Medium-Term Management Plan Gaia 2021 (2021 – 2023)

Released on February 16, 2021　(TSE JASDAQ Growth: 4579)

RaQualia Pharma Inc.

Result of FY2020 & Forecast for FY2021

(Unit: Million yen)

【Consolidated】	FY2019 (Result)	FY2020 (Plan as of Feb.14)	FY2020 (Plan as of Dec.28)	FY2020 (Result)	Change FY2019/ FY2020		FY2021 (Forecast)	Change FY2019/ FY2020
Net Sales	1,702	2,129	852	**1,107**	-35.0%		2,738	+147.3%
Operating expenses and operating costs	1,718	2,059	1,605	**1,593**	-7.3%		2,317	+45.4%
(Labor costs)	616	705	667	**666**	+8.1%		712	+6.9%
(R&D expenses)	221	196	246	**239**	+8.1%		556	+132.6%
Operating profit (loss)	△15	70	△753	**△486**	–		420	–
Ordinary profit (loss)	21	85	△759	**△527**	–		427	–
Profit (loss) attributable to owners of parent	5	13	△843	**△606**	–		343	–

Topics

Tegoprazan	South Korea	Outpatient prescription sales increased Y-on-Y 2.8 times to 72.5 billion won
	China	Application for New Drug Approval
	U.S.	Submitted Investigational New Drug(IND) application; Phase1 in preparation
	Asia	Philippines, Mongolia, Singapore; signed sublicensing agreement
GALLIPRANT®	U.S.	Sustained strong sales but slow sales growth because of COVID-19
	Europe	Strong sales performance
ENTYCE® (Dogs)	U.S.	Steady sales performance
ELURA(Cats)	U.S.	Obtained marketing approval for new drug

Joint research projects:

New = Nagasaki University(Development of a new treatment for COVID-19)
Progress = ASKA Pharmaceutical Co., Ltd. (specified ion channel)

Academic conference presentation:

Syros Pharmaceuticals Inc.(Syros) Announces new data from Phase II trial of Tamibarotene in combination with Azacitidine. Its clinical trial data is good.

Industry-Academia Collaboration:

Signed a basic agreement with Gifu Pharmaceutical University

Trends in products on the market for FY2020

Global pandemic of coronavirus(COVID-19) infection has a negative impact on business performance

✓ Spread of new COVID-19 infections

- ➢ Temporarily impact on logistics and product supply
- ➢ Inventory adjustment
- ➢ Interfere with business development activities such as license out

GALLIPRANT®

✓ **U.S.** : Sales are sluggish caused by COVID-19 and a reduction in channel inventory carried out in 1Q
Recovery trend from 2Q

✓ **Europe and other**
: Strong sales performance; Sales in Japan commenced in 4Q

ENTYCE®

✓ **U.S.** : Steady sales performance despite the impact of COVID-19 and a reduction in channel inventory in 1Q
Sales has steadily been growing from 2Q.

K-CAB®

✓ South Korea
: Out patient prescription continues to grow
Sales are sluggish caused by COVID-19 temporary distribution disruption and inventory adjustment in 1Q

Consolidated Statements of Income for FY2020

(Unit: Million yen)

	FY2019 (Previous term)	FY2020 (Current term)	Change FY2019/FY2020
Net Sales	1,702	**1,107**	**-35.0%**
Operating expenses and operating costs	1,718	**1,593**	**-7.3%**
Operating profit (loss)	(15)	**(486)**	**–**
Ordinary profit (loss)	21	**(527)**	**–**
Profit (loss) attributable to owners of parent	5	**(606)**	**–**

Forecast for FY2021

(Unit: Million yen)

[Consolidated]	FY2020 (Results)	FY2021 (Forecast)	Change FY2020/FY2021
Net Sales	1,107	2,738	147.3%
Operating expenses and operating costs	1,593	2,317	45.4%
Operating profit (loss)	(486)	420	–
Ordinary profit (loss)	(527)	427	–
Profit (loss) attributable to owners of parent	(606)	343	–

Topics

- With regards to operating revenue, we expect that sales royalty income from the three products on the market will contribute significantly to consolidated sales.
  - Sales royalty income is expected to account for approximately 47% of consolidated sales. Of this, we assume that half will be drugs for human use, and half will be drugs for pet use. Sales of drugs for human use are expected to expand further in South Korea. As for pet medicines, “GALLIPRANT”, a drug that treats osteoarthritis in dogs, is expected to further expand the regions and countries where it is sold. “ELURA”, a drug to manage weight loss in cats who have chronic kidney disease, is expected to go on sale in the United States.
  - With regards to contract-related income, we expect it will be related to P2X7 receptor antagonist and capromorelin, a drug for pet use.
- With regards to operating expenses, we expect an expansion of the research infrastructure and an increase in R&D expenses such as outsourcing testing.

Major Events in FY2021 (1)

■ Strong sales of tegoprazan in South Korea: global developments progress

- Sales of tegoprazan (South Korean product name: “K-CAB®”) by HK inno.N Corp. (South Korea) are growing further in South Korea. Mr. Won Sunchang, a managing director of the company said the following at the 2020 Republic of Korea Bio-Investment Conference (KBIC 2020) held on December 29, 2020: "We expect K-CAB® to generate sales in the 200-300 billion won range within the next two to three years.
- In China, new drug approval will be obtained in 2021, and it is expected to be launched in the first half of 2022. In 2020, Shandong Luoxin Pharmaceutical Group (China: hereinafter referred to as "Luoxin (China)") filed an application to the authorities for new drug approval.
- The phase I clinical trial is expected to begin in the United States.
- Heading toward the implementation of the phase II clinical trial in Japan, we are considering all possibilities, including how to build a cooperative relationship between RaQualia and HK inno.N Corp. (South Korea)
- HK inno.N Corp. (South Korea) is developing and reaching agreement with sublicense partners for the rest of the world (ROW) and such

■ Sales of pet medicines remained solid

- grapiprant (generic name) : A drug that treats osteoarthritis in dogs by Elanco Animal Health Inc. (U.S., hereinafter referred to as “Elanco (U.S.)”). Sales of “GALLIPRANT®” in the U.S. and Europe are growing steadily. Regions where it is sold are expected to expand further.
- capromorelin (generic name) : Elanco (U.S.) has made steady progress in selling "ENTYCE®" in the U.S., a drug to treat loss of appetite in dogs. "ELURA®", a drug to manage weight loss in cats who have chronic kidney disease, is being launched in the U.S.

Major Events in FY2021 (2)

Syros is steadily developing Tamibarotene

- In the first quarter of 2021, Syros Pharmaceuticals, Inc. (U.S., hereinafter referred to as “Syros (U.S.)”) is starting the phase III clinical trial for myelodysplastic syndrome (MDS) application.
- In the second half of 2021, the three drug combination phase II clinical trial will begin with venetoclax (AbbVie) and azacitidine (Bristol Myers Squibb) for patients with untreated and recurring or intractable acute myeloid leukemia (AML).

Further strengthening our core competencies

- Further progress in ion channel drug discovery. Seeking new joint research with pharmaceutical companies.
- Continuous strengthening of intellectual property. Promotion of a life cycle management (LCM) strategy.

Major Events FY2021 (3)

Expectations for clinical development in alliance partners

- Clinical development of the P2X7 receptor antagonist (RQ-00466479/AK-1780). Asahi Kasei Pharma has signed a global license agreement with Eli Lilly and Company (hereinafter referred to as “Lilly (U.S.)”). Lilly will take the lead in future global development.
- Clinical development of compounds targeting the ion channel created through joint research with EA Pharma Co., Ltd. (compound code not disclosed) steadily proceeded in EA Pharma.
- Development of a selective sodium channel blocking drug (compound code not disclosed) is proceeding smoothly at Maruho Co., Ltd.
- Joint research with ASKA Pharmaceutical Co., Ltd. targeting specific ion channels is proceeding smoothly. We are constructing a new screening system that targets ion channels.

Others

- Our U.S. branch (US BRANCH) is fully operational. The branch aims to build good relationships with local academia, medical institutions, and venture companies.
- In selecting new market segments, we plan to select “growth markets” (tentative name).

Outline of the “Gaia 2021" Medium-Term Management Plan

Basic Policies of the Medium-Term Management Plan

- **Realizing our vision**

  “We seek to bring people greater health and happiness through innovative new medicines."

- **Presenting and implementing specific measures to stabilize management and increase shareholder value**

- **Aiming to evolve on a "global" scale with creative power like the "Gaia"**

Outline of the Medium-Term Management Plan

➢ **Building and strengthening a drug discovery research platform aimed at early out-licensing**

- Continue and strengthen innovative drug discovery joint research centered on industry-academia-government collaboration.
- Continuously create new development compounds through our in-house evaluation system.

➢ **Launch of human-use pharmaceuticals and establishment of an efficient out-licensing system**

- Establish and strengthen an efficient licensing-out system for early out-licensing of existing pipelines.
- Build relationships of trust and secure royalty income through cooperation and collaboration with partner companies.

➢ **Acceleration of overseas operations**

- Set up a U.S. branch in San Diego, California, a city with an established innovation ecosystem for pharmaceutical companies and other entities; begin full-scale information-gathering activities.

Medium-Term Management Plan (Gaia 2021) overview

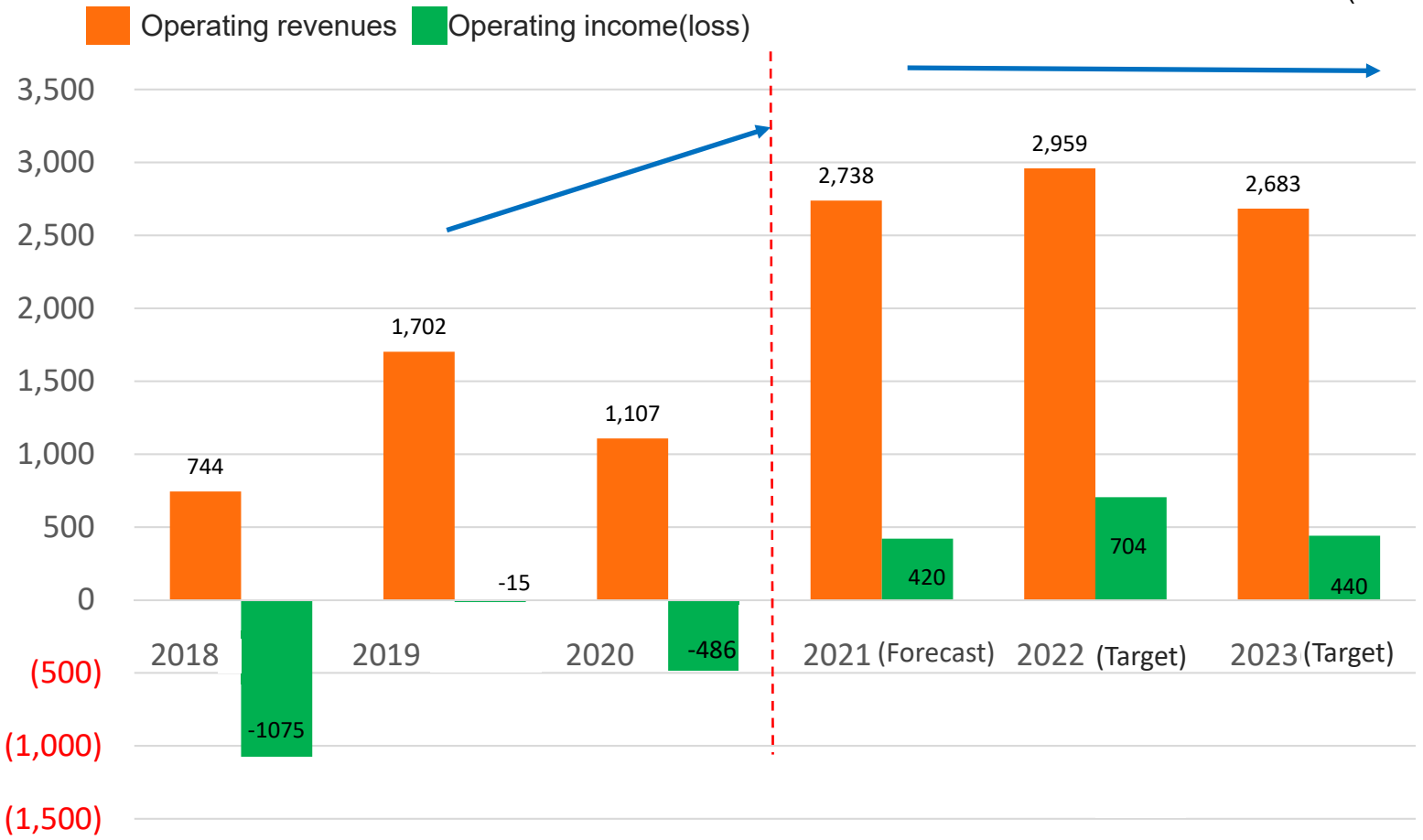
(Unit: Million yen)

[Consolidated]	FY2019 (Results)	FY2020 (Result)	FY2021 (Forecast)	FY2022 (Target)	FY2023 (Target)
Net Sales	1,702	1,107	2,738	2,959	2,683
Operating expenses and operating costs	1,718	1,593	2,317	2,255	2,242
(Labor costs)	616	666	712	743	762
(R&D expenses)	221	239	556	576	588
Operating profit (loss)	(15)	(486)	420	704	440
Ordinary profit (loss)	21	(527)	427	719	445
Profit (loss) attributable to owners of parent	5	(606)	343	610	320
Foreign exchange rates (U.S. dollars and Japanese yen)	109.55	103.52	105.00	105.00	105.00

Note: This document is not prepared for the purpose of soliciting investment. Investors are advised to make their own judgments when making investments. Please refer to the notes at the end of the final page of this document.

Changes in business earnings

(Unit: Million yen)



Shift to a stabilization phase with royalty revenues.

Overview of expenses

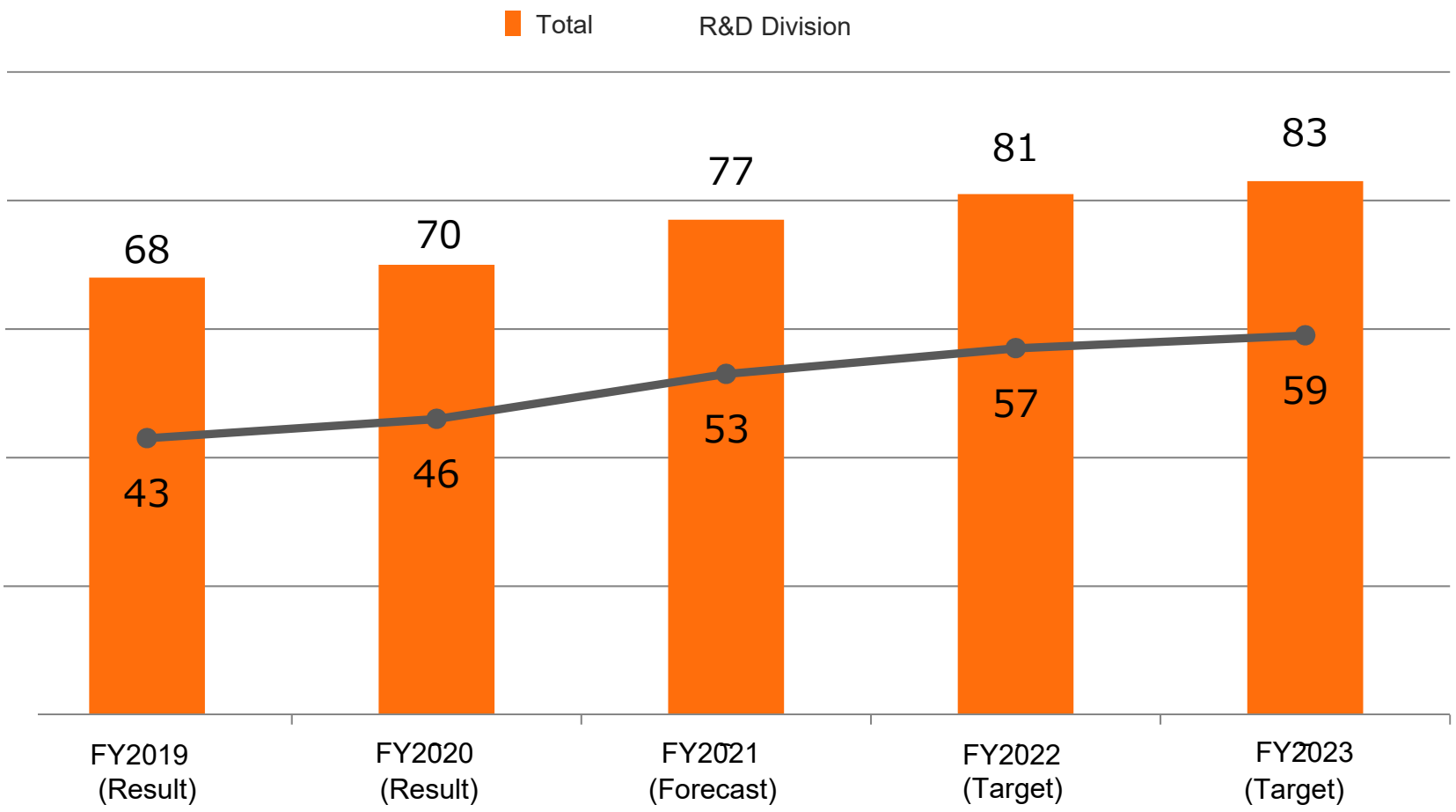
(Unit: Million yen)

	FY2019 (Results)	FY2020 (Result)	FY2021 (Forcast)	FY2022 (Target)	FY2023 (Target)
① Operating costs	262	138	340	221	236
② Operating expenses	1,456	1,455	1,977	2,033	2,006
Labor costs	616	666	712	743	762
R&D expenses	221	239	556	576	588
Administrative and Control expenses	236	206	289	267	253
Facility-related expenses	221	216	269	262	243
Others	162	128	151	185	160
Total (①+②)	1,718	1,593	2,317	2,255	2,242

FY2021	Labor costs increase with planned recruitment of researchers in order to expand the drug discovery base. R&D expenses increase in step with higher commissioned research expenditure to promote the development of in-house programs.
FY2022	Labor costs increase with planned recruitment of researchers. R&D expenses increase settles to cruising speed, and distribute efficiently.
FY2023	Labor costs increase settles to cruising speed. R&D expenses decrease.

Personnel plan

As of the date of submission



※ **persons on a consolidated basis, excluding persons on leave, temporary staff**

Fundraising strategy

Basic policy

- Aiming for profitable operating cash flow because the proportion of profit structure has shifted to more stable royalty income
- Working capital will be procured from the business revenue and the effect of reducing business costs. The balance of funds at the end of the period of each fiscal year, should remain at the ¥3.0 billion.
- Surplus funds and newly procured funds will be applied to exploratory research expenses for accelerating drug discovery, R&D cost to increase the value of existing program, and upfront costs to tackle new modality and new disease areas
- For additional financing, RaQualia is committed to implement a plan deeply rooted in a clear equity story and enhanced shareholder value by presenting the plan to the market and obtaining the understanding thereof from the market.

Results (cash and deposits, investment securities, etc.)

- Balance of funds at the end of FY2020 (approx. ¥3.2 billion)

Funding option

- Allocation of new stocks to a third party (capital and business alliance with strategic partners to find stable shareholders)
- Consideration of global offering
- Effective utilization of owned assets
- Consideration of debt required to address any changes occurring during the growth stage of a company

Others

- Expansion of analyst coverage and strengthening of IR system
- Discovery of domestic and foreign institutional investors

Review of FY2020 (Business Highlights)

1) Pet Pharmaceuticals (Slides 17-20)

2) Tegoprazan (Slides 21-24)

3) Ion Channel Drug Discovery (Slides 25-26)

4) TMRC; Tamibarotene (Slides 27-31)

1) Pet pharmaceuticals: GALLIPRANT®

Galliprant® (grapiprant tablets)

Indication	Dog Osteoarthritis (chronic inflamatory pain)
Distributor	Elanco (U.S.)
Reference Information	**Leading brand in nonsteroidal anti-inflammatory analgesic (NSAID)**

1) Pet pharmaceuticals: GALLIPRANT®

Oct. 2020
Also Available in Japan

Elanco Japan Launched GALLIPRANT Tablets (Selective EP4 Antagonist/Anti-inflammatory Analgesic for Canine Chronic Osteoarthritis) in Japan

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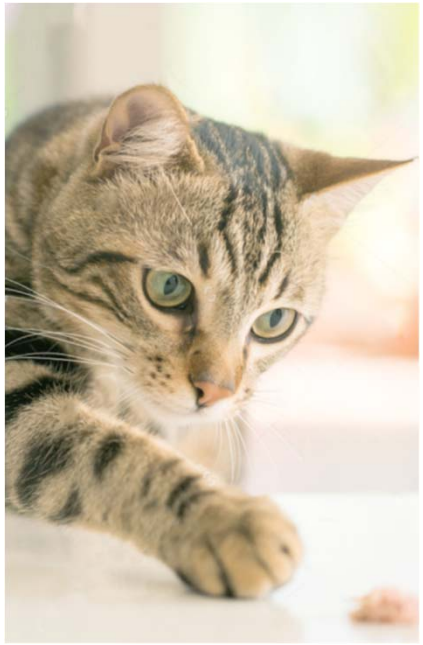
1) Pet pharmaceuticals: ENTYCE®

entyce
(capromorelin oral solution)

Indication	Appetite Stimulation (weight loss)
Distributor	Elanco (U.S.)
Reference Information	Steady sales performance in U.S.

1) Pet pharmaceuticals: ELURA®



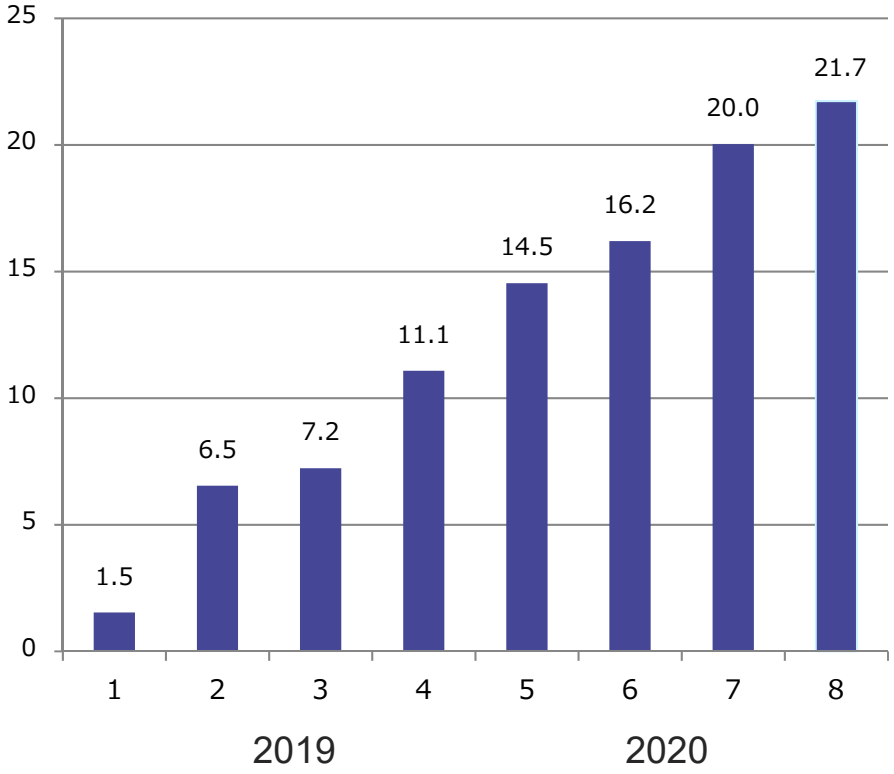
Indication	Management of Weight Loss in cat with CKD (chronic kidney disease)
Distributor	Elanco (U.S.)
Reference Information	The U.S. Food and Drug Administration has approved in October 2020. Scheduled to launch in 2021 (according to Elanco)

2) tegoprazan: K-CAB ® Remarkable growth in South Korea

Marketing pamphlet

Sales in South Korea

from Mar.2019-Dec.,2020 (Quarterly graph)



Source: UBIST

Outpatient prescription data (sales, billion won)

2) tegoprazan ：Application for Approval in China, Under Review

Sublicensee

Luoxin (China)

Progress in FY2020

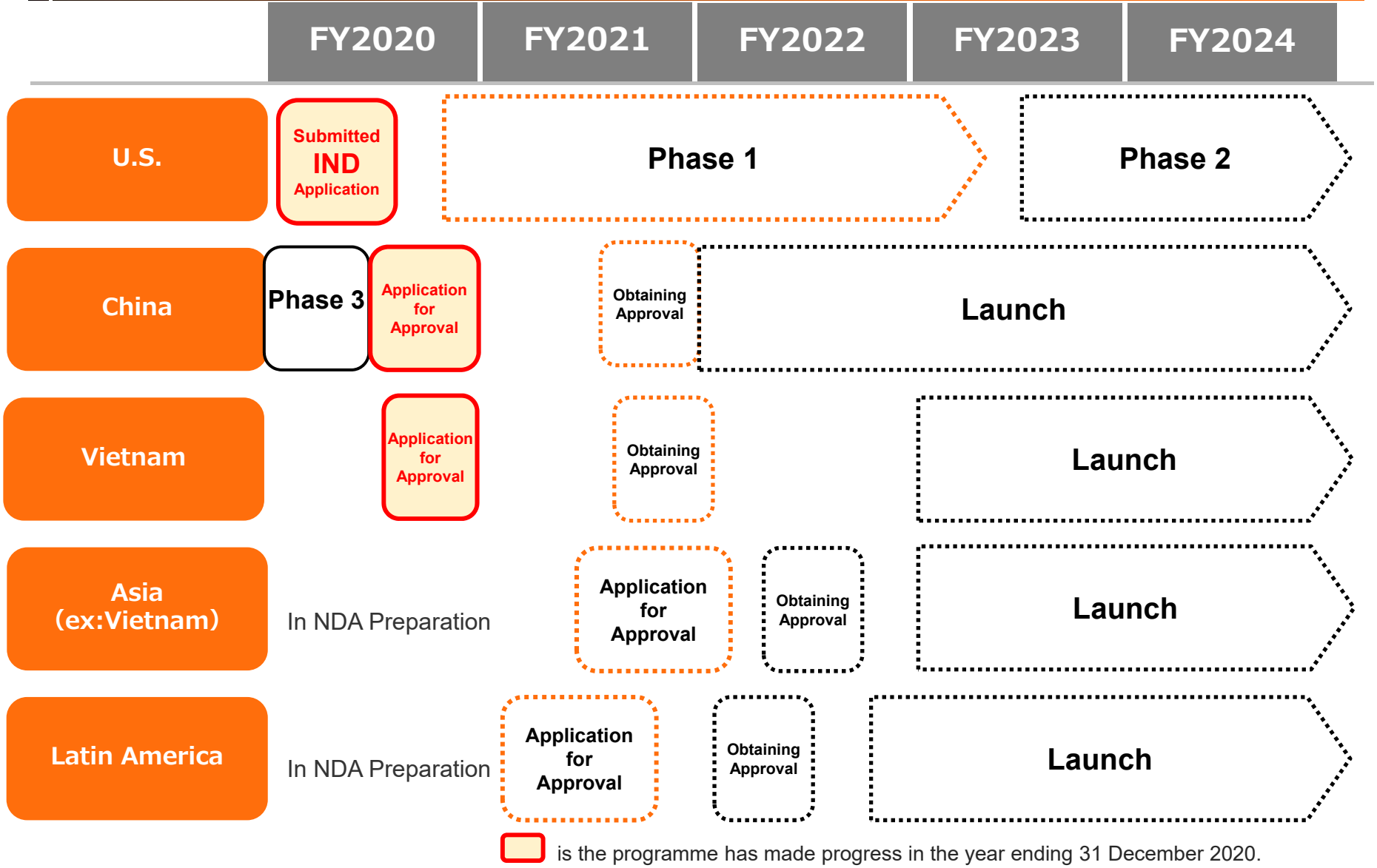
- **New Drug Application (NDA) submitted to regulatory authorities for erosive gastroesophageal reflux disease; Received an Acceptance Letter.**
- Trials for non-erosive gastroesophageal reflux in progress
- Trials for duodenal ulcer under consideration

2) tegoprazan ：Japan Now Considering

■ **FY2015 Phase1 Completed**

- **Considering all possibilities for conducting Phase 2 clinical trial, including how to build a cooperative relationship with HK inno. N**

2) tegoprazan：Global Expansion　Roadmap

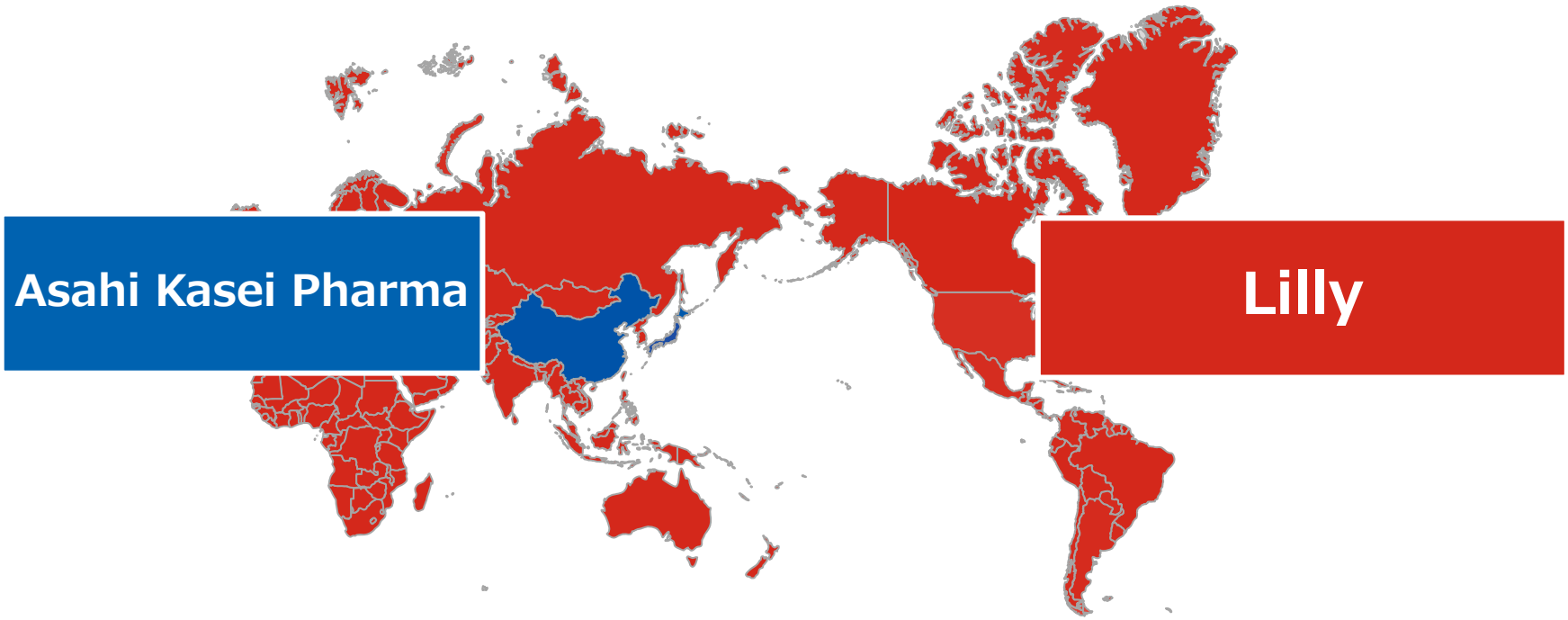


3) Ion channel drug discovery

Company Name	Contents	Recent Situation
Asahi Kasei Pharma	P2X7 receptor antagonist(RQ-00466479,AK1780) Lilly to lead global development	Jan.,2021 Asahi Kasei Pharma and Lilly signed sub-licensing agreement
Maruho	Selective sodium channel blockers Development in progress	Dec.,2017 Licensing Agreement Signed
EA Pharma	Joint research targeting specific ion channels in the gastrointestinal field Development in progress	Sep.,2019 Milestones achieved
ASKA Pharmaceutical	Collaborative research targeting specific ion channels A new screening system is being established	Nov.,2020 Milestones achieved

3) Ion channel drug discovery （P2X7 receptor antagonist(RQ-00466479）

Jan, 2021
Asahi Kasei Pharma and Lilly(U.S.) signed a license agreement related to RQ-00466479/AK1780



- Lilly (U.S.) is certain to lead global development,
- In addition to one-time royalty, RaQualia will also be entitled to royalty pre-determined in proportion to the revenue generated by Asahi Kasei Pharma if RQ00466479/AK1780 is successfully commercialized.

4）TMRC： Overview of Tamibarotene

- Syros(U.S.) is developing it for the multiple indications in the U.S.
- Ohara Pharmaceutical Co., Ltd. is developing for the indication of Neuroblastoma in Japan.

【Blood tumor】

MDS (myelodysplastic syndrome）： Tamibarotene/Azacitidine(Bristol Myers Squibb) ..

Syros(U.S.) plan to start the Phase 3 clinical trials of indications for RARA-positive untreated High-Risk MDS (HR-MDS）in the first quarter of FY2021 with an aim to apply for New Drug Application(NDA) in FY2024.

AML(acute myeloid leukemia）： Tamibarotene/Azacitidine/Venetoclax(Abbvie) …

Syros(U.S.) plan to start the Phase 2 clinical trials of indications for RARA-positive untreated AML(untreated unfit AML), which is difficault to treat with existing standard chemotherapy, in the second half of FY2021.

【Solid tumor】

NB(neuroblastoma）： Establish a POC in combination with an epigenetic drug and further development toward a regulatory marketing approval

【Others】 **Biomarker License Agreement：**

Syros(U.S.) has agreed to grant TMRC an exclusive right to license Syros' RARA positive/negative biomarker patent and its know-how for the Asian territory, including Japan and China.

The agreement will enable TMRC to use the biomarker patent and the know-how to pre-select RARA-positive patients who may get therapeutic benefit from tamibarotene.

4）TMRC：Presentation on Tamibarotene （ASH2020）

https://d1io3yog0oux5.cloudfront.net/_5a6188dc7529e7f60da372689e285f0f/syros/db/353/2342/pdf/SY-1425+ND+Unfit+AML+ASH+2020+FINAL+.pdf

Tamibarotene/azacitidine RARA+ Patients Have a High Complete Remission Rate with a Rapid Time to Response

Best IWG response	RARA positive n (%)
Response Evaluable	18
ORR	12 (67)
CR/CRi	11 (61)
CR	9 (50)
CRm	4 (22)
CRc	4 (22)
CRi	2 (11)
MLFS	1 (6)
PR	0 (0)

- Composite CR rate of 61% (11/18)
  >including nine patients (50%) achieving a complete response (CR),
  >two patients (11%) achieving a complete response with incomplete blood count recovery (CRi)
- 89% (8/9) of CRs were deep molecular or cytogenetic CRs.
- Median time to initial response was 1.2 months. Median duration of response was 10.8 months, while median overall survival (OS) of patients achieving CR/Cri was 18 months.
- 86% of patients who were transfusion dependent at baseline became transfusion independent.

4）TMRC：Superiority and Market opportunities of Tamibarotene

Compelling data and clear path forward for Tamibarotene

Strong rationale in targeted subset

～30% of AML and MDS patients **RARA+**

High level of clinical activity with Tamibarotene/Azacitizin in AML

Well tolerated in combo without myelosuppresion

RARA biomarker selects for patients less likely to respond to Ven/Aza

HR-MDS is closely related to AML

Phase 3 trial
Tamibarotene/aza
in RARA+ ND HR-MDS

Phase 2 trial
Tamibarotene/ven/aza
in RARA+ ND unfit AML

Newly diagnosed HR-MDS

- ✓ ~15,000 new cases annually in U.S. and Europe
- ✓ Expected to grow into $1B+ market
- ✓ No new approved therapies in a decade
- ✓ Existing options offer limited efficacy

Newly diagnosed unfit AML

- ✓ Over 18,000 new cases annually in U.S. and Europe
- ✓ Expected to grow into $2B+ market
- ✓ ~1/3 of patients don't respond to Standard of Care ven/aza and have poor prognosis

4）TMRC Co. Ltd:　Strong potential for Tamibarotene in MDS

ND HR-MDS represents ideal opportunity for Tamibarotene/azacitidine

Syros's data suggest strong potential for Tamibarotene in MDS

1. AML and MDS are very similar. The difference is the number of blast cells in the bone marrow, with MDS having a slightly lower number. In historical methods of treatment, it is known that AML and HR-MDS behave in the same way when looking at the clinical effects of demethylating agents such as azacitidine. For the results of AML at ASH, it was thought that this combination therapy can be expected for HR-MDS

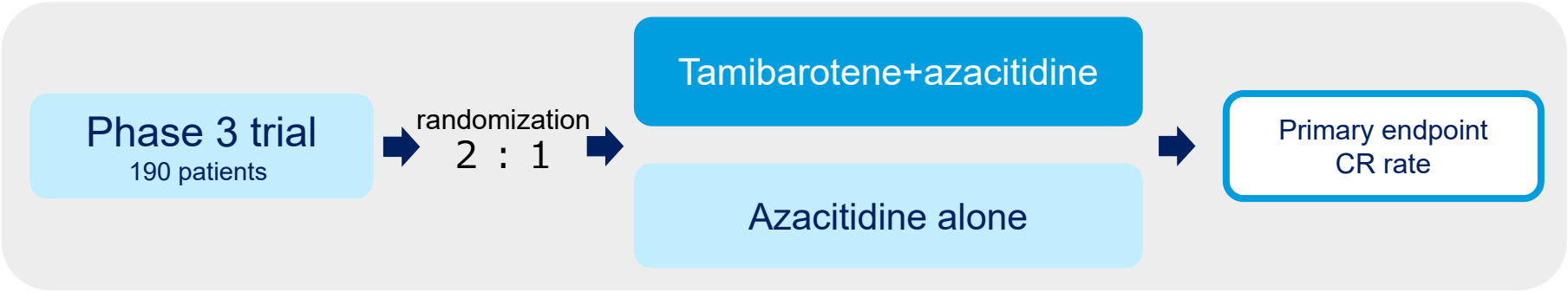
2. In the phase 2 test presented at ASH, the analysis was focused on so-called RARA-positive hypoplastic AML patients, and the CR rate was 67%. The results for this hypoplastic AML is an indicator of the potential efficacy for HR-MDS.

3. In addition, this combination therapy has few cytopenia side effects. Cytopenia is lethal for HR-MDS, and in that respect, this combination therapy with high tolerability is promising as an anti-HR-MDS drug.

4. The single agent tamibarotene has been shown to have promising results such as bone marrow CR and hematological improvement against RARA-positive R / R HR-MDS performed in the pas.

4）TMRC : A New Plan of Crinical Trials Tamibarotene

MDS(in ND RARA+ HR-MDS patients)

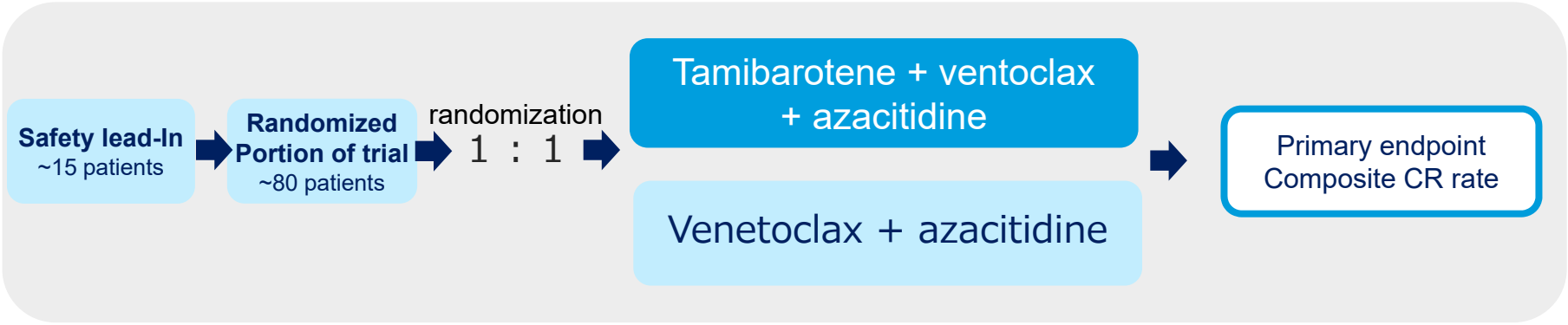


FDA feedback supports

Key Milestones

Initiate registration trial	1Q 2021
potential NDA	2024

AML(in ND RARA+ unfit AML patients)



Key Milestones

Initiate Phase 2 trial w/safety lead-in	2H 2021
Initial data from Phase 2 trial	2022

Major out-licensed programs (for human beings)

Project	Compound (Generic name)	Out-licensing partner	Primary indication	Search / Preclinical / Clinical trials (Phase 1 / Phase 2 / Phase 3) / Application / Approval / Marketing
Ziprasidone	RQ-00000003	Meiji Seika Pharma	Schizophrenia	Phase 3 (Japan)
EP4 antagonists	RQ-00000007 (grapiprant)	AskAt	Cancer	Phase 1 in progress (U.S.)
				Phase 1 in progress (China)
	RQ-00000008		Pain	Phase 2 a completed (U.S.)
				Phase 1 completed (China)
COX-2 inhibitors	RQ-00317076	AskAt	Pain	Phase 2 a completed (U.S.)
				Phase 1 in progress (China)

● is the programme has made progress in the year ending 31 December 2020.

Derivation Pre-Outlicensing Programs (As of the date of submission)

- Potassium-ion-competitor acid blocker:Completed Clinical study report on P-CAB (tegoprazan/RQ-00000004) for Phase 1 (Dec. 2016)
- Completed Clinical study report on 5-HT_4 partial agonist (RQ-00000010) completed for Phase 1(Oct. 2017)
- Completed Clinical study report on 5-HT_{2B} antagonist (RQ-00310941) for Phase 1 (Apr. 2018)
- Completed Pre-clinical trials on motilin-agonist (RQ-00201894) ; Phase 1 clinical trials are under consideration
- Started manufacturing the drug substance necessary to start preclinical trials for the ghrelin-agonist (RQ-00433412)
- Pre-clinical trials are under consideration for the TRPM8 blocker (RQ-00434739)

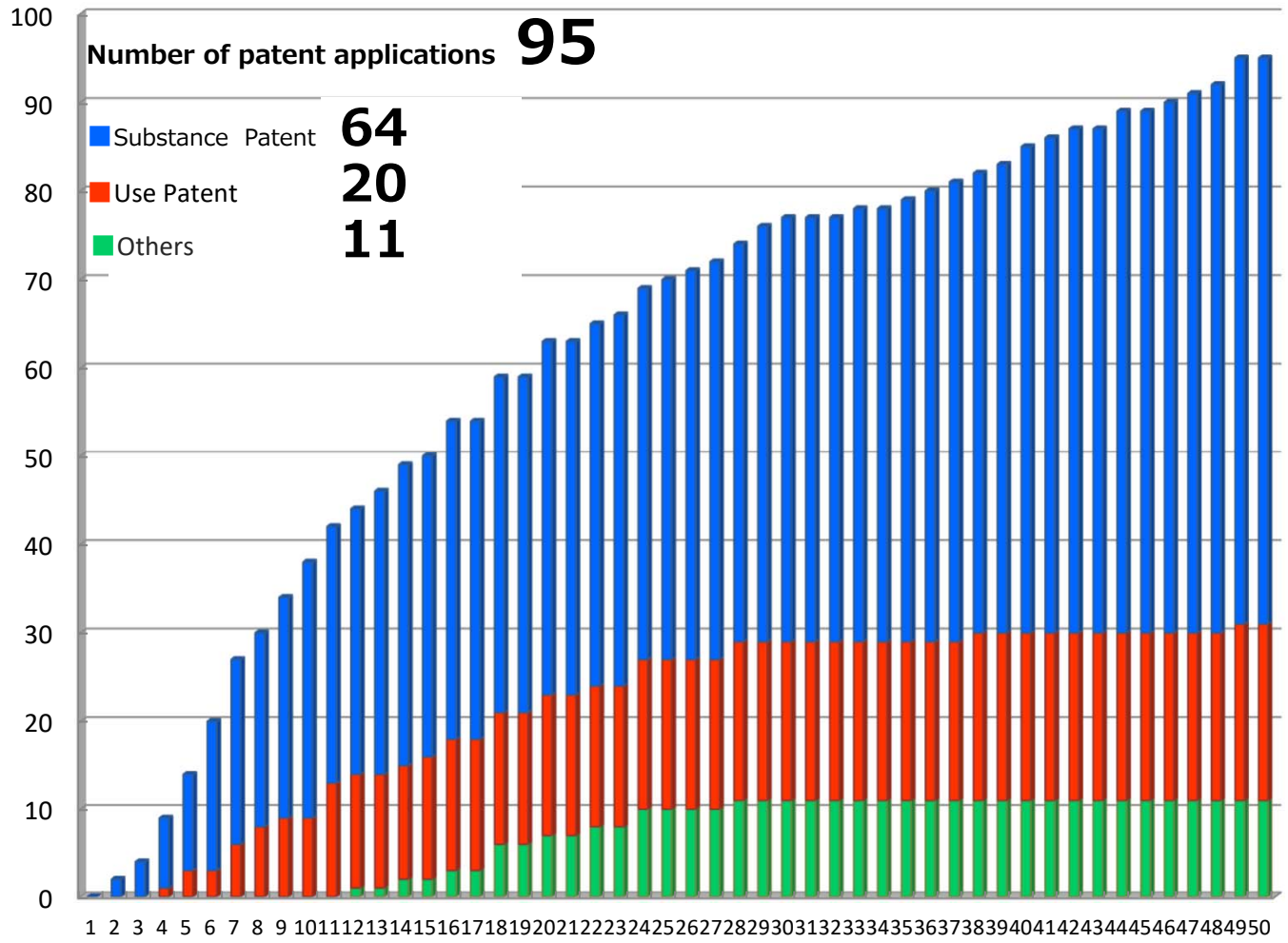
Project	Compound	Primary indication	Search / Pre-clinical / Clinical trials (Phase 1 / Phase 2 / Phase 3) / Appli-cation / Approval / Marketing	Implementation Region
Potassium-ion competitor acid blocker (P-CAB)	RQ-00000004 (tegoprazan)	Gastroesophageal reflux disease (GERD)	Completed of Phase 1	Japan
5-HT_4 partial agonist	RQ-00000010	Gastric paresis Functional dyspepsia Chronic constipation	Completed of Phase 1	United Kingdom
5-HT_{2B} antagonist	RQ-00310941	Diarrhea-type irritable bowel syndrome (IBS-D)	Completed of Phase 1	United Kingdom
Motilin agonist	RQ-00201894	Gastroparesis Functional dyspepsia Post-operatiue ileus	Under consideration	Japan
Ghrelin receptor agonist	RQ-00433412	Cancer-related Anorexia/Cachexia syndrome	Preparation	Japan
TRPM8-Blocker	RQ-00434739	Neuropathic pain (cold allodynia induced by chemotherapy)	Under preparation	Japan

Patent news

Date	Target	Region	Contents
Dec. 22, 2020	P2X7 receptor antagonist (Tetrahydroquinoline derivatives)	Japan	Substance patent
Sep. 17,2020	Nav1.7 and Nav1.8 sodium channels blocker (Amide derivatives)	Europe	Substance patent
Jun. 10, 2020	Selective TRPM8 Blocker (Azaspiro derivatives)	Europe	Substance patent
Jun. 2, 2020	5-HT4 Partial Agonist	Japan	Use patent
Mar. 26, 2020	Sodium Channel Blocker (Arylamide derivatives)	China	Substance patent
Mar. 5, 2020	Sodium Channel Blocker (Pyrrolopyridinone derivatives)	Korea	Substance patent
Mar. 3, 2020	Sodium Channel Blocker (Pyrrolopyridinone derivatives)	Korea	Substance patent
Jan. 7, 2020	5-HT4 Partial Agonist	Europe	Use patent

Patent Applications

(excluding transactions transferred to each country)

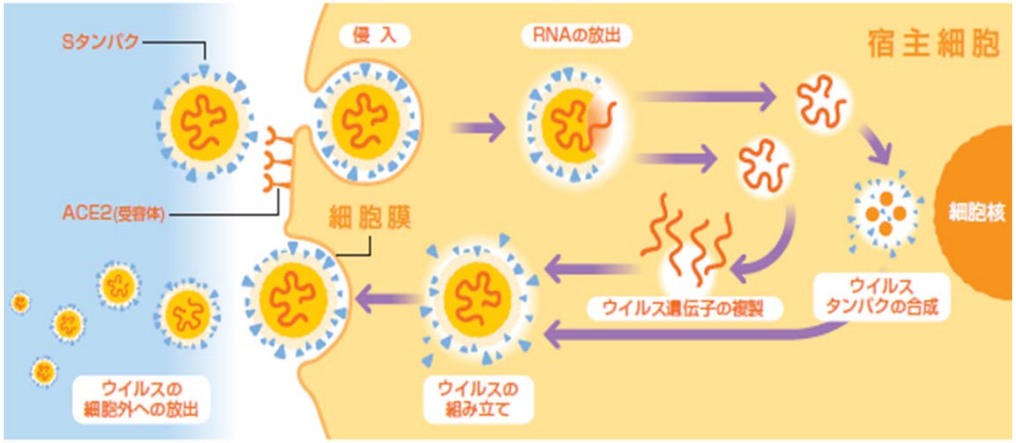


Industry-Academia-Government Collaboration

Sep.,2020
Start of joint research with Nagasaki University

We started a joint research project with Nagasaki University (Joint Research Center for Infectious Diseases/Institute of Tropical Medicine: Professor Jiro Yasuda and Assistant Professor Yasuaki Sakurai) to create a small molecule therapeutic that strongly inhibits the multiplication of a new coronavirus (SARS-CoV-2).

We are working diligently.



Industry-Academia-Government Collaboration

Oct.,2020
Signed a basic agreement with Gifu Pharmaceutical University

The purpose of this agreement is to “contribute to the realization of the drug discovery development concept originating from the Tokai region and the cultivation of talented scientists by strengthening the research capabilities and human resources of both parties.

We are aiming to establish a joint research course at Gifu Pharmaceutical University by April 2021.

October 22, 2020:at Gifu Pharmaceutical University
Takashi Inagaki, President of Gifu Pharmaceutical University
and Naoki Tani, President of RaQualia

【Photo: Gifu Pharmaceutical University General Affairs Accounting Division】

Industry-Academia-Government Collaboration

Search for selective inhibitors of specific enzymes for the development of drugs for refractory neuro blastoma (May. 2015)

Kenji Kadomatsu, Professor of Biochemistry, Nagoya University Graduate School of Medicine

Exploration of selective inhibitors for specific proteins for the development of heart failure drugs (Oct. 2015)

Mitsuhito Takefuji, Assistant Professor of Cardiology Science, Graduate School of Medicine, Nagoya University

Exploration of drugs for the treatment of retinal vein occlusion (RVO) (May. 2019)

Hideaki Hara, Professor of Molecular Pharmacology Gifu Pharmaceutical University

Initial exploratory research aimed at the creation of new therapeutic agents for ALS (ALS) (Jul. 2019)

Dr. Hitomi Tsuiji, Hospital Eco-Chemical Sector, Graduate School of Pharmacy, Nagoya City University

Development of a new treatment for macrolide-resistant group A streptococci (Dec. 2019)

Professor Tadao Hasegawa, Department of Bacteriology, Department of Medicine, Nagoya City University

Development of a new treatment for COVID-19 (Sep. 2020)

Professor Jiro Yasuda/Assistant Professor Yasuhiro Sakurai of Nagasaki University

Notes on Business Projections

- Materials and information provided in this document include forward - looking statements. These statements are based on the current expectations, projections and assumptions involving risks, and contain uncertainties that could cause the actual results to be substantially different from such statements.

- Such risks and uncertainties include general conditions of domestic and global economy such as general industry and market conditions, interest rate, changes in exchange rates. Particularly, risks and uncertainties exist in forward - looking statements related to products (R&D programs and compounds). Risks and uncertainties of products include, but not limited to, technical progress, acquisition of patents by competitors, completion of clinical trials, claims and concerns regarding safety and efficacy of products, approval by regulatory authority, health - care insurance reforms within and outside Japan, tendency to contain medical expenses, laws and regulations of the government affecting businesses within and outside Japan, challenges associated with new product development.

- The Company does not undertake to update or revise any forward - looking statements contained in this document, whether as a result of new information, future events, or otherwise.

Note: This document has not been prepared for the solicitation of investments. In making any investments, investors are kindly required to base their decisions on their own judgments. Please be sure to read the notes at the end of this paper, without fail.

RaQualia
innovators for life

Contact Information

E-mail: Our website, please.
https://www.raqualia.co.jp/(Link)

RaQualia Pharma Inc.

appendix

Company overview

As of the date of submission

Company name

RaQualia Pharma Inc.

Representative Director

Naoki Tani

Description of Businesses

Pharmaceutical products and clinical development candidates in pharmaceutical R&D; sales and licensing of intellectual properties of the related core technologies

Employees

71 persons

Establishment

Feb. 19, 2008

Common stock

¥2,095.0142 million

Total issued share capital

2,255,400,000 shares

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RaQualia Pharma's History and Future Growth

Feb. 2008
Establishment

Jul. 2008
Spin-out
from Pfizer

Jul. 2011
Initial public offering
JASDAQ: 4579

2014-2015
Drug Discovery and
Research Division relocated
to Nagoya University

2017
Launched two pet
phamaceuticals

2019
Launched human
pharmaceutical

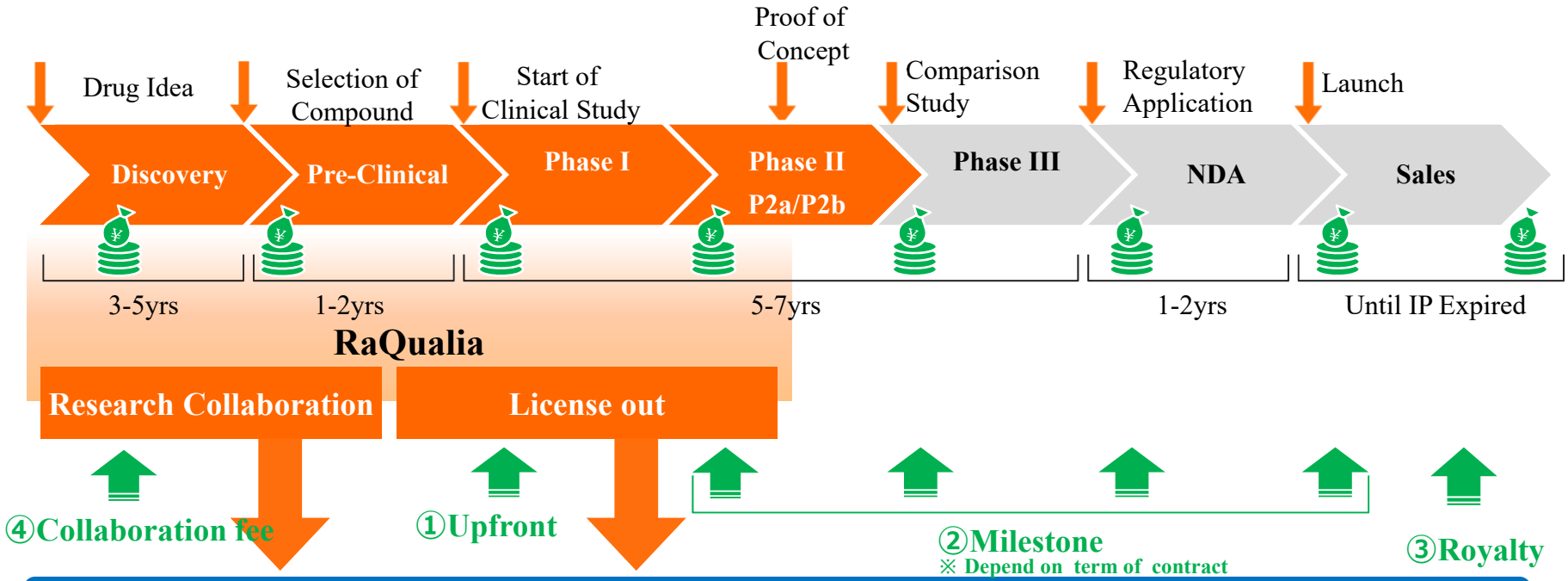
Establis
hment

Growth

Develop
ment

Further
Growth

Business Domain and Strategy



Business Domain	• Our business focus extends from discovery research to proof of concept (POC)
Business Model	• RaQualia primarily generates its revenue (upfront, milestone payments and royalty income) by licensing development and commercialization rights to pharmaceutical companies for compounds that it has discovered. • RaQualia also projects revenue from research collaboration activities with academia.

Strengths and Attractiveness (1) Drug Development Capability

Maximize the infrastructure that is in the highest class among biotechnology venture companies in Japan and aim to create development compounds

Hardware

- **Compound Library**
  - Continue to expand rich compounds

Number Owned **380,000**

- **Synthesis & Analysis**
  - Establishment of the automation system

Synthesis **150/week possible**

- **Screening**
  - SCARA Robot System
  - QPatch

High Through-put Screening

Software

- **Abundant researchers who have advanced techniques**
- **Research with expertise on the fields of "GI" and "Pain"**
- **Implementing collaborative studies in the field of ion channel drug development with multiple pharmaceutical companies**

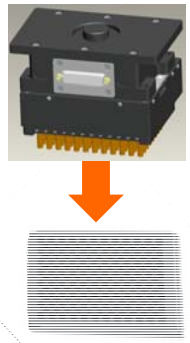
Based on the rich resources, we will efficiently conduct the exploratory research and development and aim to create development compound

Strengths and Attractiveness (2) Ion Channel Drug Development

The field where other companies cannot easily imitate and follow up

Issues related to the Ion Channel Drug Development	Our Superiority
Many matters unsolved Because it is a relatively new area of study, there are many unsolved matters such as physiology and involvement in clinical conditions.	Implementation of collaborative studies with universities, public Research organizations, pharmaceutical companies, etc.
Limitations of existing methods Because the natural ligand does not exist, natural biologically active substances will not be a clue.	Abundant compound library and establishment of the automated compound refining and analyzing system
Difficult to explore As the existing HTS method can only do the indirect observation, cumbersome measurement systems to measure living cellsare essential	A collaborative development of an ion channel activity measuring instrument with Hamamatsu Photonics K.K.

FDSS/μCELL
(Hamamatsu Photonics)



It able to analyzed at the same time 96 compound.

QPatch HTX
(Sophion Bioscience)

Autopatch systems
It able to HTS.
(7,000 data point/day)
It able to giga seal.

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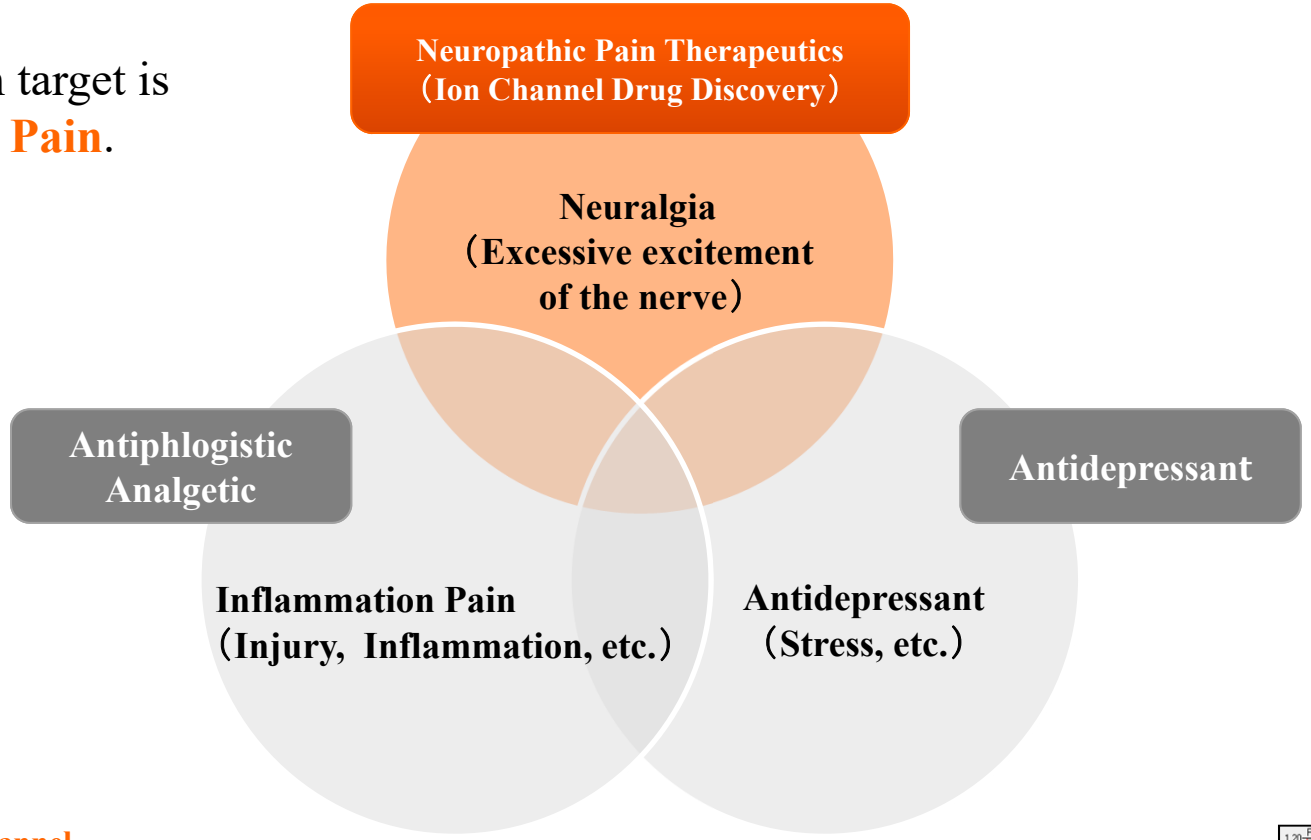
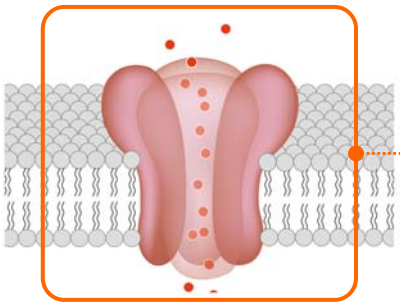
Strengths and Attractiveness (2) Ion Channel Drug Discovery

Our Research target is **Neuropathic Pain**.



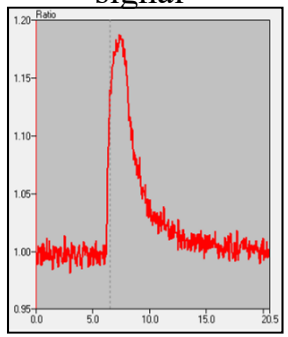
Ion Channel



About Ion Channel

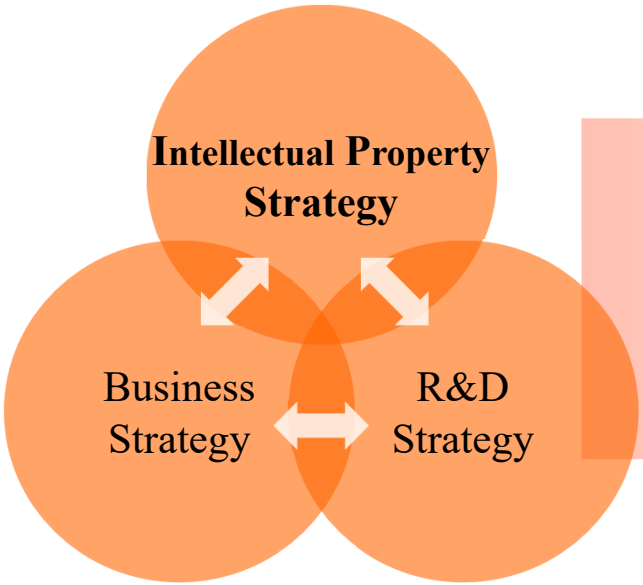
The generic name of a membrane protein passing an ion to the inside and outside of the cell. It take an important duty to regulate the release of the neurotransmitter.

Fluorescence signal



Strengths and Attractiveness (3) Intellectual Property Strategy

Intellectual property in our products
- Building a high-value intellectual property portfolio



Anticipated Program Benefits

- Prompt patent application
- Steady acquisition of rights
- Creation of IP tailored to customer needs
- IP-based licensing proposals
- Extending the life cycle of IP

Substance patent

Expiration

Life cycle extension (acquisition of peripheral patents)

Patent term extension

Up to 5 years

Expiration

Peripheral patents	Application patents, polycrystalline patents, salt patents, formula patents, combination patents, usage and dosage patents, etc.

Revenues from the out-licensing of basic patents

Profits from outlicensing of peripheral patents

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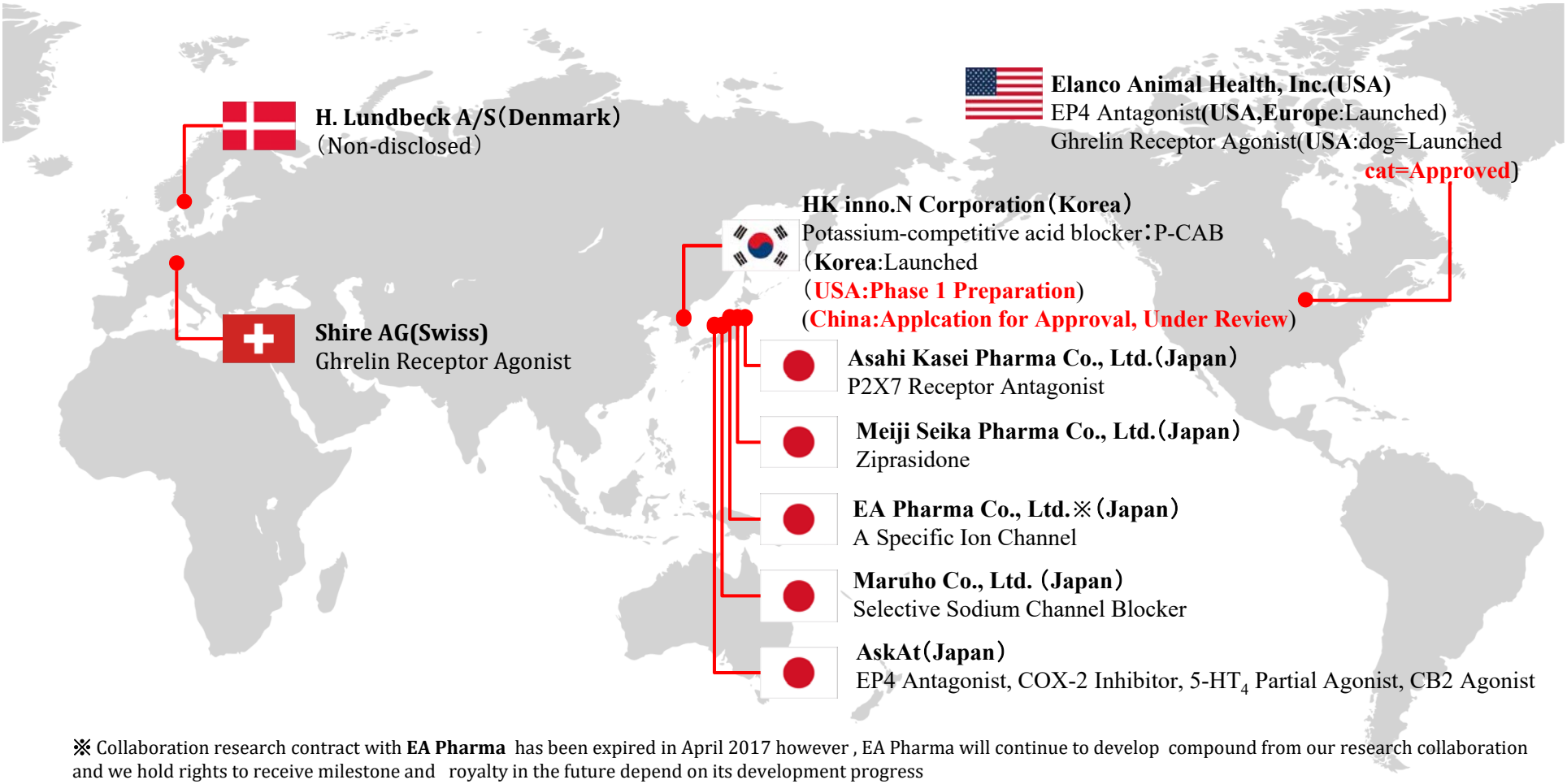
Outlicensed Program

- **Conclude 13 licensing agreement and Collaborative Research Contract with 9 companies in 5 countries of the world**
- **Steady progress for ongoing clinical trial and discovery research by partners**



※ Collaboration research contract with **EA Pharma** has been expired in April 2017 however , EA Pharma will continue to develop compound from our research collaboration and we hold rights to receive milestone and royalty in the future depend on its development progress

RaQualia's mission in industry-university collaboration

➢ **Making the Chubu region centered on Nagoya University a hub for the creation of innovative new drugs as seen in Silicon Valley in the U.S.**

"New Drug" from Nagoya University