

Unlocking the Secrets to Successful Japan Market Entry



FEB 10, 2022



HEADLAND
STRATEGY GROUP

Today's Speakers



**ANDREW
MCKEE**

MD,
Founder,
CEO



**KEN
SHIMOKAWA**

PhD,
BD/M&A
Expert, Sr. EM



**AKIHIKO (AKI)
WATANABE**

PhD,
Senior
Consultant



**LUDWIG
KANZLER**

PhD,
CEO of Hanegi
Solutions

Based in the SF Bay Area

Ex-Genentech, McKinsey, Google

Passionate about creativity, teams,
learning, inclusivity, and high-quality
solutions

Japanese: intermediate

Based in the SF Bay Area

25+ years' experience (BD/M&A,
VC, R&D, consulting)

Ex-Santen, Astellas

23 VC or Partnering-stage deals

Japanese: native fluency

Based in Japan

35+ years' experience (BD/Open
Innovation, R&D, Commercial,
Consulting)

Ex-Teva Japan, Kyowa Kirin,
Bayer, NapaJen

Japanese: native fluency

Based in Japan

25 years' experience

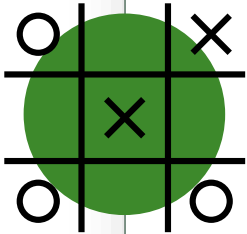
Japan regulatory, pricing, marketing
& sales expert

Longtime Headland collaborator

Former Partner, McKinsey &
Company (Tokyo office)

Japanese: fluent

Typical questions we hear from our clients about Japan



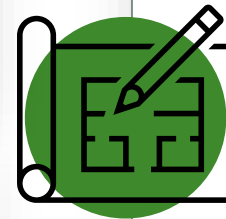
Commercial and market planning

- How big is the overall opportunity?
- How do the patient journey, prescriber behavior differ from other markets?
- What reimbursement price can we get?
- When should we sequence a Japan launch?



BD/M&A and partnering

- Do we need a partner? If yes, at which stage?
- What are the pitfalls of partnering vs. going alone? How would we manage them?
- Who would be the best partner? How do we get the best potential partners interested in us?
- What are the most important deal terms to ensure long-term success?

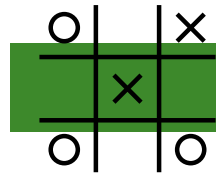


Trial design and PMDA

- Can we include Japan in a global Phase III trial and go for simultaneous submission?
- Do we need to do a PK/PD bridging study? If yes, how and where?
- How do we achieve fast and effective alignment on our approach with the PMDA?
- What are the pros/cons of pre-consultation vs. full consultation with PMDA?
- How quickly can we enter the market with a regenerative medicine program?
- How do we navigate the Japanese business culture and/or language?

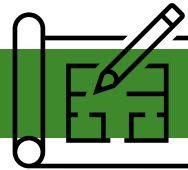


For Japan, our clients have 4 key needs



Commercial planning

- Revenue forecasting
- Primary market research (qualitative, quantitative) – MDs, patients, etc.
- Patient journey mapping
- TPP testing
- Launch pricing, market access



Trial design ± PMDA engagement

- Global trial program strategy including Japanese patients
- Trial design vetting with KOLs
- PMDA engagement, strategy (pre-consultation, full consultation)



BD/M&A, Partnering

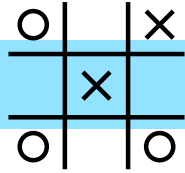
- Cross-border partnering
- Pitch deck overhaul
- Due diligence support (e.g., aNPVs, revenue forecasts, benchmarking, scenario analysis)
- Negotiation strategy and/or facilitation

End-to-end Japan entry support

- 2-year or longer support duration
- Team composition flexibly shifts as functional needs, deliverables shift over time

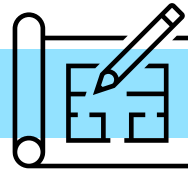


Preview of secrets we'll unlock today



Commercial planning

- ✓ Epidemiology, patient journey, and prescriber behavior can differ significantly vs. outside Japan
- ✓ MHLW pricing algorithms need to be carefully navigated
- ✓ Distributors have much more influence and broader capabilities vs. outside Japan



Trial design ± PMDA engagement

- ✓ It's possible to negotiate strategically with PMDA regarding global trial plans
- ✓ A well-prepared pre-consultation may prevent a full consultation
- ✓ You'll need help from an agency physically in Japan for PMDA interactions



BD/M&A, Partnering

- ✓ The business culture may seem impenetrable, but patience, respect, and sensitivity pay off
- ✓ Partners highly value long-term relationships and quality in their interactions and plans
- ✓ “Going alone” in Japan is becoming increasingly common

The Japanese market may seem like a black box. But the right consultancies and partners can ensure your success



Agenda

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Headland Strategy Group: Brief intro

.03

Overcoming challenges of entry

.05

Q&A, wrap up

.02

Japan: The opportunity

.04

Going alone: wholesaler insights



Agenda

.01

Headland Strategy Group: Brief intro



“

At Headland Strategy Group, **we empower growth strategy for therapeutics and diagnostics innovators**

”



We help our clients answer 3 fundamental growth questions



COMMERCIAL STRATEGY

How to commercialize innovative new products?



CORPORATE DEVELOPMENT

How to grow through deals (BD/M&A) and fundraising?



PORTFOLIO, R&D STRATEGY

How to invest in creative, compelling R&D strategies?



We serve some of the most innovative firms on the planet

United States / Europe



Japan / Asia



Note: if/as needed, Headland Strategy Group uses an ethical screen (“firewall”) policy, effective January 1 2020, to separate staff and information serving two different clients.

Our Japan credentials: Local office, seasoned team, extensive relationships, and excellent track record



Shonan iPark,
Japan

OFFICE*



YEARS
65+

Combined experience working for and consulting to **Japan-based** life science companies

5 TEAM MEMBERS

Fluent in **Japanese and English**, including for BD/M&A, PMDA meetings, and commercial primary market research



OUR PERFORMANCE:

100%

success rate for Japan-related projects since our founding (2017)

\$950M

cumulative deal value creation involving Japanese life science companies

10

Ongoing/recent clients based in Japan

8

Total deals supported involving Japanese life science companies



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Agenda

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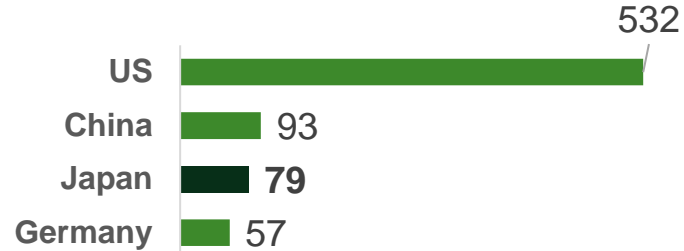
Japan: The opportunity



Japan is the 3rd largest global pharma market, driven by fundamentals and despite recent slow economic growth

LARGE HEALTHCARE MARKET OPPORTUNITY

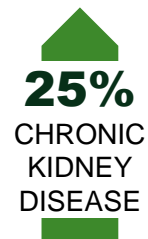
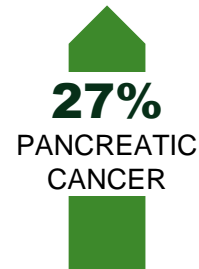
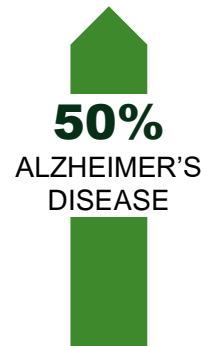
3rd Largest Pharma Market¹
(\$B USD, 2020)



STRONG MEDICAL AND DEMOGRAPHIC DRIVERS



Aging population²
(28% over 65)



Rising prevalence, select diseases³ (2009-2019)



Pricing is usually **similar to or higher than EU**



Typically, **fast uptake**; highly receptive to innovative new drugs



Generally, **coverage is widespread** for any MHLW-approved medicine*



Various financial protections to **limit patient co-pay / out-of-pocket exposure**

* The Pharmaceutical and Medical Device Agency (PMDA) is an independent agency that makes recommendations for approval by Japan's Ministry of Health, Labor and Welfare (MHLW)

1. July 2021 IQVIA Survey - Market share of top 10 national pharmaceutical markets worldwide in 2020
2. "Statistical Handbook of Japan 2020" published by the Statistics Bureau of Japan
3. [Japan Institute for Health Metrics & Evaluation](#)

Examples of companies that have entered Japan skillfully and driven growth



Key strategic partnerships to advance clinical and commercial operations in Japan; now, **plans to open a Japan affiliate**



Since 2017, has operated independently in Japan with numerous regulatory approvals



Since 2016, has operated independently in Japan, launched Galafold in 2018, with ongoing revenue growth

\$65M

initial equity investment from Takeda to combat rare diseases in 2016

\$200M

deal granting Daiichi Sankyo access to gene therapy manufacturing platform

At JPM 2022, announced plans to open a commercial presence in Japan

4 PMDA approvals since 2017. Including Pemazyre for Biliary Tract Cancer (BTC, 2021) and Tabrecta (NSCLC, 2020)

Received **\$20M**

milestone payment with the PMDA's approval of Tabrecta

Received **\$40M**

in milestones for PMDA approvals (Jakavi, MF; Olumiant, RA)

First and only oral therapy approved to treat Fabry Disease in Japan

43% YoY revenue growth in 2020 due in-part to strong patient demand in Japan

17% YoY revenue increase in 2021, plus double-digit guidance for 2022



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Agenda

.03

Overcoming challenges of entry



Japan: numerous challenges to overcome



Pricing, market access

- MHLW's pricing/reimbursement algorithms require expertise to navigate
- MHLW requires annual price erosions for branded drugs



PMDA interactions

- PMDA can seem intimidating to non-Japanese
- PMDA interactions require expertise and native-level fluency
- Requires in-country presence and real-time interpretation



Commercial and development planning

- Compared to other major markets:*
- Addressable epidemiology can be much higher/lower
 - Diagnosis and/or treatment patterns can differ significantly
 - MD areas of focus and treatment settings can differ

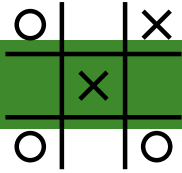


Doing business in Japan

- Partnering can feel like a black box
- Unfamiliar language and business culture norms, mores

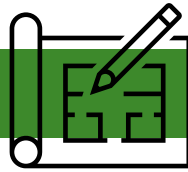


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BD/M&A, Partnering

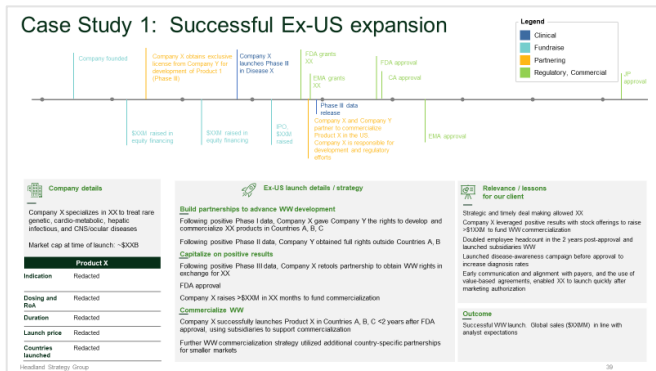
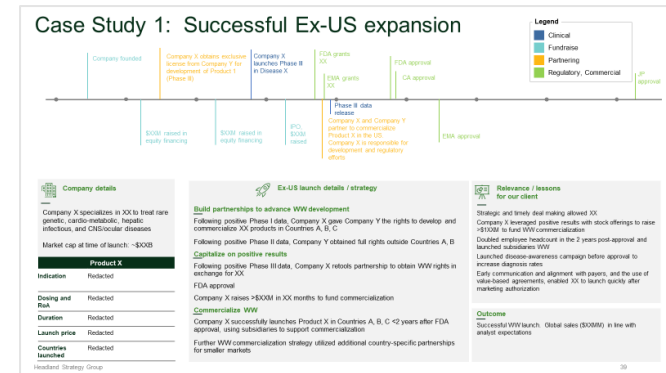
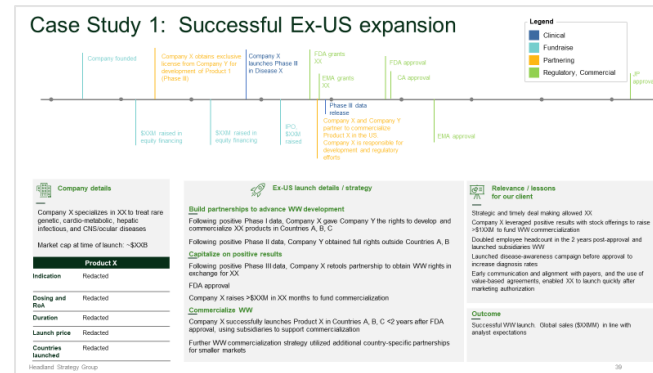
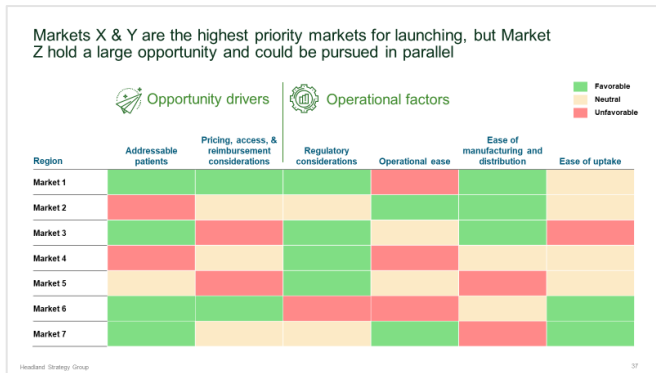
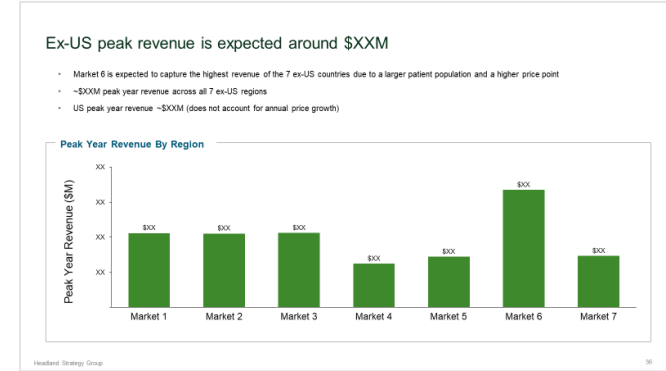
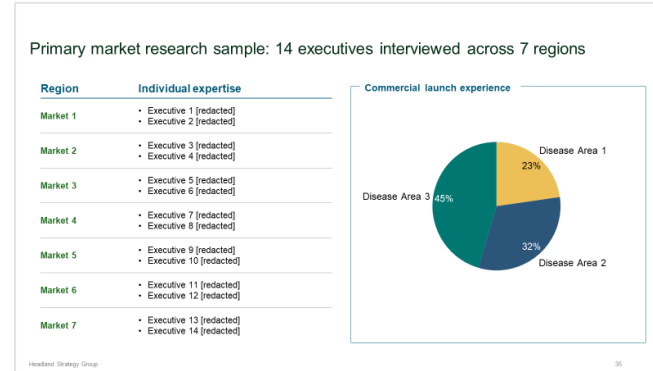
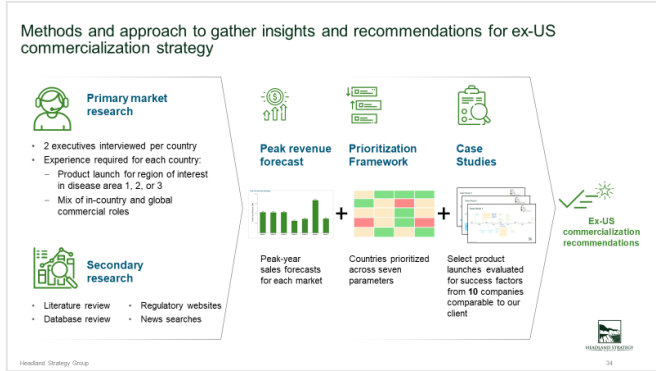
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End-to-end Japan entry support

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Case Study: Ex-US commercialization strategy for an oncology-focused US biotech



How was our work unique and important?

- We evaluated key commercialization elements in 7 markets (European and Asian) to inform ex-US commercialization strategy
- We used a multipronged approach to paint an exhaustive picture of the commercial investment and risks involved, plus potential benefits in each ex-US market
- Our findings informed launch order and partnering recommendations in each market, and the investment needed to pursue each strategic option

Case study: Primary market research to inform commercial and development planning in Japan



What was our impact?

A US health care firm was seeking to conduct clinical trials for polypoidal choroidal vasculopathy (PCV in Japan). They needed help understanding the disease prevalence and patient journey to shape their clinical development strategy



How we helped

- ✓ Conducted research interviews with top key opinion leaders in South East Asia
- ✓ Evaluated key criteria to determine the quickest development path, leanest financials, and highest translatable proof of concept from early to late-stage development
- ✓ Analyzed difference in prevalence, treatment, and disease progression of PCV in Japan and the US
- ✓ Recommended top clinical development options to pursue Japanese CDP goals

Executive Summary

PCV has high unmet needs and prevalence greater in SE Asia than the US (~XX% vs. XX% of population)

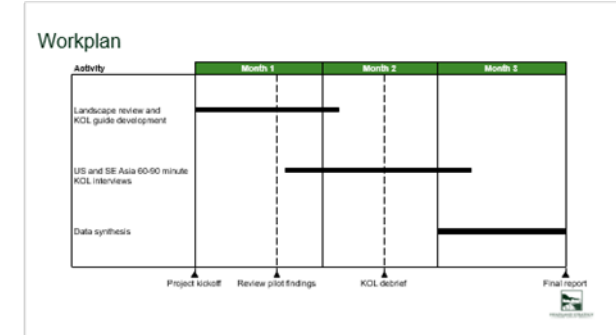
- In Japan, PCV prevalence is ~XX patients (~XX% of "wet AMD" in Japan)
- In US, prevalence is ~XX patients (~XX% of "wet AMD" in US)
- SOC anti-VEGF monotherapy treats exudation, with short-term rescue PDT, yet disease always recurs
- Unmet needs:
 - Frequent anti-VEGF injections, ranging from XX to XX per year
 - Disease progresses despite SOC (recurrent fluid, massive sub-macular hemorrhage, vision loss)
 - ~XX% of patients don't respond to anti-VEGF leading blindness and have worse outcomes
 - PDT has short-term efficacy as rescue therapy, but has long-term side effects
 - Patients less with chronic disease for 2-3 decades due to younger age of presentation vs wet AMD (65-70ys vs 75-80ys)

Clinical development strategies are feasible in Japan, with [REDACTED] strategy

- XX sites are experienced and active in studying PCV
- [REDACTED] study in Japan, evaluating XX, recruited ~XX patients across XX sites
- Japan: feasible to enroll given [REDACTED]
- US: appears feasible with [REDACTED]
- POC Phase 1b/2 designs could include: (1) XX endpoints (2) XX

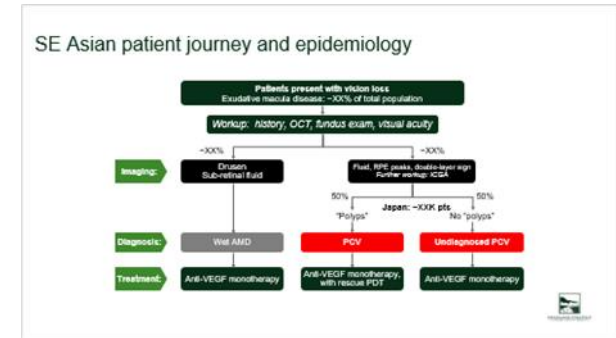
Recommendations

- [REDACTED]



Disease Overview

PCV evolves over decades as a choroidal neovascular disease with eventual exudation, hemorrhage and vision loss



In US and Japan, retinal specialists use [REDACTED] approaches for diagnosis

XX is the gold standard for imaging-based diagnosis, but other imaging modalities are used to further define the disease features, and to monitor response to treatment

- Fundus Photography**
 - Large choroidal neovascular and "polypoid" blebs visible on fundus photographs
 - Isolated vascular network (IVN)
 - Highly reflective drusen, with or without subretinal fluid
- Fluorescein Angiography (FA)**
 - Imaging modality reveals an abnormality in choroidal neovascularization (CNV)
 - Imaging modality used to assess for blood in retina (IA, leakage, fibrosis)
 - Imaging modality used to assess for subretinal fluid
- Indocyanine Green Angiography (ICGA)**
 - Choroidal neovascularization
 - Choroidal neovascularization, seen as half of cases
 - Choroidal neovascularization
- Optical Coherence Tomography (OCT)**
 - Sub-RT, pigmentation
 - Higher reflective drusen
 - Fluid in the subretinal space (RS) indicates the site of neovascularization
 - Choroidal neovascularization (CNV) is the most common cause of the RS, but leakage is characteristic
 - Higher rates of choroidal neovascularization
- Adaptive Imaging Modalities**
 - General hyperreflective area with a surrounding higher reflectance ring, corresponding to polypoidal disease
 - General hyperreflective area, corresponding to branching choroidal neovascularization
 - Small, intermediate reflectance in ICGA and OCT for diagnosis and monitoring of treatment
- OCT angiography**
 - The combination of the fundus and cross-sectional OCT angiography images provides anatomical information about neovascularization
 - Best resolved above age 1 (OCT is less sensitive to smaller vessels)
 - Quantitative analysis of neovascularization in the macula
 - Only 50% of patients with angiography OCT angiography from recent study performed in Korea

Major unmet needs and desired improvements

Unmet need	Desired benefits of new biopharma therapies
1. Frequent injections are a high burden to patients, retina practices, and payers	<ul style="list-style-type: none"> Lower incidence of fluid Long-term preservation of visual acuity despite exudation Lower frequency (2-3 year versus 4-6 year)
2. Massive sub-retinal hemorrhages (aneurysm/polypoid blebs) require surgery and patients risk retinal scarring and permanent vision loss	<ul style="list-style-type: none"> Better resolution of "polyps" to minimize hemorrhage Preservation of visual acuity Lower hemorrhage events (1-2% with treat-and-extend, higher with PRN)
3. Under-diagnosis and under-treatment of polyp-free PCV because of a small mis-understanding by retinal specialists that underlying PCV is a malignant and maturing chronic neovascular disease	<ul style="list-style-type: none"> Prevention of "polyps" (measured via OCT) showing reduced exudation of RNV and less leakage of RPE by new "leaky" Lower injections and excursions, better VA
4. Neurodegeneration due in part to recurring exudation and progressive neurovascularization	<ul style="list-style-type: none"> Improving visual outcomes by protecting retinal cells Better visual outcomes over the long term



Case study: Supporting PMDA pre-consultations for a client with evolving, nuanced development strategy needs

Context

- A US biotech with a novel drug for a GI disease needed help engaging with PMDA about Japanese patients in a global Phase III study
- The company had previously retained another consultancy, but had received very conservative answers about how to approach the PMDA

Workplan

We designed a thoughtful approach with sufficient time for strategic discussions, planning, and iterations

	May	Jun	Jul	Aug
Preparation	█			
Application development	█	█		
Pre-consult meeting		█		
Debrief, support next steps			█	

Credentials

- ✓ We leveraged our extensive experience, having supported numerous PMDA consultations for wide range of biopharma companies across company size and specialty
- ✓ We have the industry experience, business culture, and linguistic know-how to understand what is said vs. implied, and how to confirm with PMDA (in Japanese)
- ✓ Our extensive R&D strategy and commercialization credentials helps us understand our client's development strategy and evaluate strategic options

Considerations

We used the following considerations to best help our client approach the PMDA

Category	Consideration
Disease and unmet need	How well do the SOC and pipeline competition perform on efficacy, safety, and other parameters?
	What is the addressable epi? In Japan, in what settings will diagnosis & treatment occur?
Program-specific	What preclinical and clinical data have been shown to date?
	How many Japanese patients and trial sites are included in the current global development plan?
	Has a PK or bridging study been planned or conducted yet?
Client-specific	What resource constraints to do you have?
	What is your risk tolerance?
	How important is launching in Japan? What is your commercialization plan?

Outcome

- ✓ We successfully steered our client through 2 successful pre-consultations as the data for their program, and strategic plans, evolved
- ✓ As a result of our work, a full-consultation with the PMDA was not needed
- ✓ We were able to complete everything on time or ahead of schedule, and with extremely positive feedback from the client about our strategic thought partnership and facilitation of the PMDA process

Example: To overcome challenges with Japan market entry, Headland has strong connections to Japan executives

Company		Headland personal contacts (selection of senior executives)
	Alfresa Holdings Inc. (including Alfresa Pharma)	C level, VP level
	Astellas Pharma, Inc.	C level, VP level
	Chugai Pharmaceutical Co., Ltd.	C level, VP level
	Daiichi Sankyo Co., Ltd. Sankyo Co., Ltd.	VP in Research; Some BD contacts
	Eisai Co., Ltd.	VP level
	Kyowa Kirin Co., Ltd.	C level, VP level, Director level
	Meiji Seika Pharma Co., Ltd	VP level
	Mitsubishi Tanabe Pharma Corporation	VP level
	Ono Pharmaceutical Company, Ltd.	VP level
	Otsuka Holdings Co., Ltd.	VP level
	Shionogi & Co. Ltd.	C level, VP level
	Sumitomo Dainippon Pharma Co., Ltd.	Ex. Officer level, Senior Director level
	Takeda Pharmaceutical Co. Ltd.	VP level

Going alone in Japan: Increasingly common practice, but with its own challenges

Commercial and market planning

- How big is the overall opportunity?
- How do the patient journey, prescriber behavior differ from other markets?
- What reimbursement price can we get?
- When should we sequence a Japan launch?

BD/M&A and partnering

- Do we need a partner? If yes, at which stage?
- What are the pitfalls of partnering vs. going alone? How would we manage them?
- Who would be the best partner? How do we get the best potential partners interested in us?
- What are the most important deal terms to ensure long-term success?

Extra considerations, going alone

- Are addressable patients concentrated by geography/setting and highly diagnosed, making commercialization easier?
- What CROs should we work with?
- Which wholesaler should we work with?
- How are wholesalers different from outside Japan?

Agenda

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Going alone:
wholesaler insights

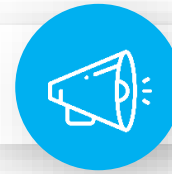


Wholesaler functions in Japan are different from other markets



DISTRIBUTION

- Order Processing / Handling
- Procurement
- Packaging and Shipping
- Delivery



PROMOTION

- **Promotion** to Pharmacies
- **Promotion** to Prescribers



FINANCE (ACCOUNT MANAGEMENT)

- **Price Negotiations/Pricing**
- **Price maintenance**
- Credit Management / Debt Collection



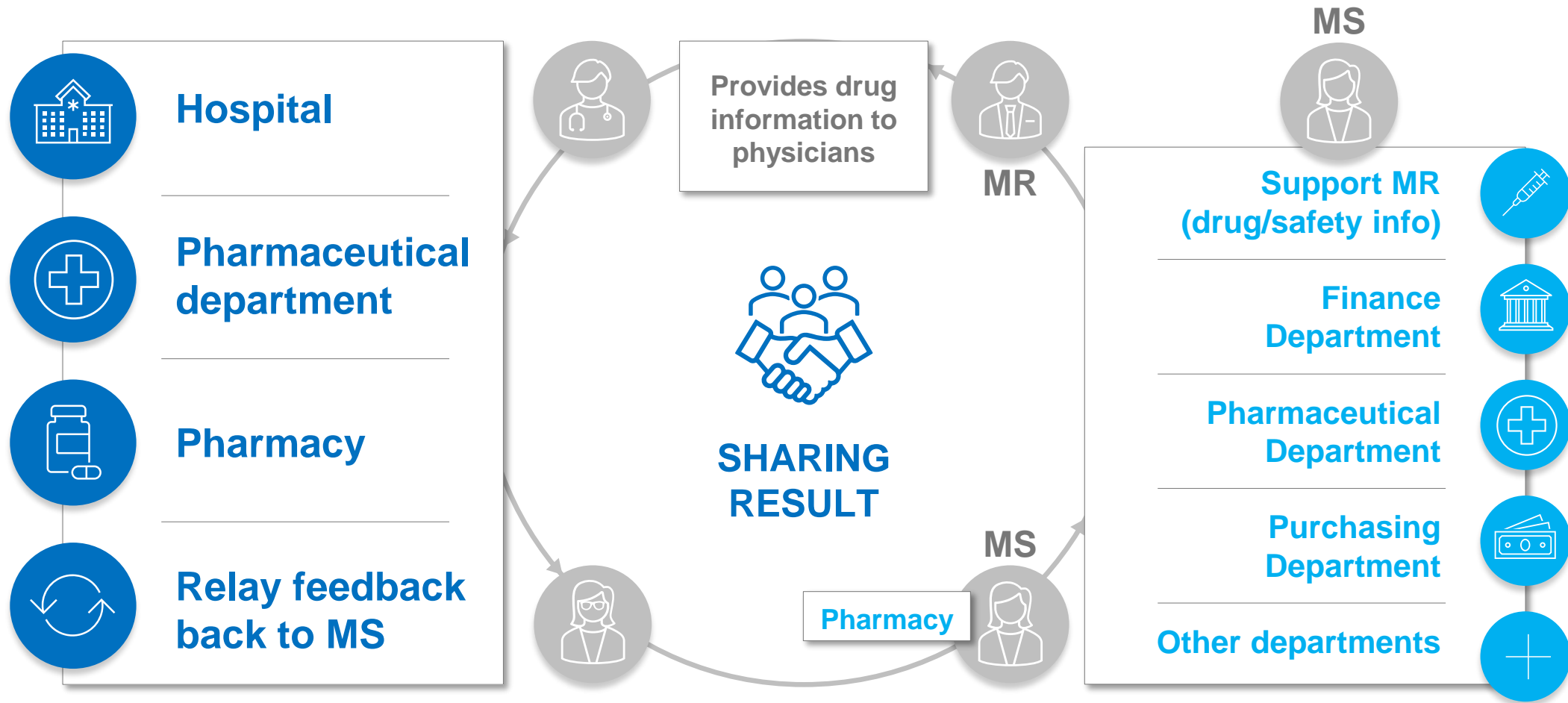
INFORMATION

- **Provision/Collection** of Safety Information
- Provision of Regional Prescribing / Stock Information
- Provide support (information & feedback) to drug buyers
- Consulting services
- Post Marketing surveys

Items in bold above may seem unusual for those not familiar with the Japanese market



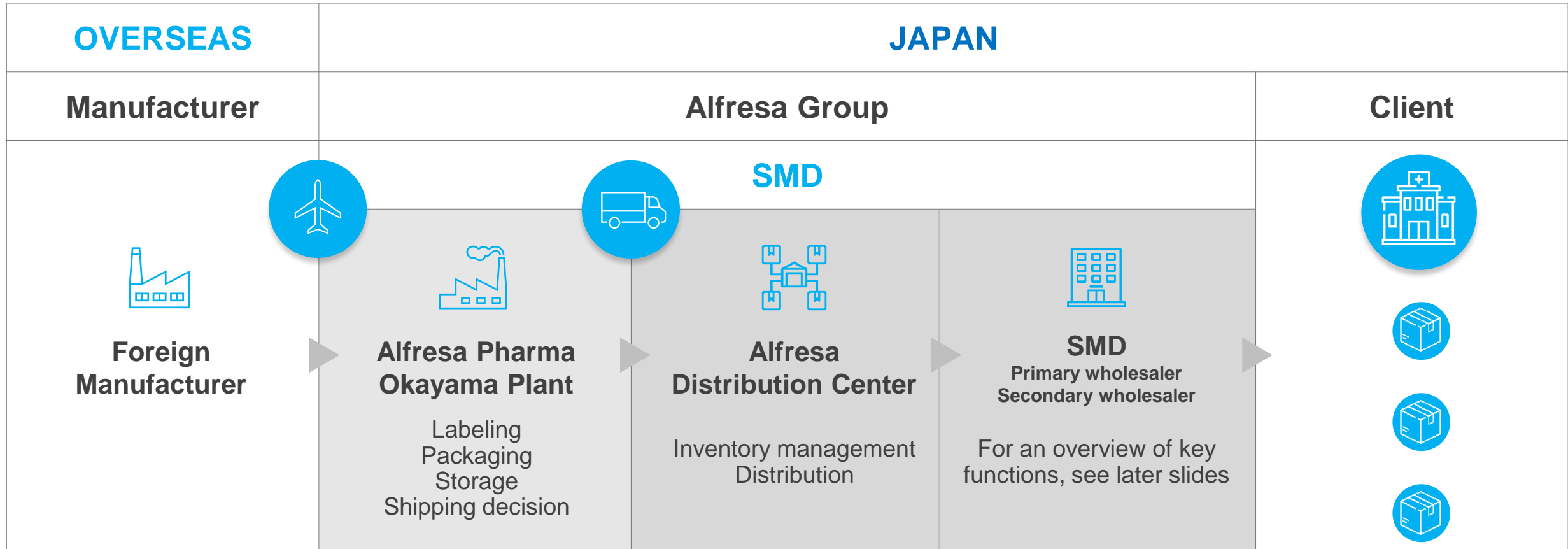
Wholesaler MSs: gaining importance vs. pharma MRs



1. Medical Representative
2. Marketing Specialist

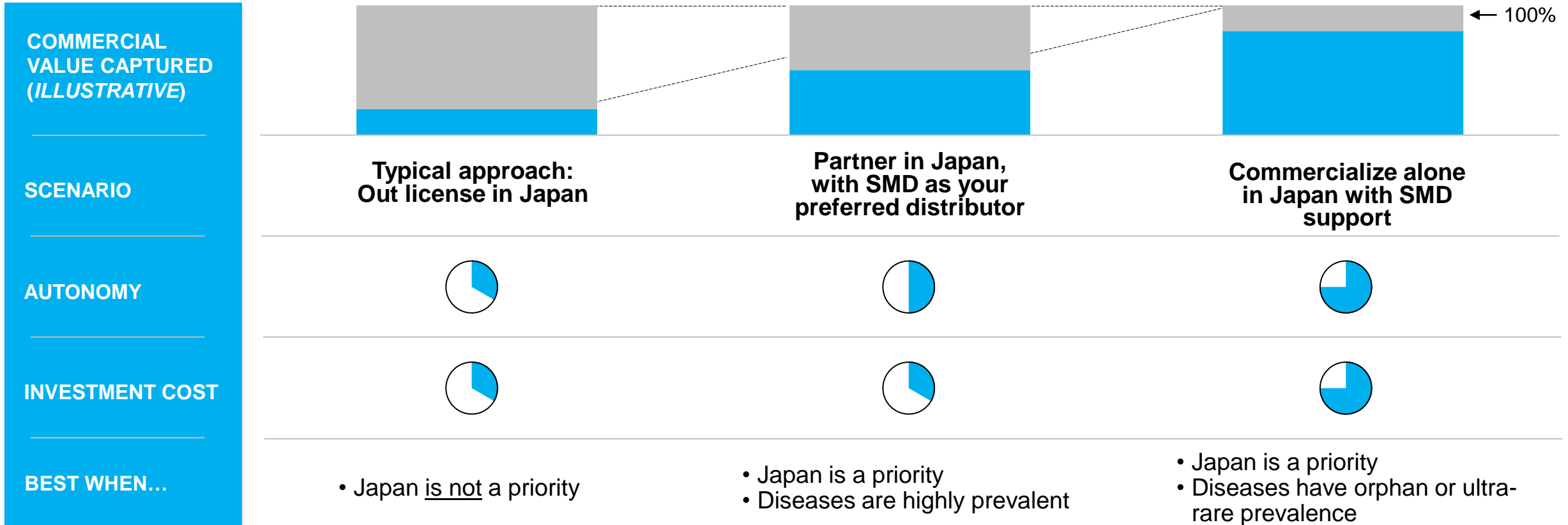
Alfresa SMD is a “one-stop-shop” for Japan market entry

Model of Integration Supply Chain (Manufacture - Distribution – Patients for rare disease)



Alfresa SMD Can Maximize Your Commercial Value in Japan

Options for Commercializing in Japan



Partner Commercial Value
 Your Commercial Value

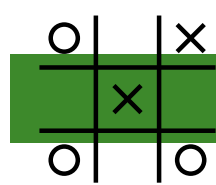
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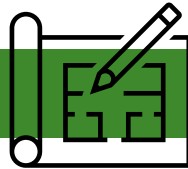
Q&A, wrap up



Summary: 4 ways we can help with Japan market entry



**Commercial
planning**



**Trial design ±
PMDA engagement**



**BD/M&A,
Partnering**

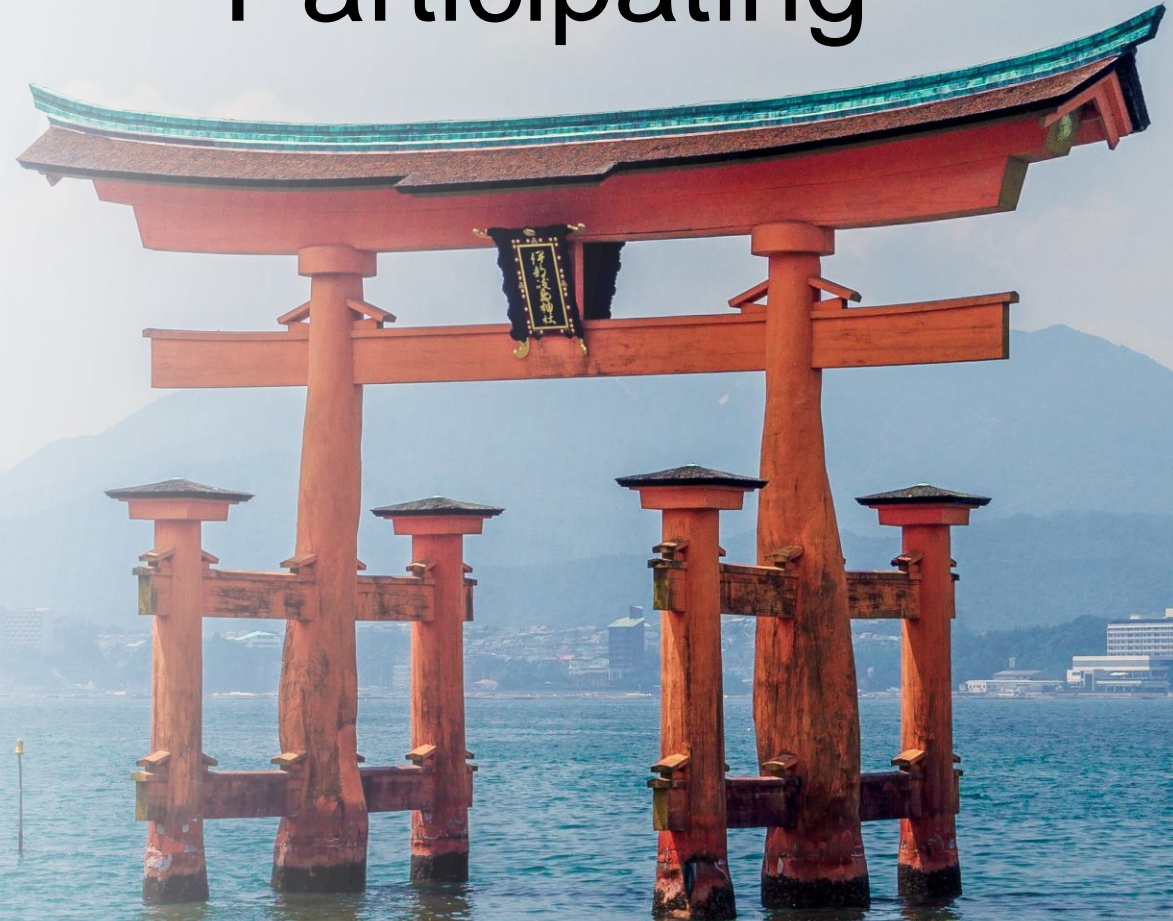
End-to-end Japan entry support



Next steps

- ❑ Please fill out our short survey
(email forthcoming)
- ❑ We'll send you these slides and
the recording
- ❑ Email Andrew McKee
(andrew@headlandstrategy.com)
for a complimentary consultation

Thank you for Participating



Thank you to our team!

Ken Shimokawa	<i>Content creation, editing, presenting</i>
Colin Waycott	<i>Content creation, logistics</i>
Bobby Brown III	<i>Content creation, logistics</i>
Celine Teoh	<i>Marketing lead, editing, coaching</i>
Akihiko Watanabe	<i>Content creation, editing, presenting</i>
Ludwig Kanzler	<i>Content creation, editing, presenting</i>
Diane Wallick	<i>Scheduling, communications</i>
Tak Yamaguchi	<i>Editing</i>
Andrew McKee	<i>Content creation, editing, presenting</i>



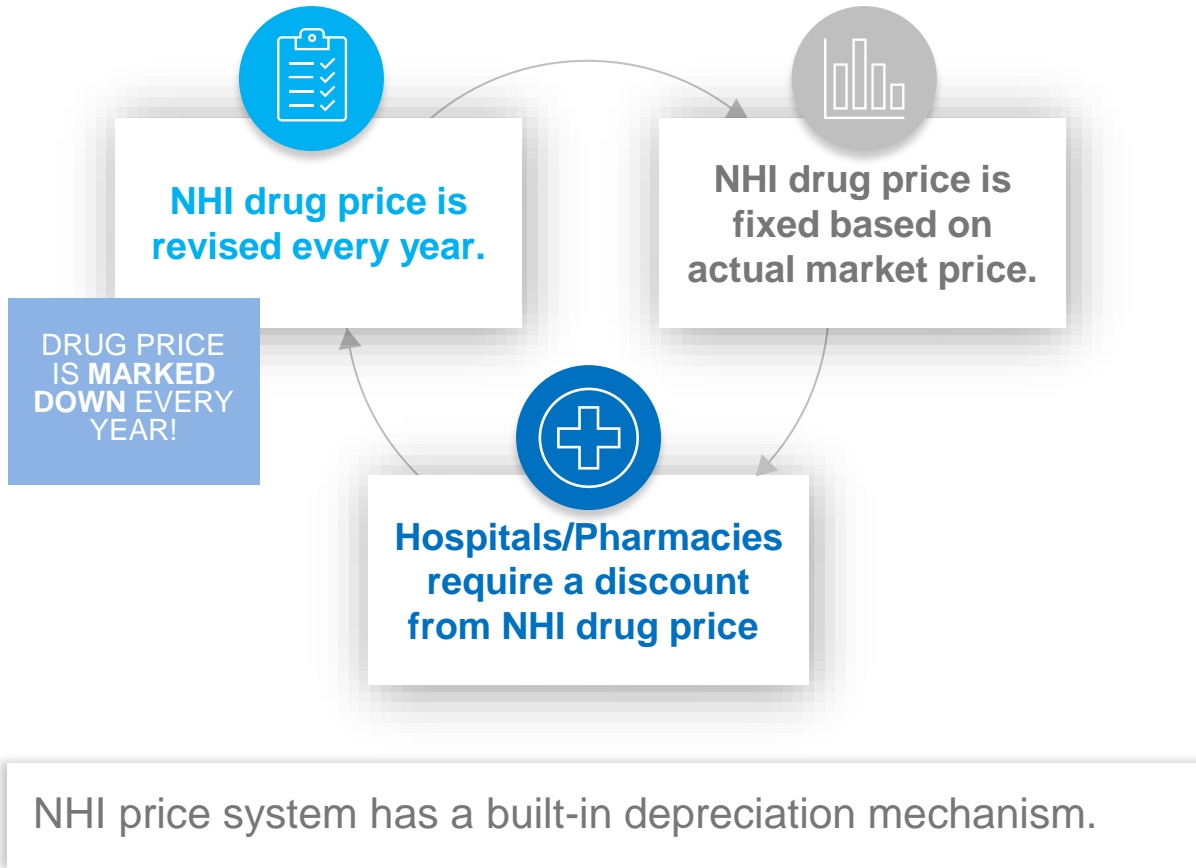
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Alfresa SMD case studies

alfresa



Drug Pricing System in Japan



	Drug Pricing system	Market Price Negotiator
JAPAN	Free and open competition	Wholesaler
EUROPE	Official margin	Official margin
US	Free and open competition	Brand: Pharma Generic: Wholesaler (GPO, PBM)



Transportation tools and compatible temperature zones

We have developed and introduced transportation tools for various temperature ranges

Compatible with temperature range from -150 °C to 40 °C

We also provide dedicated transportation tools for specific product characteristics



Standards for proper distribution of pharmaceuticals:

Realizing safe and secure distribution of medicines by refrigerated boxes compliant with PIC / S GDP



Levodopa / Carbidopa (Duodopa) Distribution

Manufacture & sales: AbbVie

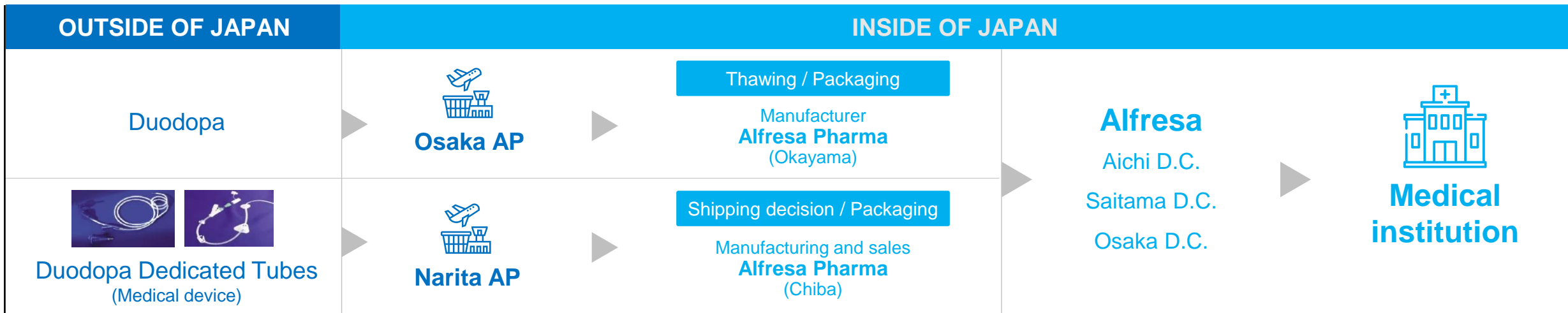


15 weeks' storage life with cold temperatures (2-8 ° C)

STORAGE LIFE:

2 years when frozen, 15 weeks in refrigeration

Our manufacturing and sales timeline is dependent on proper drug storage



Case Study: rare disease questionnaires to help with patient diagnosis, treatment, and/or compliance

Disease examples: spinal muscular atrophy, muscular dystrophy, congenital myopathy, Pompe disease, Prader-Willi syndrome

Questionnaire responses reveal

36 patients diagnosed with spinal muscular atrophy.

15 patients had been treated with Spinraza



Pediatric

Target facility

Implemented facility

Facilities where patients may exist

Number of patients who have been treated

10,000

7,590

360

15



Adult

** 1,726 neurology departments nationwide*