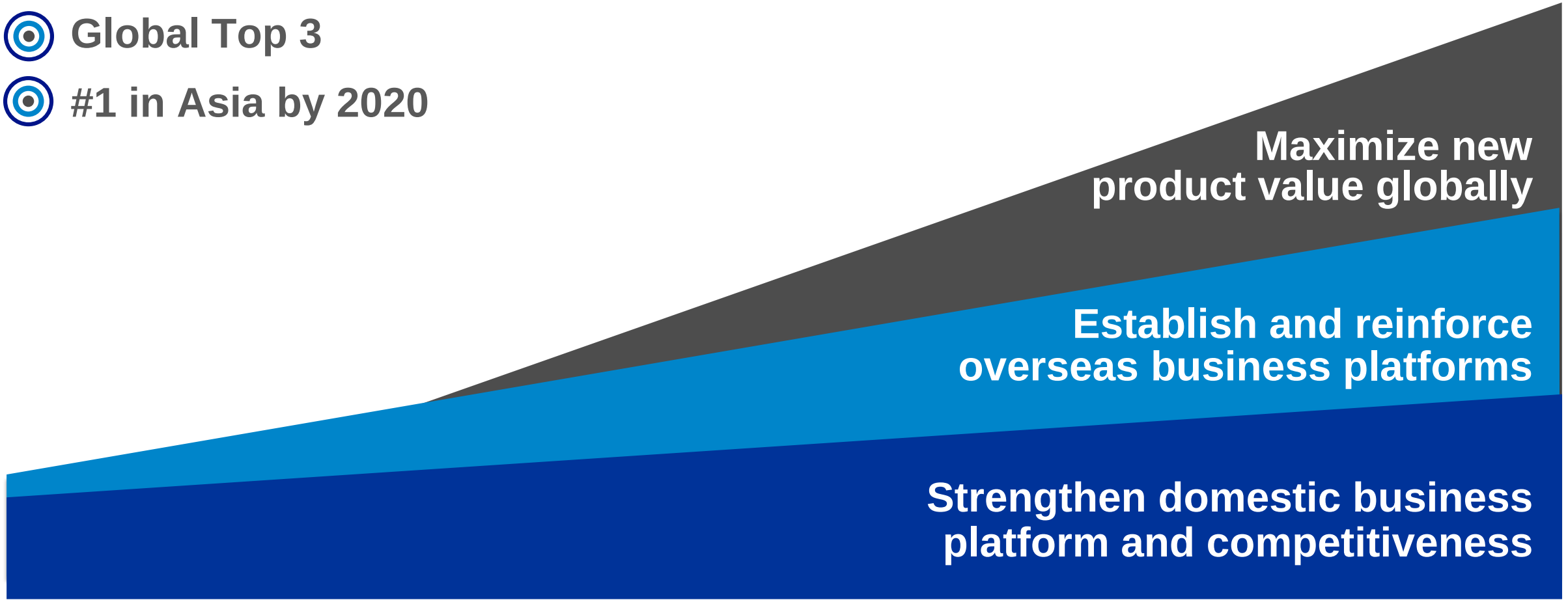
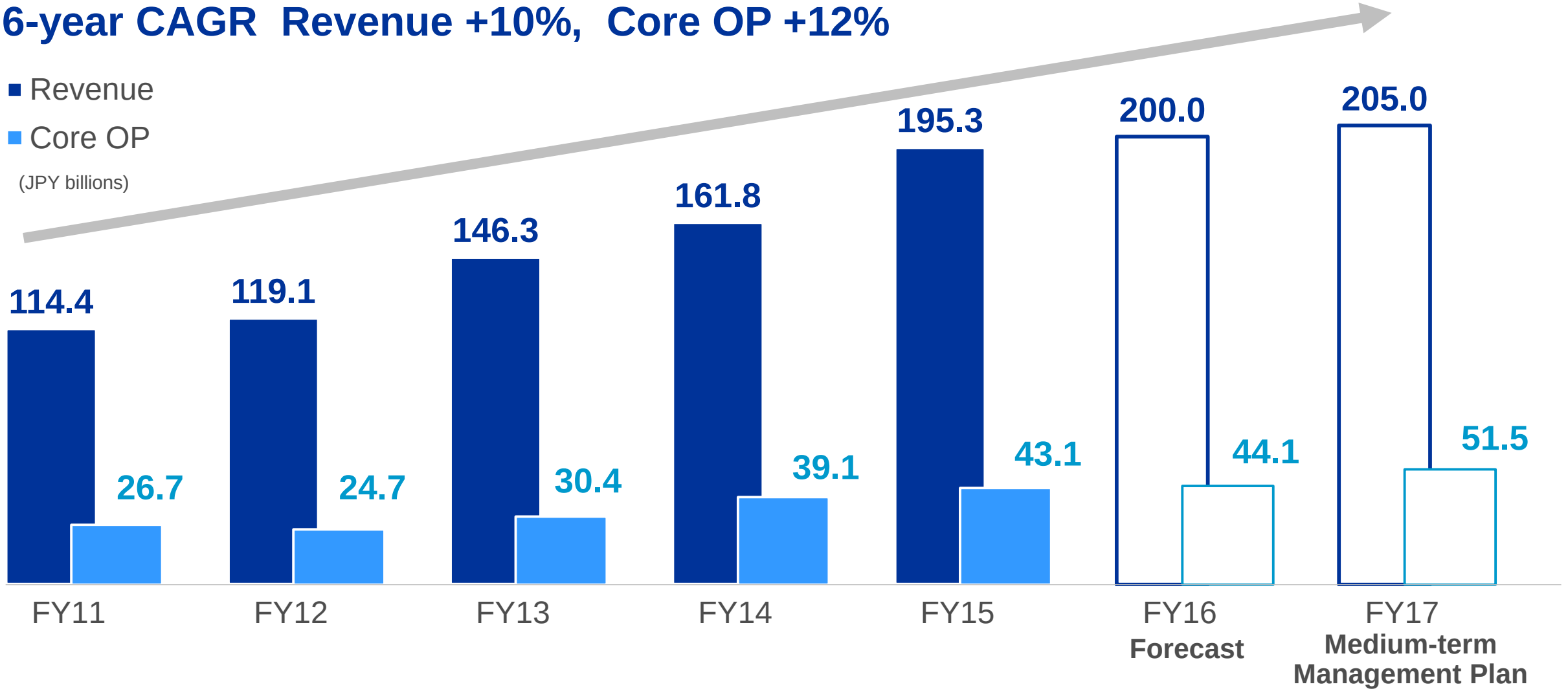
Establishing a Global Presence as a Specialized Pharmaceutical Company

- Global Top 3
- #1 in Asia by 2020



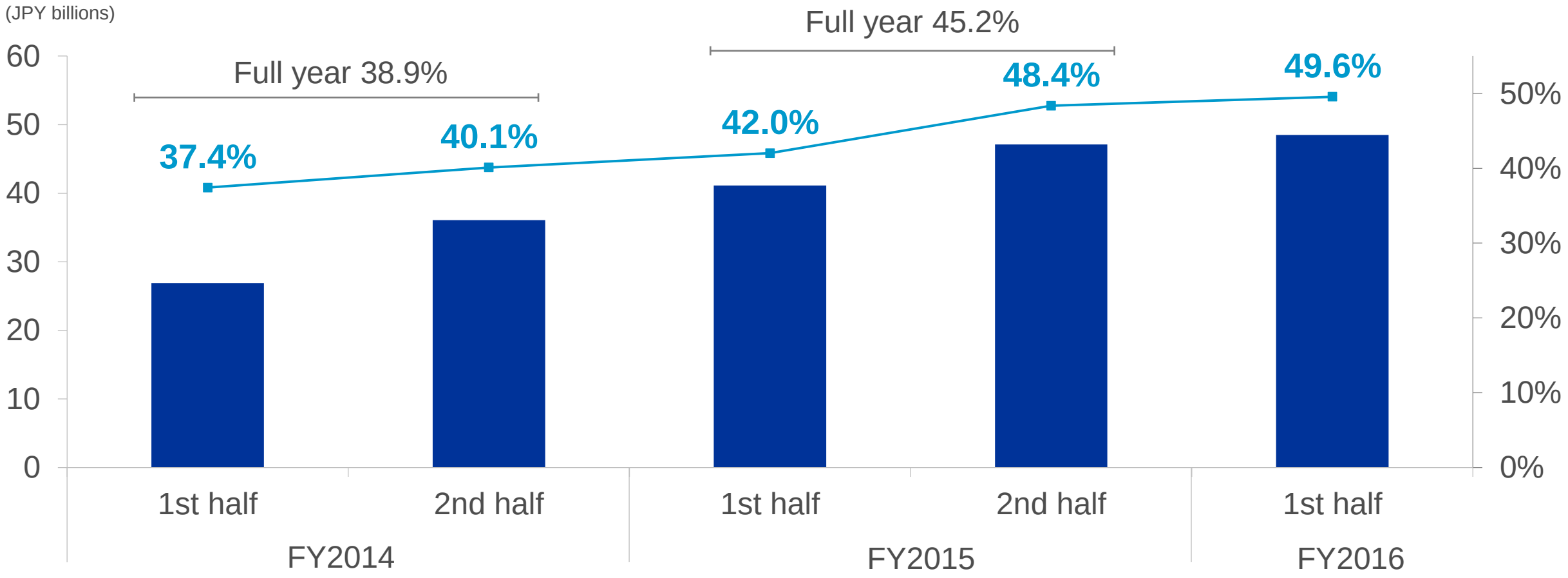
Steady Earnings Growth with Ophthalmology Specialization

6-year CAGR Revenue +10%, Core OP +12%



*FY17 OP: 51.5 billion yen used on IFRS core basis, 45.0 billion yen used on J-GAAP.

Steady Growth New Global Products As We Seek Total Ophthalmic Solutions



NEW PRODUCTS: *Cosopt, Tapros, Tapcom, Diquas, Ikervis, Alesion, Eylea*

Trend of New Product Revenue and Ratio to Revenue

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Steady Pipeline Launches Will Meet Unmet Medical Needs

Domain	Launched in FY2011-2013	To be Approved in FY2014-2017	To be Approved FY2018 Onward
Glaucoma	*Tapros Mini*	DE-111 (tafluprost/timolol combination)	DE-117 (omidenepag isopropyl) DE-126 (sepetaprost) DE-128 (*MicroShunt*) US
Corneal and Conjunctival Disease (Dry Eye)		*Ikervis* (ciclosporin)	
Retinal Disease, Uveitis	*Eylea*		DE-109 (sirolimus injection) DE-120 (VEGF/PDGF inhibitor) DE-122 (Anti-endoglin antibody)
Other Infection, Allergy	*Alesion* *Cravit* 1.5%	*Vekacia* (ciclosporin)	

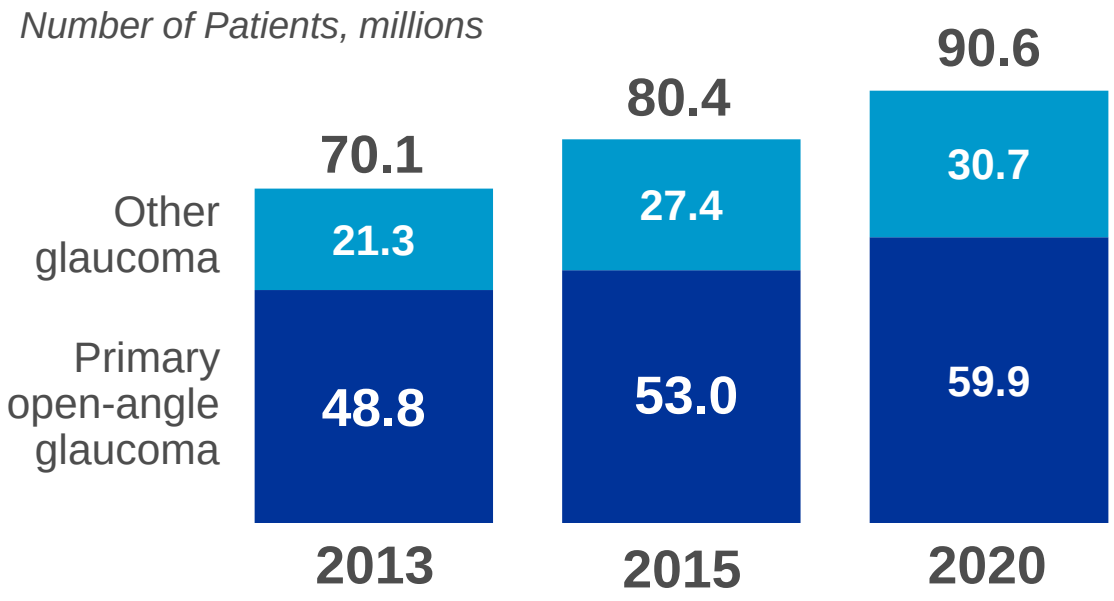
Global Product | Japan (Asia) Product

*Excluding GE products. With regard to LCM products, those products to be launched in multiple regions are included.

Glaucoma Market is Growing

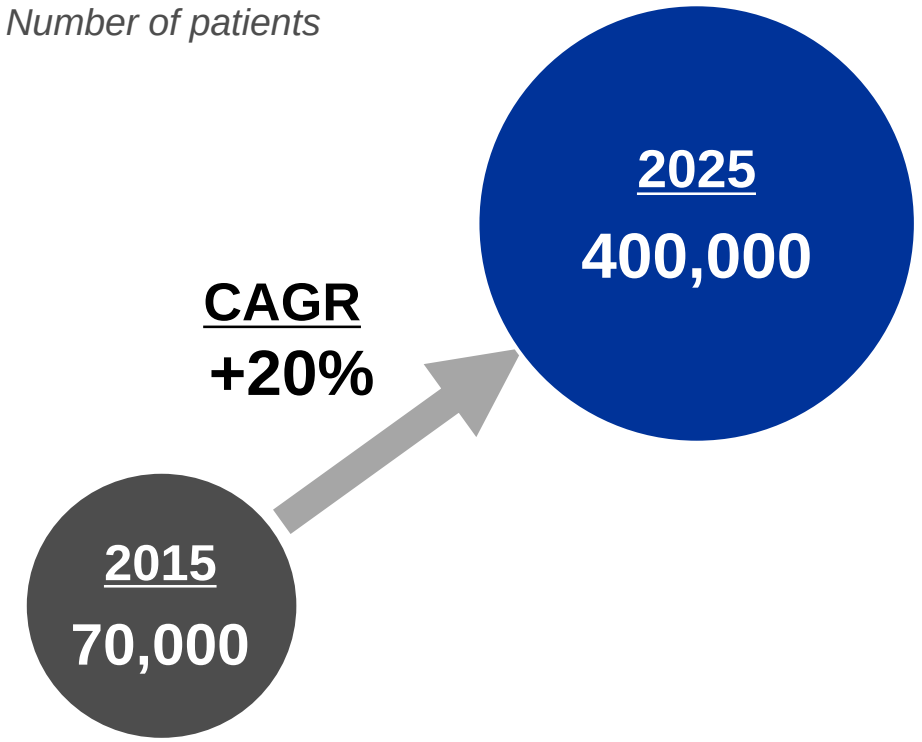
Blindness from open-angle glaucoma forecast to reach 5.9 million people globally by 2020

Global Glaucoma Patient Population



U.S. Primary Open-Angle Glaucoma		
2013	2015	2020
3.3	**3.5**	**3.8**

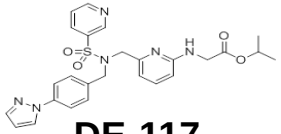
U.S. Demand for Micro-Invasive Glaucoma Surgery (MIGS)



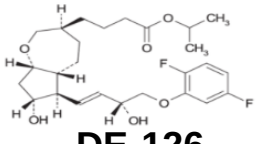
Sources: Market Scope, *Br J Ophthalmol.* 2006 Mar; 90(3): 262–267., Santen estimates

Santen's Glaucoma Portfolio is Positioning to Address All Stages of Glaucoma

	Mild	Moderate	Severe
Current treatments	DRUG THERAPIES: Mono-therapy → 2 Drugs → 3 Drugs or more		FILTERING SURGERY: Trabeculectomy, Tube Shunt
	Laser		
Santen's future treatment options	Single drugs based on various MOAs: *Tapros*, *Timoptol*, *Trusopt*, *Detantol*, *Rescula*		
	Combination drugs based on other MOAs: *Cosopt*, *Tapcom*		
	MIGS (Micro-Invasive Glaucoma Surgery)		

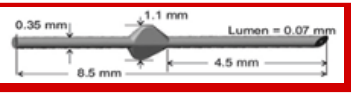


DE-117



DE-126

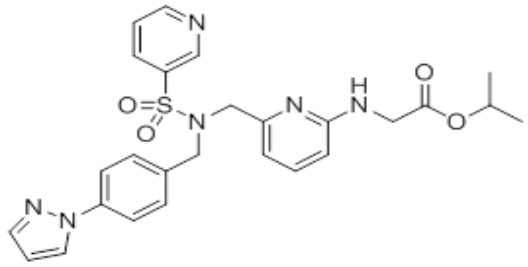
MicroShunt (DE-128)



Santen Glaucoma Pipeline:
Building A Powerful Glaucoma Treatment Franchise

DE-117

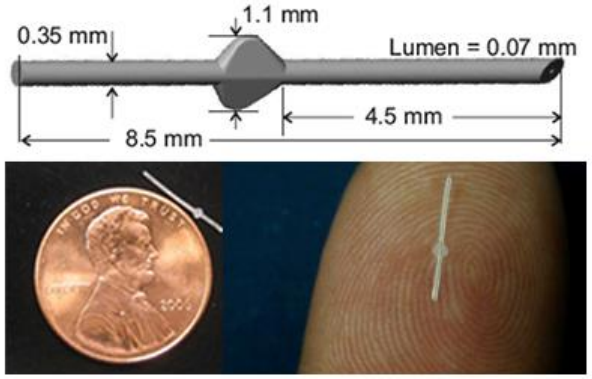
- First-in-class candidate with a novel EP2 agonist MOA
- Study on-going for non-/low-responders of gold standard glaucoma treatment, prostaglandin analogues



Mid-FY18
expected approval
(Japan)

MicroShunt (DE-128)

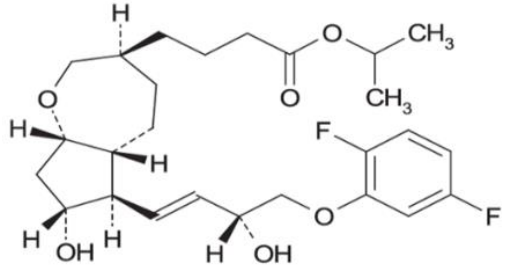
- First true replacement for trabeculectomy, “gold standard” glaucoma surgery for moderate-severe patients



FY19~FY20
expected approval
(US)

DE-126

- First-in-class candidate with a novel EP3 / FP agonist MOA.
- Expected to show a superior intraocular pressure lowering effect compared to FP receptor agonists



FY21~
expected approval

DE-128 *MicroShunt*: Less Invasive and Greater Adherence

DE-128 is being developed to address unmet needs compared to existing treatment options

Unmet needs of current treatments

- Compliance/Adherence issue of drug treatment/Lack of sustained efficacy of laser
- Invasiveness and post-op complications of trabeculectomy

MicroShunt

- One surgery to achieve mean IOP 11.1mmHg after 3 years, 49% reduction from baseline
- Procedure similar, but simplified compared to trabeculectomy
- Adverse effects observed comparable or less than other surgical procedures and devices reported in the literature

Planning, if approved, full-scale launch in the U.S. in 2020/2021

Annual peak revenue potential estimated at over $200 million

Source: J Glaucoma. 2016 Feb;25(2):e58-65.

MicroShunt (DE-128): Simple Procedure / Low Burden

Please click here for animated video of surgical procedure

(Video is 1 minute 31 seconds and contains no audio)

DE-109: Candidate for Unmet Medical Need of Uveitis

Highlight on Sirolimus Injection (DE-109)

SAKURA Phase III Program completed, topline results announced Nov 2016

Included one large pivotal trial (SAKURA 1), one supportive trial (SAKURA 2), and ongoing long-term safety extension trial (SPRING); designed to confirm dose with the optimal benefit-risk profile

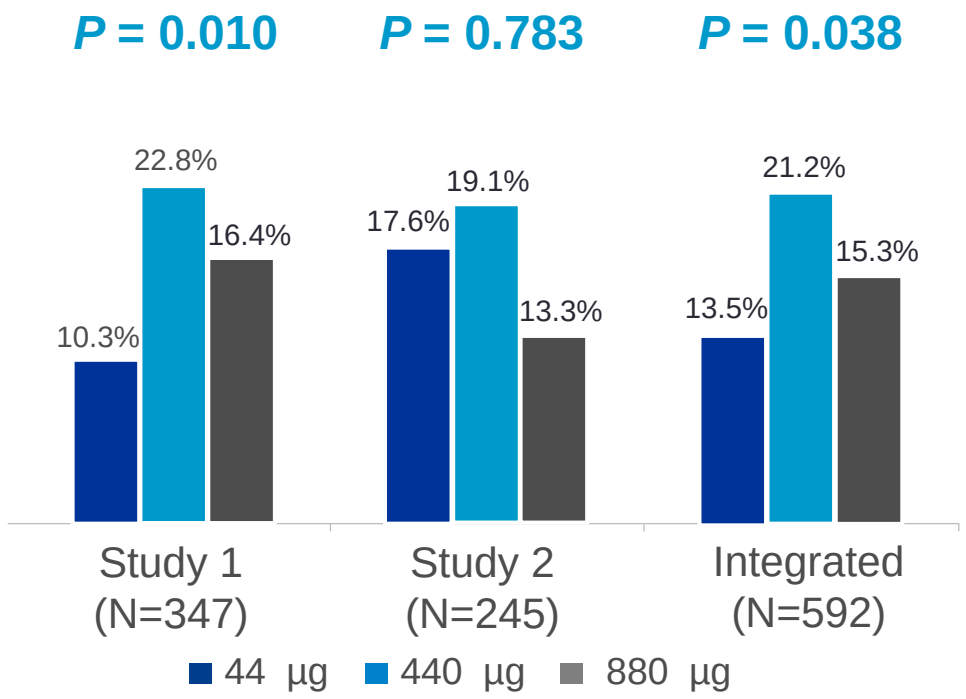
NDA submission to the FDA (US) planned in fiscal Q4 (Jan–Mar); submission to EMA (Europe) later in 2017

If approved, launch in U.S. planned for first half of 2018 and peak sales potential estimated at over 10 billion yen

DE-109: Candidate for Unmet Medical Need of Uveitis

SAKURA Program Supports Benefit-Risk Profile of Sirolimus Injection, with 440 µg as Optimal Dose for Treatment of Non-Infectious Uveitis of Posterior Segment

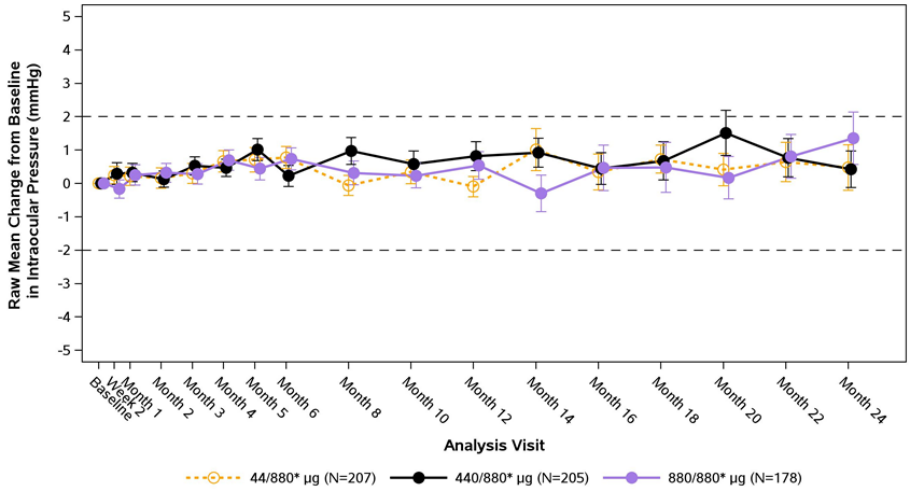
VH 0 Response, Intent to Treat (ITT) Population P-value (440 µg vs. 44 µg)



Reduction or Elimination of Corticosteroids (≤5 mg/day)

Tapering of Corticosteroid for Intent-to-Taper Patients	44 µg N=32	440 µg N=46	880 µg N=32
Baseline mean dose, mg/day	24.2	**26.2**	20.74
Tapering success (n)	(22) 68.8%	**(32) 69.6%**	(22) 68.8%
Tapering success and VH 0/0.5+ (n)	(9) 40.9%	**(20) 62.5%**	(10) 45.5%

Minimal Impact on IOP post Sirolimus Intravitreal Injection



Results of SAKURA study 1 was reported on Ophthalmology. 2016 Nov;123(11):2413-2423

*Patients received 44, 440 or 880 µg double-masked dose for the first six months, and then all patients received 880 µg open-labeled dose.

Pipeline Development: To Quickly Deliver Important Ophthalmic Treatment Solutions

DE-117	**Q2/Q3 FY2017 Filing in Japan**	
DE-126	**FY2016 P2b Start**	
DE-109 (*OPSIRIA*)	**Jan-Mar 2017 Filing in US**	**Jan-Jun 2018 Launch in US**
	Calendar 2017 Re-filing in EU (After filing in US)	
DE-120	**FY2016 P2a Completion**	
DE-122	**FY2017 P1/2 Completion**	
DE-128 (*MicroShunt*)	**Calendar 2018-2019 P2/3 Completion**	**Calendar 2020-2021 Launch in US**

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To Meet Unmet Medical Needs, Expanding Global Partnership Alliances

Santen is working closely with excellent companies, institutes, and academia

Santen

In Conclusion, Santen Is…

- Specialized in ophthalmology
- Pursuing unmet medical needs
- Building high customer satisfaction with customer-oriented strategy
- Steadily growing earnings driven by global new products
- Enjoying high market share in Japan and continuing to grow in Europe and Asia
- Preparing for business expansion in the U.S and other regions
- Developing treatments for all stages of glaucoma in our substantial and high-growth franchise
- Expecting to file drug candidates DE-117 and DE-109 to government agencies in 2017
- Building partnerships with leading companies and institutions worldwide


Santen
A Clear Vision For Life®

For Reference: SAKURA Development Program

Sirolimus injection study Assessing double-masKed Uveitis tReAtment (SAKURA)

Phase 3, Multicenter, Randomized, Double-Masked Study Assessing the Safety and Efficacy of Intravitreal Injections of DE-109 (Sirolimus Injection, 3 Doses) for Treatment of Non-infectious Uveitis of the Posterior Segment

Objective	To evaluate the safety and efficacy of sirolimus injection of 440 µg and 880 µg sirolimus vs. active comparator (44 µg) for the treatment of non-infectious uveitis of the posterior segment	
Principal Eligibility Criteria	• Diagnosis of active NIU of the posterior segment • VH score >1+ (study eye, modified SUN scale) • BCVA: ≥19 ETDRS letters or 20/400 (study eye); Vision ≥20/200 (fellow eye)	
Study Design	Randomized in 1:1:1 ratio to receive 44 µg (active control), 440 µg, or 880 µg by intravitreal injection for 2 months for a total of three doses; safety follow up for up to 24 months	
Primary Endpoint	Vitreous Haze Score = 0 at Month 5	
Clinical Sites	Largest global clinical program in NIU-PS: 103 sites in 15 countries across the US, EMEA, India, Latin America, and Japan	
	STUDY 1	**STUDY 2**
Patients (N)	347	245
Timing	Subjects enrolled through March 31, 2013, completed October 2013	Subjects enrolled on or after April 1, 2013, completed October 2016