

#### Disclaimer

The material that follows is a presentation of general background information about Nxera Pharma Co., Ltd and its subsidiaries (collectively, the "Company") as of the date of this presentation. This material has been prepared solely for informational purposes and is not to be construed as a solicitation or an offer to buy or sell any securities and should not be treated as giving investment advice to recipients. It is not targeted to the specific investment objectives, financial situation or particular needs of any recipient. It is not intended to provide the basis for any third-party evaluation of any securities or any offering of them and should not be considered as a recommendation that any recipient should subscribe for or purchase any securities.

The information contained herein is in summary form and does not purport to be complete. Certain information has been obtained from public sources. No representation or warranty, either express or implied, by the Company is made as to the accuracy, fairness, or completeness of the information presented herein and no reliance should be placed on the accuracy, fairness, or completeness of such information. The Company takes no responsibility or liability to update the contents of this presentation in the light of new information and/or future events In addition, the Company may alter, modify or otherwise change in any manner the contents of this presentation, in its own discretion without the obligation to notify any person of such revision or changes.

This presentation contains "forward looking statements," as that term is defined in Section 27 A of the U S Securities Act of 1933 as amended, and Section 21 E of the U S Securities Exchange Act of 1934 as amended. The words "believe", expect", anticipate", intend", seeks", estimates", and and similar expressions identify forward looking statements. All statements other than statements of historical facts included in this presentation, including, without limitation, those regarding our financial position, business strategy, plans and objectives of management for future operations (including development plans and objectives relating to our products), are forward looking statements. Such forward looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward looking statements. Such forward looking statements are based on numerous assumptions regarding our present and future business strategies and the environment in which we will operate in the future The important factors that could cause our actual results, performance or achievements to differ materially from those in the forward looking statements include, among others, risks associated with product discovery and development, uncertainties related to the outcome of clinical trials, slower than expected rates of patient recruitment, unforeseen safety issues resulting from the administration of our products in patients, uncertainties related to product manufacturing, the lack of market acceptance of our products, our inability to manage growth, the competitive environment in relation to our business area and markets, our inability to attract and retain suitably qualified personnel, the unenforceability or lack of protection of our patents and proprietary rights, our relationships with affiliated entities, changes and developments in technology which may render our products obsolete, and other factors. These factors include, without limitation, those discussed in our public reports filed with the Tokyo Stock Exchange and the Financial Services Agency of Japan. Although the Company believes that the expectations and assumptions reflected in the forward-looking statements are reasonably based on information currently available to the Company's management, certain forward-looking statements are based upon assumptions of future events which may not prove to be accurate. The forward-looking statements in this document speak only as at the date of this presentation and the company does not assume any obligations to update or revise any of these forward statements, even if new information becomes available in the future.

This presentation does not constitute an offer, or invitation, or solicitation of an offer, to subscribe for or purchase any securities. Neither this presentation nor anything contained herein shall form the basis of any contract or commitment whatsoever. Recipients of this presentation are not to construe the contents of this summary as legal, tax or investment advice and recipients should consult their own advisors in this regard.

This presentation and its contents are proprietary confidential information and may not be reproduced, published or otherwise disseminated in whole or in part without the Company's prior written consent. These materials are not intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation.

This presentation contains non-GAAP financial measures. The non - GAAP financial measures contained in this presentation are not measures of financial performance calculated in accordance with IFRS and should not be considered as replacements or alternatives profit, or operating profit, as an indicator of operating performance or as replacements or alternatives to cash flow provided by operating activities or as a measure of liquidity (in each case, as determined in accordance with IFRS). Non-GAAP financial measures should be viewed in addition to, and not as a substitute for, analysis of the Company's results reported in accordance with IFRS.

(c) Nxera Pharma Co, Ltd, 2024. Nxera and the Nxera logos are trademarks of Nxera Pharma Co. Ltd.



N

# Agenda

- Business Overview
- Strategic Roadmap
- Our Pipeline
- Japan/APAC Business
- Our NxWave<sup>TM</sup> Platform
- Financial Results
- Appendix





# Leading the Next Era of Medicine. From Japan, for Japan, and the world

World-leading NxWave<sup>TM</sup> platform (UK), coupled with Japan's most effective development and commercial organization

# Our Mission

To accelerate the development of life-changing medicines, by investing in science and technology.

# Our Vision

To lead the next era of medicine.

From Japan, for Japan, and the world.

# Our Values

- Patients come first
- Innovation and teamwork
- Focus
- Speed and agility
- Operational excellence



#### We are Nxera Pharma

A technology-powered biopharma in pursuit of new specialty medicines to improve the lives of patients

# Cutting-edge Science

**WORLD-LEADERS IN GPCR** STRUCTURE-BASED DRUG DESIGN

Strong focus on GPCR targets – solved 375+ molecular structures

# Programs by Design

**30+ ACTIVE PROGRAMS** 



**CNS** 39%



GI

33%



**IMM** 



Other

### Real Human Outcomes

#### PROTECTING LIVES EVERYDAY

15,000+ patients have received PIVLAZ® (Japan and shortly South Korea) +4 other partnered marketed products



TSE: 4565

Tokyo Stock Exchange Prime



350+ FTE Employees



5 Global Locations

Tokyo, Cambridge, London, Seoul & Basel

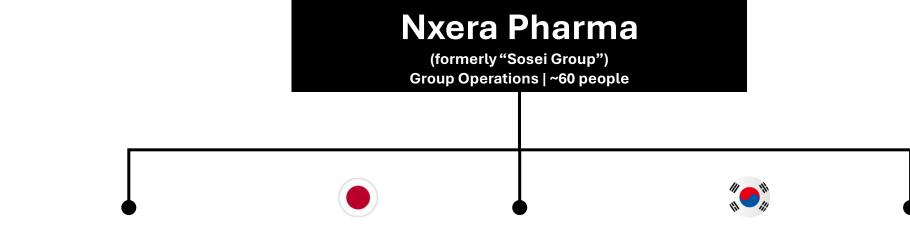


Revenue-Generating \$350m+ Cash in hand (Dec-2023)



# Global Corporate Structure

Over 350 team members employed across Japan, South Korea, UK and Switzerland



#### **Nxera Pharma UK (NPU)**

(formerly "Heptares")

Cambridge | ~170 staff

#### Research & Early Clinical Development

- NxWave<sup>TM</sup> SBDD Platform
- Drug Discovery
- Translational Medicine
- Early Clinical Development
- Business Development

#### Nxera Pharma Japan (NPJ)

(formerly "Idorsia Pharma Japan" and "Sosei Co.")

Tokyo | ~140 staff

#### **Drug Development & Commercial Operations**

- Clinical Development
- Regulatory Affairs
- Marketing Authorisation Holder
- Commercial Sales (direct and via partners)

#### Nxera Pharma Korea (NPK)

(formerly "Idorsia Pharma Korea")

Seoul | ~7 staff

#### **Drug Development & Commercial Operations**

- Clinical Development
- Regulatory Affairs
- Marketing Authorisation Holder
- Commercial Sales (via partners)



Eiko Tomita

**Reg Affairs** 

Eisai

# Agile and decisive leadership team

#### **BOARD OF DIRECTORS**































#### **EXECUTIVE MANAGEMENT**



Kieran Johnson **Chief Accounting Officer** 





**Group Operations** Tokyo / London



Chris Cargill



Hironoshin Nomura **Chief Financial Officer** 







Bristol Myers Squibb

J.P.Morgan

Candelle Chong **Chief of Staff** 

**Chief Executive Officer** 

J.P.Morgan

Kazuhiko Yoshizumi **Chief Compliance Officer** 



**UK Research & Development Operations** 







Research & Early Development Discovery / Preclinical / Phase I

Development & Commercialization Phase II / III / IV



Japan Development & Commercial Operations

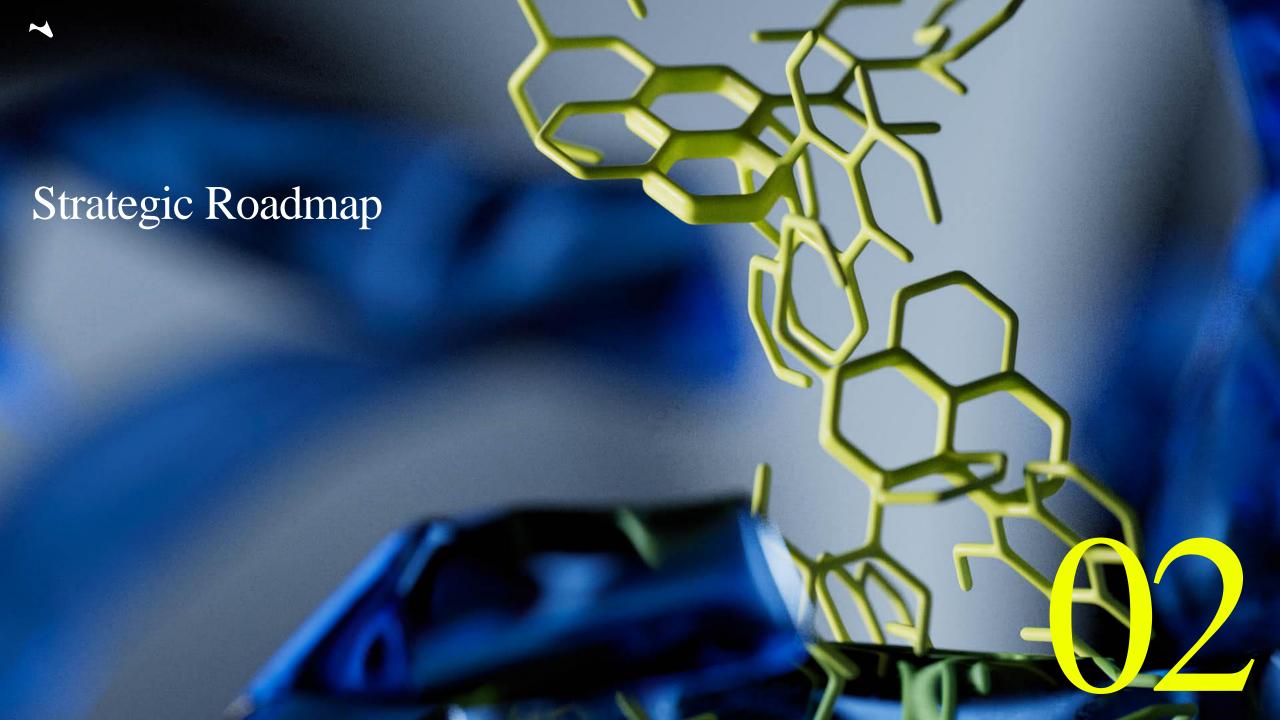
Makoto Sugita **President of Nxera Pharma Japan** 

<sup>™</sup> Bristol Myers Squibb









# Our History

Strategic steps taken to build Nxera over the last two decades

#### 2000s

# Launched a public company dedicated to **bringing innovation to**Japan

✓ IPO on TSE (MOTHERS) in 2004

Made strategic acquisitions to bring **steady revenue** through groundbreaking medicines

- \$186m acquisition of Arakis Limited in 2005
- Royalty revenues from Breezhaler® medicines from 2012 to present

**ARAKIS** 

2015

# Out-licensed several programs to global pharma to generate profit, a cash reserve and a larger market valuation

√ 15+ partnered programs that generate upfront and milestone revenue (plus future royalties)

Invested in research-focused companies that could generate a continuous pipeline of new medicines

\$400m acquisition of Heptares Therapeutics Limited in 2015



2023

# Elevated our status in the **Tokyo Stock Exchange**, improving access to institutional investors

- Promotion to TSE (PRIME) segment in 2023
- First public healthcare investment by the Japan Investment Corporation in 2023

Acquired a commercial-stage pharmaceutical company which provided an **integrated platform** for even greater sustainable revenue growth

- Rapidly growing revenues from sales of PIVLAZ®



2024



Launched new corporate branding:

#### **Nxera Pharma Co**

With a vision to lead the next era of medicine.

From Japan, for Japan, and the world.



# To make our mission happen...

Accelerate the development of life-changing medicines

1

Acquire or in-license multiple de-risked medicines for Japan

2

Invest in our
NxWave<sup>TM</sup> platform
to seed programs

3

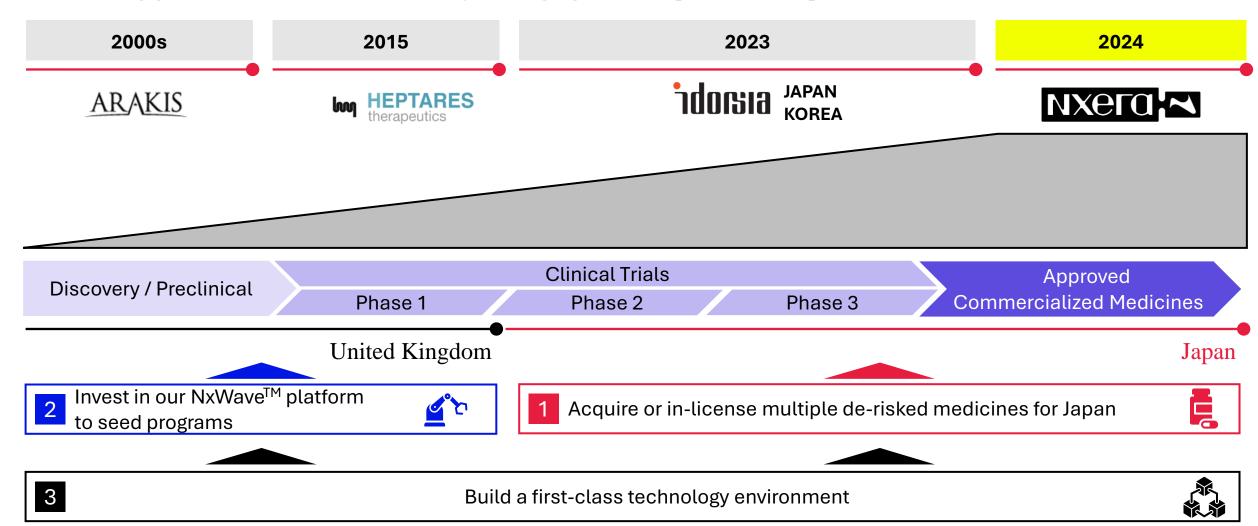
Build a first-class technology environment

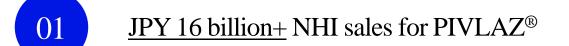
Focusing on these three areas is how we plan to make our mission happen as fast as possible



# ...building a fully integrated biopharma from Japan

Accelerating growth to achieve our mission by leveraging business platform in Japan and UK





**SLIGHTLY BEHIND** 

New target is JPY 15-16Bn

JNDA approval for daridorexant in Japan 02

Sep. 2024

Acquire/in-license at least one late-stage 03 medicine for Japan/APAC (ex-China)

**ON-TRACK** 

Execute at least one new major partnership, 04 and initiate at least one new in-house Ph.1 study







EP4 ag.

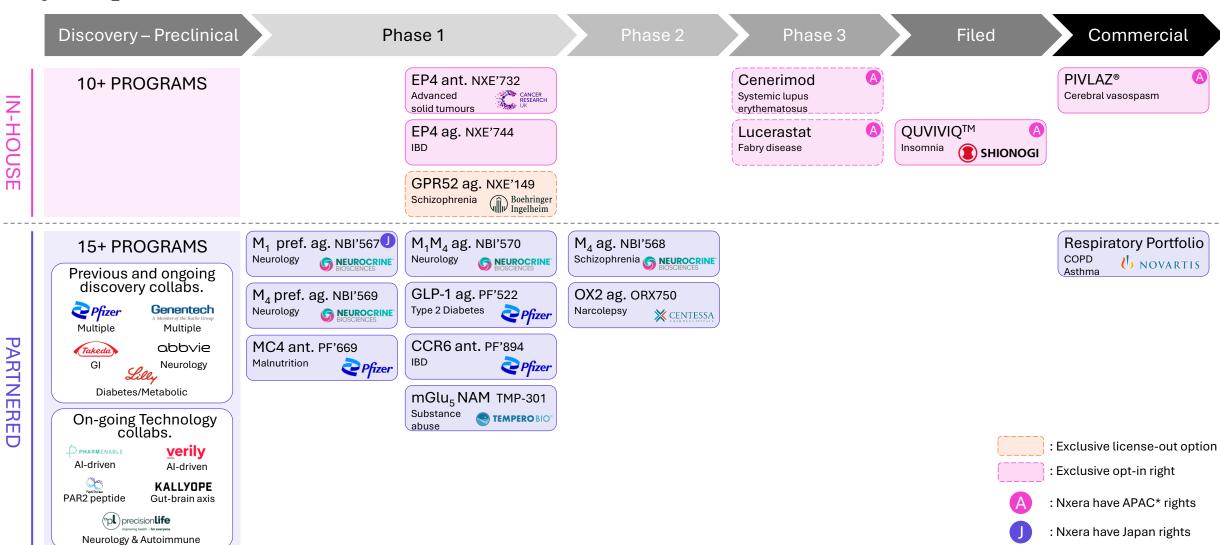
<u>PMI investment</u> in new brand concept, plus systems 05 and applications for efficiency and scalability

**ON-TRACK** 



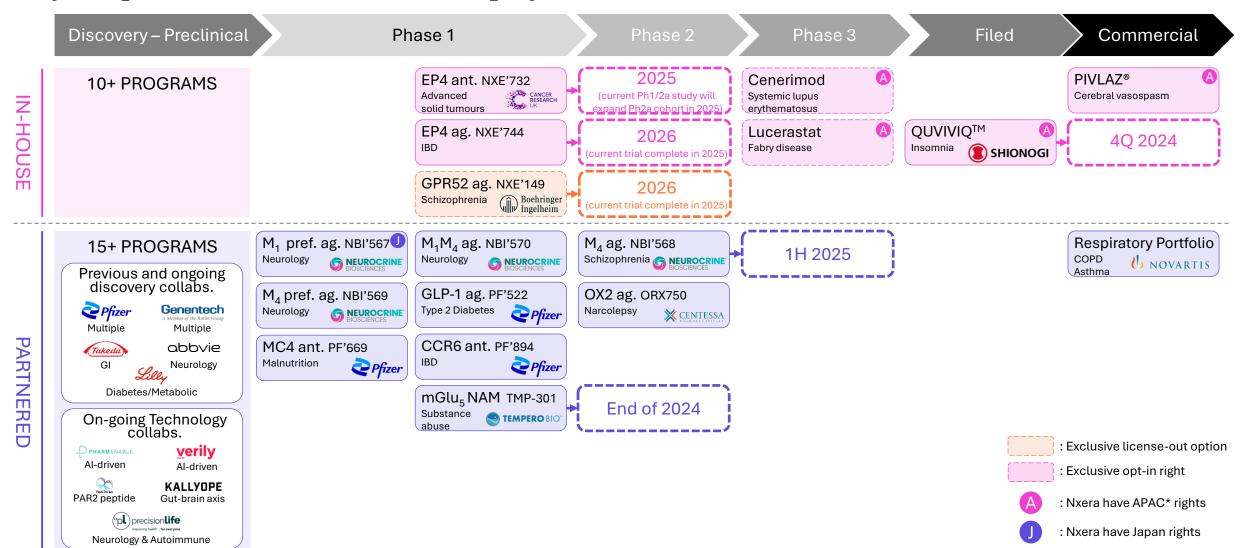


# Major Pipeline Overview





# Major Pipeline Overview (with future projection)





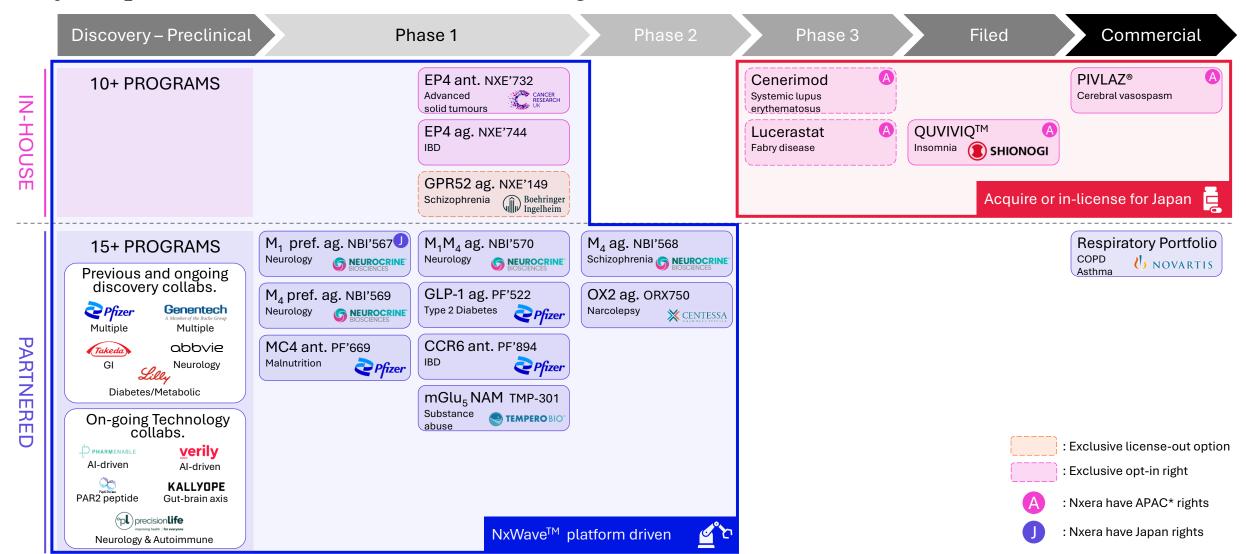
# Achievements and several potential catalysts in 2024

Potential catalysts of in-house and out-licensed programs (excluding new business development transactions)

	PROGRAM	PARTNER	TIMING	EVENT
$\bigcirc$	EP4 Ag	NXera ►	Achieved (Mar. 2024)	Ph.1 start
$\bigcirc$	GPR35 Ag	GSK NXera¦≈	Achieved (Mar. 2024)	Program reversion
$\bigcirc$	GPR52 Ag	Boehringer Ingelheim	Achieved (Mar. 2024)	Option-to-license agreement
$\bigcirc$	NBI-568 (M4 Ag)	S NEUROCRINE BIOSCIENCES	Achieved (Apr. 2024)	Long-term TOX study completed
$\bigcirc$	NBI-567 (M1 pref. Ag)	S NEUROCRINE BIOSCIENCES	Achieved (May 2024)	Ph.1 start
$\bigcirc$	ORX750 (Ox2 Ag)	X CENTESSA PHARMACEUTICALS	Achieved (May 2024)	Ph.1 start
$\bigcirc$	NBI-568 (M4 Ag)	S NEUROCRINE BIOSCIENCES	Achieved (Aug. 2024)	Ph.2 topline data
$\bigcirc$	ORX750 (Ox2 Ag)	X CENTESSA PHARMACEUTICALS	Achieved (Sep. 2024)	Ph.1 completion & POC data
$\bigcirc$	ORX750 (Ox2 Ag)	X CENTESSA PRABRACE UTICALS	Achieved (Nov. 2024)	Ph.2 start
	Cenerimod	ndorsia	4Q 2024	Exclusive opt-in decision
	Lucerastat	ndorsia	4Q 2024	Exclusive opt-in decision
	Daridorexant (Sth Korea)	NX6La!✓	4Q 2024	New Partnership & Ph.3 start
	Daridorexant (Japan)	SHIONOGI	4Q 2024	NDA Approval (achieved) & Launch
	TMP-301 (mGlu5 NAM)	TEMPERO BIO"	End of 2024	Ph.2 start



# Major Pipeline Overview (with business categories)





# Key strategy for each business category

Maximize the value of each business and demonstrate synergies by conducting integrated development in future

#### NxWave<sup>™</sup> platform driven



### Acquire or in-license for Japan



Organic

Growth

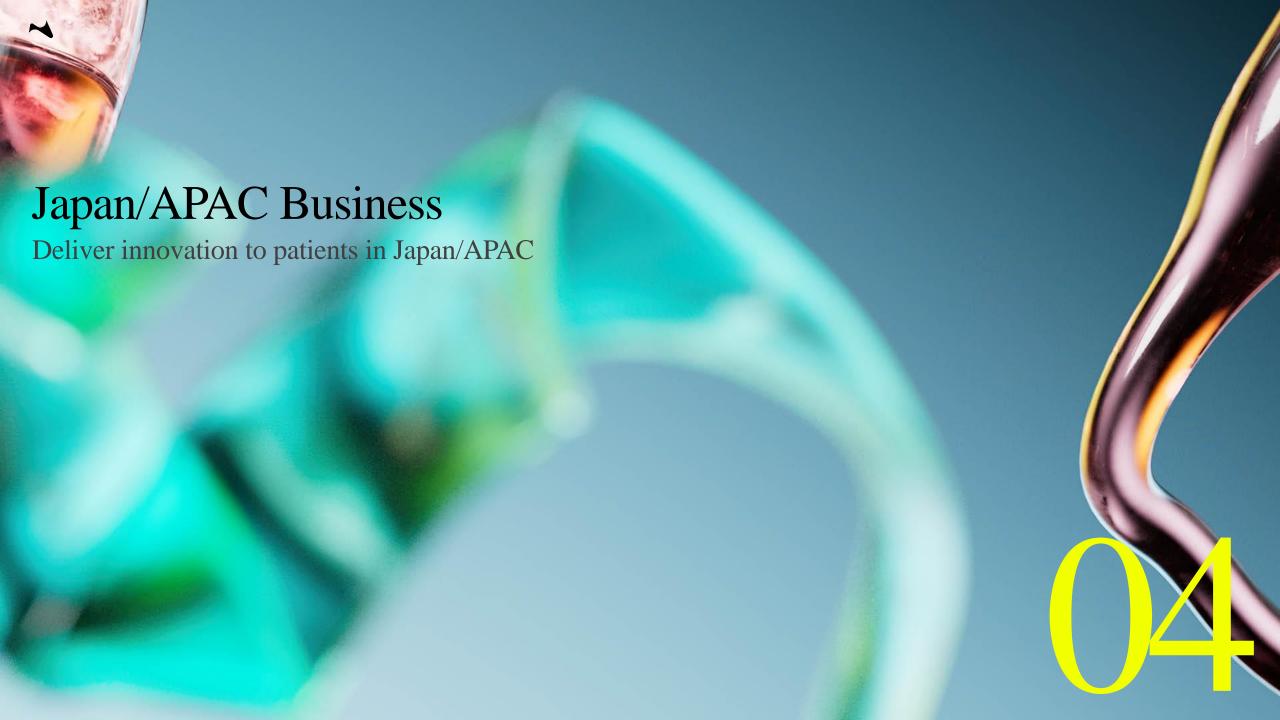
- Collaborate with existing partner to help them to progress pipeline licensed from us
- Execute at least one new high value collaboration and/or co-investment per year

Maximize and optimize sales and profit for two major products (PIVLAZ®/QUVIVIQ<sup>TM</sup>)



- Collaborate/invest in new technologies with synergies
- In-license late-stage products for clinical development and commercialization in Japan and APAC



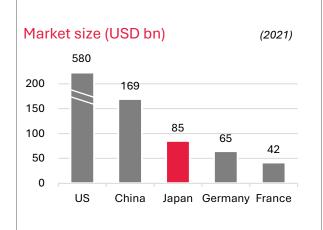


# Japan will serve as our base to expand across APAC markets

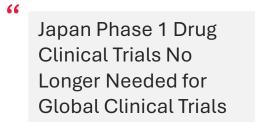
Japan is an attractive, established market with strong volumes



# Japan is the second largest pharma market (ex-China)



# Tailwinds from nearterm regulatory changes

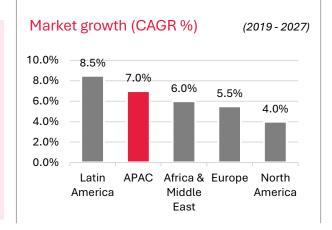




# High quality clinical and regulatory environment

- Excellent access to Doctors/HCPs who evaluate novel drugs
- Typically achieve strong patient uptake
- Reduces drug loss and drug lag for Japan patients

# APAC is the second highest growth pharma market



Source: IQVIA Market Prognosis, Sep 2022; IQVIA Institute, Nov 2022.

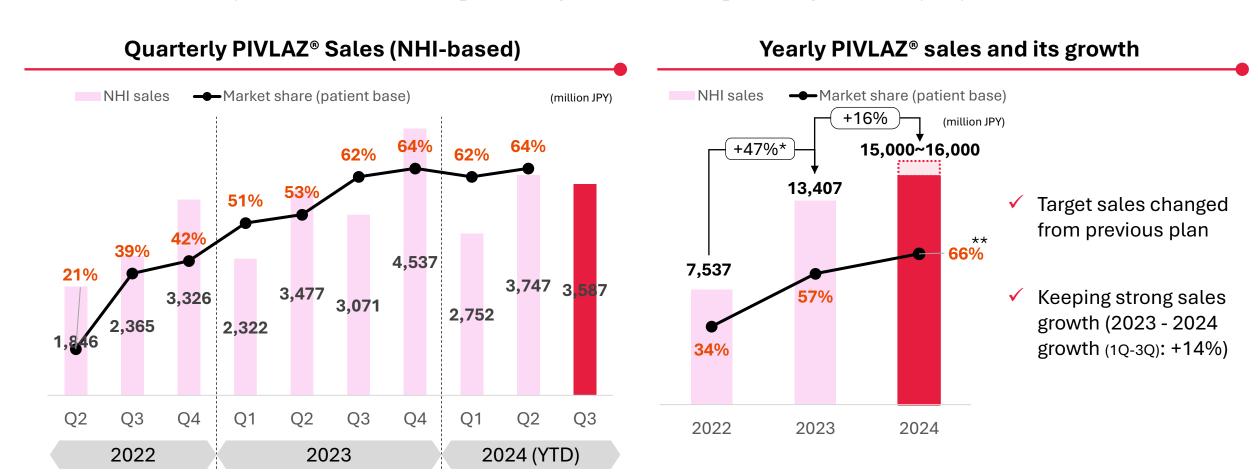
APAC (ex-China) territory includes South Korea, Australia, Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, New Zealand, Philippines, Singapore, Taiwan, Thailand and Vietnam



# Our product: PIVLAZ®

PIVLAZ

Our first commercially available medicine is penetrating the market and protecting lives every day.



PIVLAZ® is rapidly spreading and becoming standard of care in prevention of cerebral vasospasm



<sup>\*:</sup> Comparison of 2-4Q of 2022 and 2023, \*\*: Estimation from previous trend

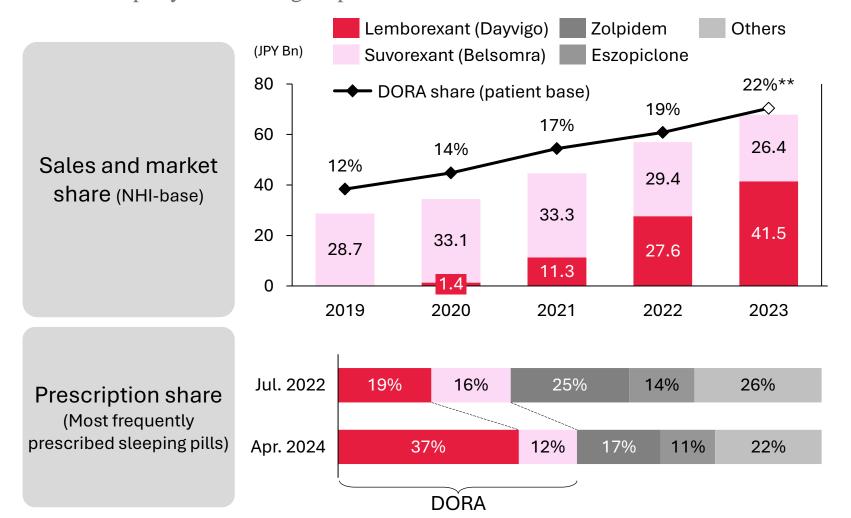


# QUVIVIQ<sup>TM</sup>\*: A Novel Dual Orexin Receptor Antagonist (DORA)

不服産治療業 / オレキシン受容体拮抗薬 25mg 50mg



DORA is rapidly establishing its position in insomnia treatment



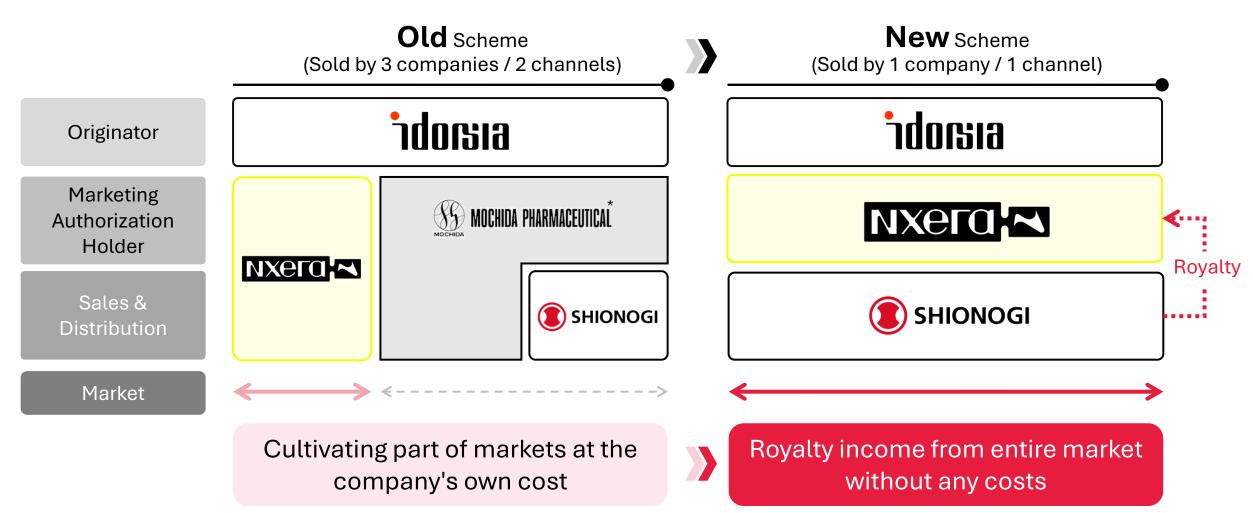
- ✓ DORAs are rapidly penetrating the insomnia treatment market in Japan
- ✓ Japan is one of the largest DORA markets



# QUVIVIQ<sup>TM</sup> Business scheme change

SHIONOGI to Exclusively Handle Distribution and Sales Activities in Japan









# In-house pipeline: QUVIVIQ<sup>TM</sup>

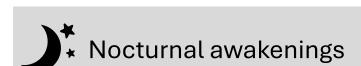


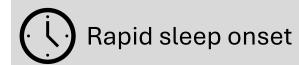


JNDA approval received in September 2024, and aim to be best-in-class drug

#### Unmet needs in insomnia









Carry-over effects to the next day after medication

## **About QUVIVIQ™**







Alleviates excessive wakefulness through strong inhibition of orexin receptors

Recommended in the 2023 European Insomnia Guidelines as the only orexin receptor antagonist that can be used 1

T<sub>max</sub>: about 0.5-1.4 hour

T<sub>1/2</sub>: about **6-9 hour** 

Significant improvement in next-day sleepiness and daytime functioning confirmed in global phase 3 trials <sup>2</sup>

#### Aim to be Best-in-class drug in DORA class





Actual

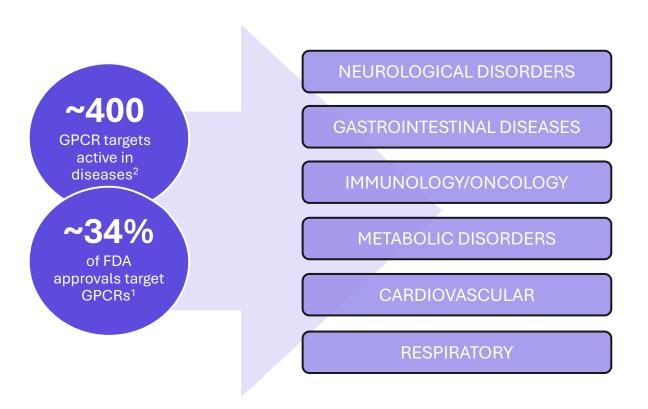
Prediction

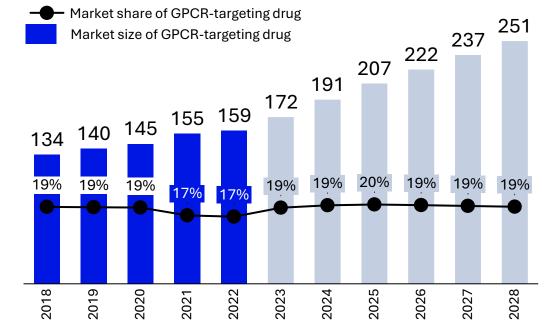
(Billion USD)



# NxWave<sup>TM</sup> platform is focussed on drugging GPCRs

GPCRs are the largest family of drug discovery targets – comprising 1/3 of all FDA approved drugs





GPCRs are active in a wide range of disease areas, and offer broad therapeutic potential

Drugs that target GPCRs account for 20% of the entire pharmaceutical market



# GPCR: Large unmet needs and FIC opportunities

>650 First-in-class opportunities in GPCR-targeting drug



#### Best-in-class opportunities (~120): Drugs are available



Total ~800 drug opportunities (~400 GPCRs are thought to be drug targets)



# NxWave<sup>TM</sup> platform enables faster, cheaper and more precise drug discovery

Platform

World-leading science and platform enables efficient drug discovery against difficult targets

	Conventional drug discovery	Our drug discovery
Approach	Empirical design	Rational design (computer-based)
Method	High Throughput Screening (HTS <sup>1</sup> )	Proprietary NxWave™ Platform
Period <sup>2</sup>	4.5 years on average	3.0 years on average
Costs <sup>2</sup>	\$15 million	\$5 million
Features <sup>3</sup>	Difficult to design drugs precisely – high development attrition rate	Execute more precise drug design  – lower development attrition rate
Target <sup>3</sup>	Difficult for GPCRs with unstable structures	Best for GPCRs with unstable structures

<sup>1</sup> HTS/High Throughput Screening is a method to find drug candidates by reacting tens of thousands to millions of compounds with drug targets using large machines and human hands.

<sup>&</sup>lt;sup>3</sup> Precise drug design make clear the binding site of target, make easier to improve compound, create backups and redo – potentially increase the success rate. GPCR is most popular drug target which account for 30% of current drug target.



<sup>&</sup>lt;sup>2</sup> The period from target selection to preclinical testing. For conventional drug discovery, figures are taken from NATURE REVIEWS Drug Discovery (MARCH 2010).



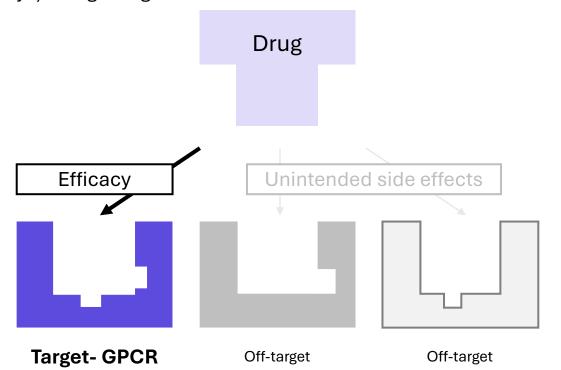
# Our platform enables precise design of GPCR models

Only by performing detailed structural analysis can we design great drugs.



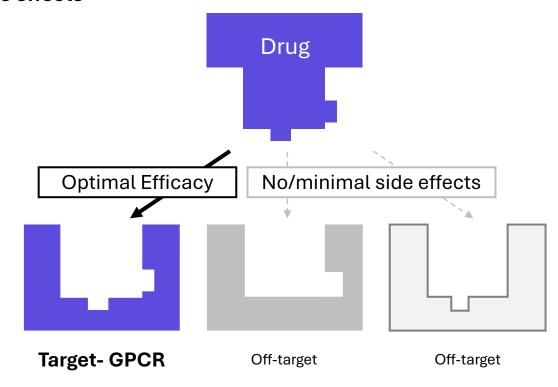
## Imprecise GPCR model: Standard Medicine

Poorly understood GPCRs (locks) led to suboptimal drugs (keys) being designed



# Precise GPCR model: Optimized Medicine

High selectivity enables to **optimize efficacy and minimize side effects** 





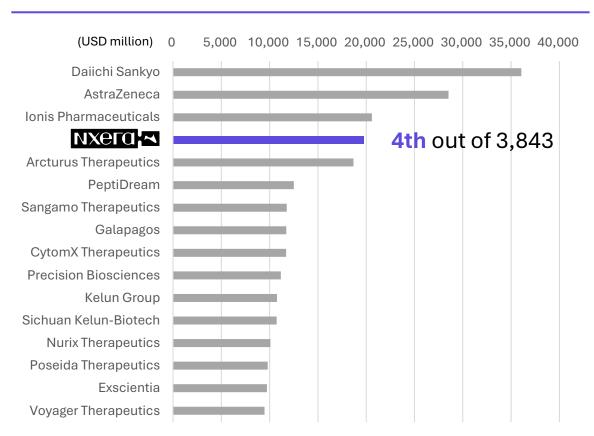
# Our track record of major licensing transactions speaks for itself...

Income from licensing provides a great source of non-dilutive financing to support our growth

#### Balance of potential milestone income from existing license agreements<sup>1</sup>



Top 15 pharmaceutical/biotech companies by license value<sup>2</sup> (cumulative total since 2015)



<sup>&</sup>lt;sup>1</sup> Balance as of the end of the fiscal year of only those currently under contract. TEVA and AbbVie (formerly Allergan), for which compounds were returned, are excluded from the balances from FY2018 and FY2021, respectively.



<sup>&</sup>lt;sup>2</sup> The figures are based on 'Licensing' category on third party's (EvaluatePharma's) proprietary database and therefore do not completely match the amounts shown in the LHS chart. Source: Company's data (LHS) and EvaluatePharma (as of 2024/10/17) (RHS)

# Platform

# ... hundreds of millions of dollars received, billions of dollars in potential to come

New collaboration and exclusive option to license agreement executed with Boehringer Ingelheim

Partner	Execution	Program	Therapeutic Area(s)	Upfront and Initial Milestones	Potential Total Milestone <sup>1</sup>
Boehringer Ingelheim	March 2024	Collaboration and exclusive option-to- license agreement for GPR52 agonist	Schizophrenia	€25m	€670m
Lilly	December 2022	Multi-target Collaboration	Diabetes and Metabolic	\$37m	\$800m
abbyie	August 2022	Multi-target Collaboration	Neurological disorders	\$80m	\$1.2bn
NEUROCRINE BIOSCIENCES	December 2021	Collaboration and license agreement for M <sub>4</sub> , M <sub>1</sub> and M <sub>1</sub> /M <sub>4</sub> dual agonist	Neurological disorders	\$100m	<b>\$2.6bn</b>
GSK	December 2020	Collaboration and license agreement for GPR 35	Gastrointestinal, immunology	\$44m	\$480m
biohaven pharmaceuticals	December 2020	Collaboration and license agreement for CGRP portfolio	Neurology	\$10m	\$380m
abbvie	June 2020	Discovery Collaboration and Option to License <sup>2</sup>	Inflammatory and Autoimmune	\$32m	\$400m
Takeda	August 2019	Multi-target Collaboration	Multiple; Initial focus on Gastrointestinal	\$26m	\$1.2bn
Genentech  A Member of the Roche Group	July 2019	Multi-target Collaboration	Multiple	\$26m	\$1.0bn
<b>P</b> fizer	November 2015	Multi-target Collaboration	Multiple	<u>-</u>	\$1.8bn

<sup>&</sup>lt;sup>1</sup>Potential option fees, development, regulatory and commercial milestone payments agreed at the time of transaction. Nxera is also eligible to receive tiered royalties ranging from high single digit to mid-teen percentage on future net sales of any products developed under the partnership. <sup>2</sup> AbbVie has the option to expand the collaboration by an additional three targets



PIPELINE

# M4 ago. (NBI'568) demonstrated competitive positive phase 2 data



Once-daily 20 mg dose showed efficacy, and good safety / tolerability profile for schizophrenia patients.

Clinically meaningful and statistically significant efficacy (Once-daily 20 mg dose)	Effect size 0.61  Marder Factor score change vs Placebo:  • Positive -3.0 (p	= 0.011)  Met primary and additional endpoints and demonstrated efficacy on both positive and negative symptoms  =0.004)  =0.008)
Generally safe and well-tolerated across all doses tested	Gl and CV adverse event frequency	placebo: 4.3%)  NBI'568 showed safety and tolerability for all doses
Rapidly advancing to Phase 3 development	Received successful milestone of Ph2 trial  Ph3 clinical trial  Evaluating additional indication for NBI'568  Advancing follow-on compounds in muscarinic agonist	in 1H 2025  Expanding potential of muscarinic agonist portfolio

Source: Presentation of Neurocrine Sciences (Aug.28 2024), KarXT for Schizophrenia draft evidence report (Nov. 28, 2023)





OVERVIEW

STRATEGIC ROADMAP

JP/APAC

**PIPELINE** 

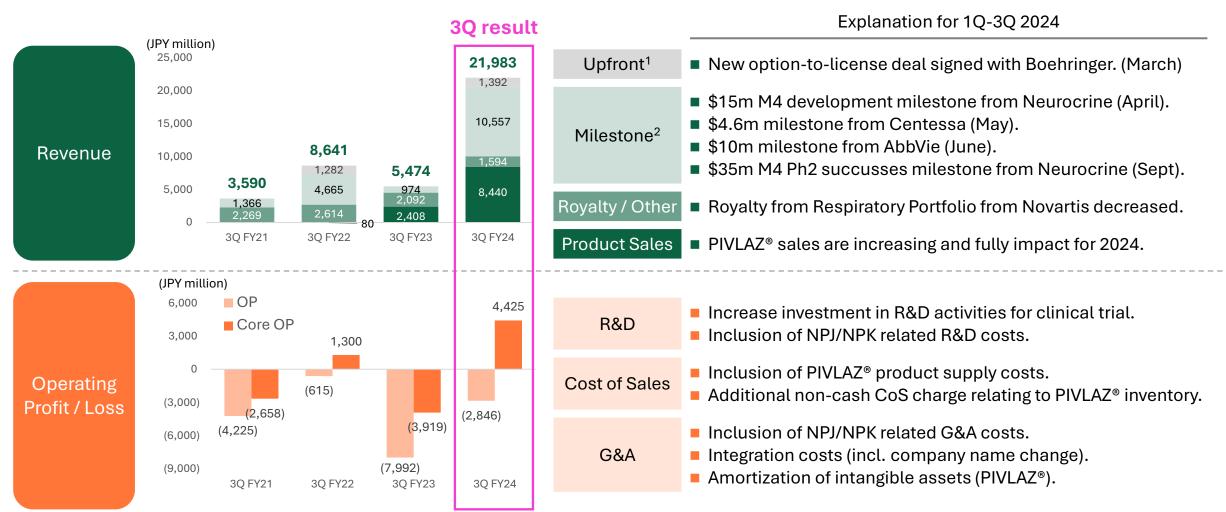
PLATFORM

FINANCIALS

APPENDIX

# Key financial indicators

Full impact of NPJ/NPK product sales and cost base reflected in FY2024



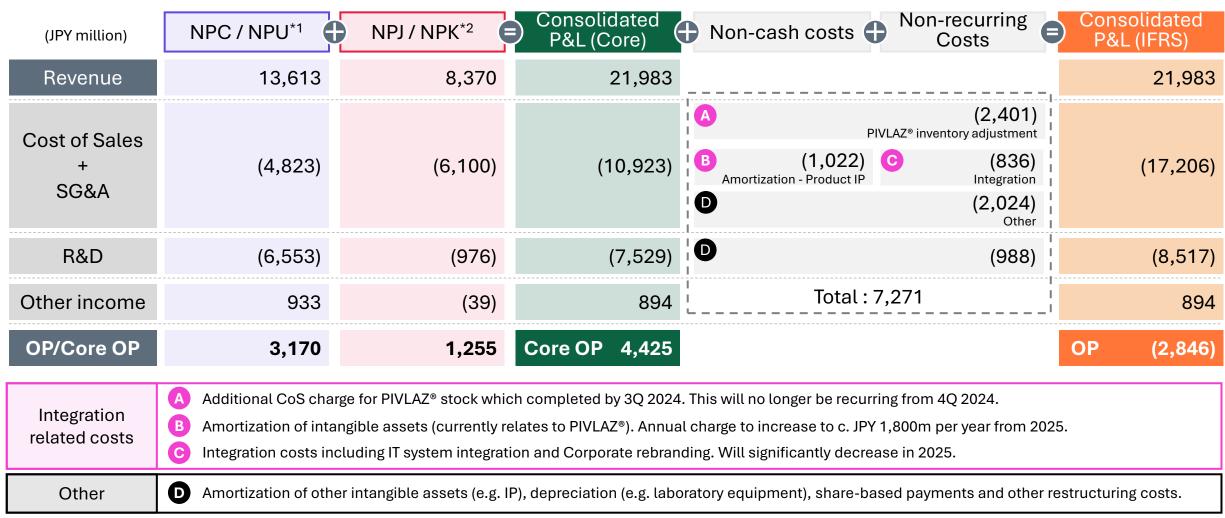
<sup>&</sup>lt;sup>1</sup> Upfront fee revenue recognised at deal inception



<sup>&</sup>lt;sup>2</sup> Milestone revenue recognised at milestone event + deferred revenue releases

## Breakdown of 3Q 2024 result

Impact of Non-cash/Non-recurring costs on full-year result is more significant in 2024 due to the inclusion of Idorsia businesses



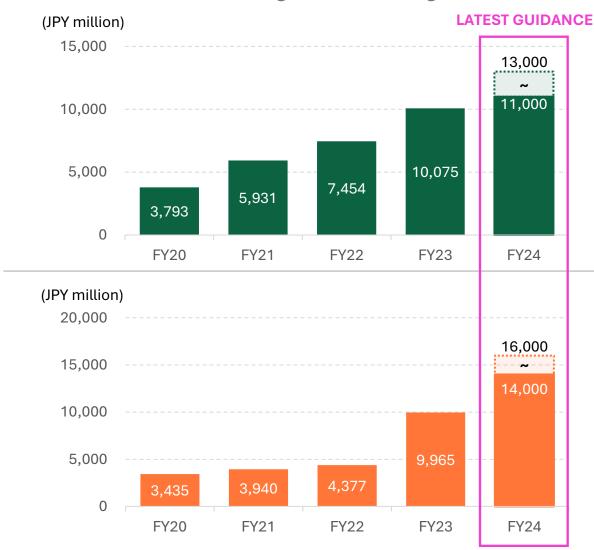
<sup>\*1 =</sup> Nxera Pharma Co. Ltd. (formerly Sosei Group Corporation) + Nxera Pharma UK Ltd (formerly Heptares Therapeutics Ltd.) + Sosei K.K

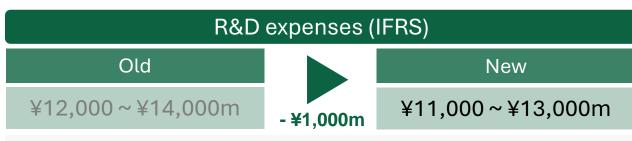


<sup>\*2 =</sup> Nxera Pharma Japan (formerly Idorsia Pharmaceuticals Japan) + Nxera Pharma Korea (formerly Idorsia Pharmaceuticals Korea)

## Full year cost guidance

Incremental investment designed to deliver greater returns over the medium to long term





#### **Major points on FY24**

- Investment in discovery and translational medicine capabilities.
- 1 clinical trial initiated for in-house program (EP4 ag.)
- Advancing in-house programs further through the clinic will deliver higher out-licensing revenues



#### Major points on FY24

- Includes NPJ¹/NPK² SG&A costs for a full year.
- Increase in support for PIVLAZ® to drive growth.
- Increase in amortization charge for PIVLAZ® and QUVIVIQ™(c. ¥1,600m)
- PMI relating costs for NPJ/NPK (c. ¥1,000m)



STRATEGIC ROADMAP OVERVIEW PIPELINE

JP/APAC

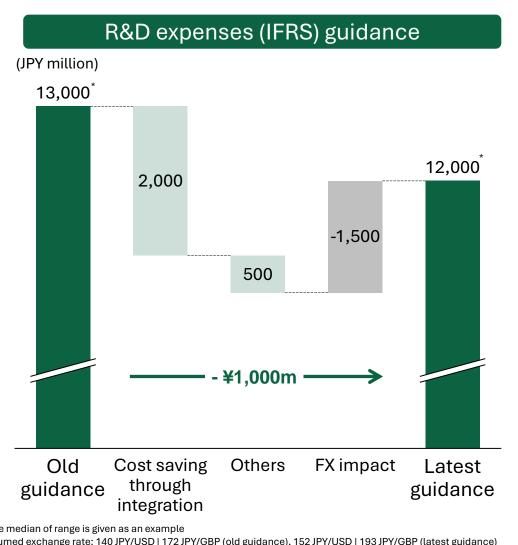
PLATFORM

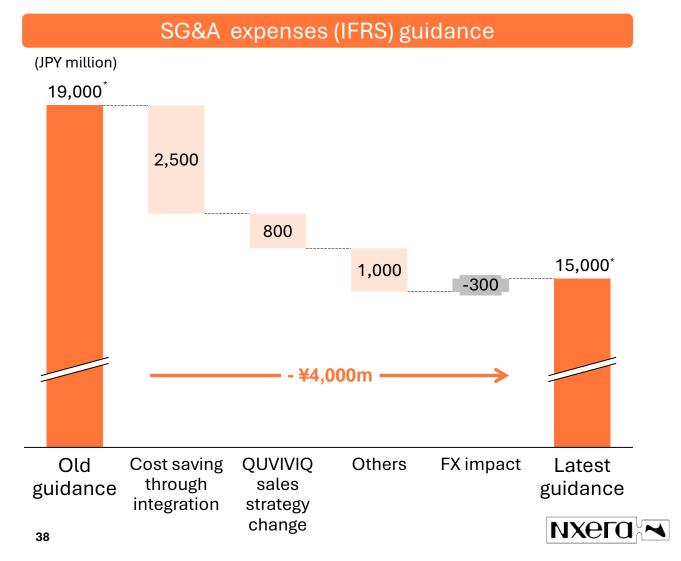
FINANCIALS

**APPENDIX** 

## Cost expenses guidance gap vs. beginning of FY24

We expect downward trend in SG&A expenses to continue through optimization in 2025





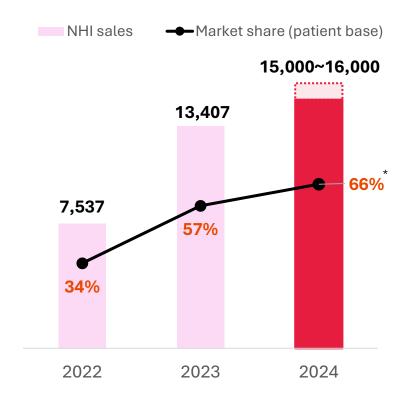
<sup>\*</sup> The median of range is given as an example Assumed exchange rate: 140 JPY/USD | 172 JPY/GBP (old guidance), 152 JPY/USD | 193 JPY/GBP (latest guidance)

## PIVLAZ® sales guidance update

Updated sales guidance due to SAH occurrence decrease and cancellation of inventory adjustment plan

#### Sales guidance of PIVLAZ®

Updated sales guidance though PIVLAZ's market share is continuously growing



#### **Background of sales guidance update**

SAH occurrence decrease in 2024

c. JPY800m

Mortality cases of SAH in 2024 (Jan-May) was 4-6% lower than past

2 years

1,200

1,000

800

2022

2023

2024

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov De

Optimization of year-end inventory

c. JPY200m 👢

#### 2023

In anticipation of increasing demand over the year-end and New Year period, the inventory for distributor was adjusted (excess of <u>c.</u> <u>JPY 200 million</u> than monthly forecast)

#### 2024

Inventory adjustment was cancelled based on the track records in 2022-2023





## Exclusive Opt-in Rights And ROFN/ROFR<sup>1</sup>

Option to develop up to seven clinical programs for Japan and APAC (ex-China) from Idorsia

	Program	Mechanism of Action	Indication	Stage	Region
Exclusive	Cenerimod	S1P1 receptor modulator	Systemic lupus erythematosus	Phase 3	
Opt-in Right	Lucerastat	Glucosylceramide synthase inhibitor	Fabry disease	Phase 3	
	ACT-1004-1239	ACKR3 / CXCR7 antagonist	Multiple sclerosis and other demyelinating diseases	Phase 2*	APAC
ROFR	ACT-1014-6470	C5aR1 antagonist	Immune-mediated disorders	Phase 1*	(ex-China) <sup>2</sup>
/ROFN <sup>1</sup>	IDOR-1117-2520	Undisclosed	Immune-mediated disorders	Phase 1*	
	ACT-777991	CXCR3 antagonist	Recent-onset Type 1 diabetes	Phase 1*	



<sup>&</sup>lt;sup>1</sup> ROFN/ROFR - Right of first negotiation / Right of first refusal

<sup>&</sup>lt;sup>2</sup> Territories include Japan, South Korea, Australia, Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, New Zealand, Philippines, Singapore, Taiwan, Thailand and Vietnam

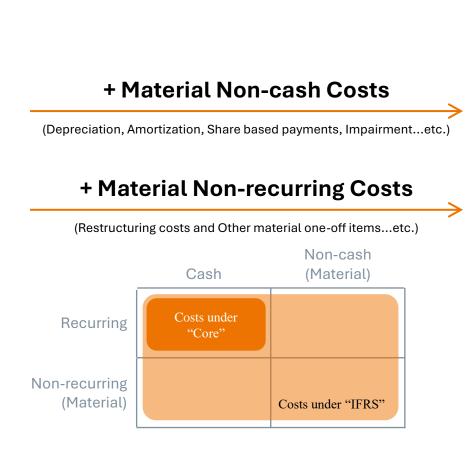
<sup>\*</sup> Global Phase

### Core Operating Profit - Definition

Core Operating Profit/Loss – a financial indicator closer to the reality of our business

# "Core"

- Core Operating Profit/ Loss is a key financial indicator that highlights the underlying recurring cash generating capability of our business.
- Core Operating Profit/Loss is defined as IFRS Operating Profit + material Non-cash costs + material non-recurring costs
- Material Non-cash Costs include depreciation, amortization, share based payments and impairment.
- Material Non-recurring Costs include restructuring costs, M&A related professional fees and other material one-off items.



#### Operating Profit

## "IFRS"

 Financial results recorded and prepared in accordance with International Financial Reporting Standards (IFRS)



OVERVIEW

NX6LQ .✓

## Estimation of potential market size

Multi-billion USD annual peak sales potential for our post-pre-clinical pipeline

0-1	la disaria a 2	Number of			
Category	Indication <sup>2</sup>	Patients	Market Size	Individual Products	Our Candidates
	Dementia	~55 million	\$7.3 billion (2010)	\$3.9 billion (2009/Aricept)	M1 agonist, M1/M4 agonist
	Schizophrenia	~20 million	\$20.7 billion (2011)	\$5.7 billion (2013/Abilify)	M4 agonist, M1/M4 agonist, GPR52 agonist
Neurological disorders	Substance use disorders	~10.4 million <sup>1</sup>			mGlu5 NAM
	Narcolepsy	~3 million	\$2.3 billion (2022)	\$1.7 billion (2020/Xyrem)	OX2 agonist
	Other	-		-	CGRP antagonist, GPR52 agonist
	Cancer	~42 million	\$178.9 billion (2022)	\$21.0 billion (2022/Keytruda)	A2a antagonist, EP4 antagonist, CXCR4 mAb
Immunological disorders	IBD	~10 million	\$23.5 billion (2022)	\$7.5 billion (2022/Humira)	CCR6 antagonist, GPR35 agonist, EP4 agonist
	Atopic Dermatitis	~13.3 million	\$8.1 billion <sup>3</sup> (2022)	\$7.0 billion (2022/Dupixent)	H4 antagonist, PAR2 mAb
Other	T2DM/Obesity	~420 million	\$58.3 billion (2022)	\$8.8 billion (2022/Ozempic)	GLP1 agonist
Other	Anorexia	~10 million		-	MC4 antagonist
	Total		~\$299 billion/year	~\$56 billion/year	

Source (Number of patients): World Health Organization, Evaluate Pharma, The European Federation of Crohn's & Ulcerative Colitis Associations (EFCCA), Narcolepsy Network, Inc., GBD 2015 Disease and Injury Incidence and Prevalence Collaborators (October 2016). "Global, regional, and national incidence, prevalence, and years lived with disability for 310 diseases and injuries, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015". Lancet. 388 (10053): 1545–1602 <sup>1</sup> The number of patients with drug addiction

Source (Peak Sales): Sales of each indications are extracted form Evaluate Pharma's data of sales by disease and sales by individual products (as of 30 June. 2022). Nxera may target one segment in the market for specific diseases. Since there is no applicable indication category, the market size of "Eczema" is stated. Current market size for Atopic Dermatitis may be larger than stated above.

## Partnered pipeline (1/2)

Compound	Target / Mechanism of Action	Modality	Indication	Partner	Disc.	PCC	Ph1	Ph2	Ph3	Арр	Mkt
Partnered											
Seebri® Breezhaler®	LAMA	SME	COPD	<b>U</b> NOVARTIS							
Ultibro® Breezhaler®	LAMA+LABA	SME	COPD	<b>U</b> NOVARTIS							
Enerzair® Breezhaler®	LAMA+LABA+ICS	SME	Asthma	<b>U</b> NOVARTIS							
ORAVI®	Antifungal agent miconazole	SME	Oropharyngeal candidiasis	<b>Alisamitsu</b>							
NBI-1117568	Muscarinic M4 agonist	SME	Schizophrenia	NEUROCRINE' BIOSCIENCES							
NBI-1117569	Muscarinic M4 preferring agonist	SME	Neurology diseases	S NEUROCRINE BIOSCIENCES							
NBI-1117570	Muscarinic M1/M4 agonist	SME	Neurology diseases	S NEUROCRINE' BIOSCIENCES							
NBI-1117567	Muscarinic M1 preferring agonist	SME	Neurology diseases	S NEUROCRINE' BIOSCIENCES							
PF-07054894	CCR6 antagonist	SME	Inflammatory bowel disease	<b>₹</b> Pfizer							
PF-07258669	MC4 antagonist	SME	Malnutrition	<b>P</b> fizer							
PF-06954522	GLP-1 agonist	SME	Type 2 Diabetes	<b>Pfizer</b>							
(Not disclosed)	CGRP antagonist	SME	Neurology diseases	<b>Pfizer</b>							
(Not disclosed)	Multi target	SME/LME	Multiple indications	Genentech A Member of the Roche Group							
(Not disclosed)	Multi target	SME	Neurology	abbvie	_						
(Not disclosed)	Multi target	SME	Diabetes/Metabolic	Lilly	_						



# Partnered pipeline (2/2)

Compound	Target / Mechanism of Action	Modality	Indication	Partner	Disc.	PCC	Ph1	Ph2	Ph3	Арр	Mkt
Co-development											
KY1051	CXCR4 mAb	mAb	Immuno-oncology	sanofi							
(Not disclosed)	PAR-2	Peptide	Inflammatory diseases	PeptiDream							
(Not disclosed)	Al-Augmented Drug Discovery	SME	Neurology diseases	"Ď PHARMENABLE	_						
(Not disclosed)	Multi target AI-powered	SME/LME	Immune diseases	<u>v</u> erily	_						
(Not disclosed)	Gut-brain axis drug discovery	SME	Gastrointestinal disorders	KALLYOPE							
Co-owned compan	ies										
TMP301	mGlu5 NAM	SME	Substance use disorders	<b>● TEMPERO</b> BIO <sup>™</sup>							
ORX750	OX2 agonist (Oral)	SME	Narcolepsy	CENTESSA Therapeutics							
ORX142	OX2 agonist (Oral)	SME	EDS in neurology	CENTESSA Therapeutics							
ORX489	OX2 agonist (Oral)	SME	Neurology	CENTESSA Therapeutics							



# In-house pipeline

Compound	Target / Mechanism	Modality	Indication	Partner	Disc.	PCC	Ph1	Ph2	Ph3	Арр	Mkt
In-house Programs											
PIVLAZ®	ETA antagonist	SME	Cerebral vasospasm	NX6LQ ✓							
$QUVIVIQ^{TM}$	Dual Orexin antagonist	SME	Insomnia	SHIONOGI							
NXE0048149 <sup>1</sup>	GPR52 agonist	SME	Neurology diseases	Boehringer Ingelheim							
NXE0039732	EP4 antagonist	SME	Immuno-oncology	NX6LQ ✓			_				
NXE0033744	EP4 agonist	SME	Inflammatory bowel disease	NX6LQ ✓			_				
NXE0027477	GPR35 agonist	SME	Inflammatory bowel disease	NXeLO →							
(Not disclosed)	Muscarinic M1 agonist (JP)	SME	Neurology diseases	ихега ~							
(Not disclosed)	SARS CoV-2 Mpro	SME	Coronaviruses	NXeLO →	_						
Multiple programs	Not disclosed	SME/LME	Neurology diseases	NXera ∼	_						
Multiple programs	Not disclosed	SME/LME	GI and Inflammatory diseases	NXera <mark>→</mark>	_						
Multiple programs	Not disclosed	SME/LME	Immunology diseases	NXELQ.'⊶	_						
In-house Programs (No	longer internally funded. Targetin	g academic / i	ndustrial partnership)								
NXE'310	SSTR5 agonist	Peptide	Hypoglycaemic disorders	NX6LQ.'✓							
NXE'097	GLP-1 antagonist	Peptide	Hypoglycaemic disorders	NX6La.'✓							
NXE'023	Dual GLP-2/GLP-1 agonist	Peptide	Intestinal failure/NASH	NX6La.							
(Not disclosed)	Apelin agonist	Peptide	Pulmonary Arterial Hypertension	NXeLO.'✓							
NXE'641	Dual orexin antagonist	SME	Insomnia and sleep disorders	NXeLO.'✓							
(Not disclosed)	PAR-2 mAb	mAb	Atopic Dermatitis/Pain	ихега 🛰							



PIPELINE

# Glossary

		Basic Terminology/Technology
GPCR	G Protein-Coupled Receptor	There are about 800 types of GPCRs in the human body. While 400 of them are known to be potential drug targets, about 300 of them are not yet drugged
NxStaR™	Stabilized Receptor	Nxera' proprietary technology to stabilize a GPCR by engineering a small number of single point mutations outside of the ligand-binding site. It enables to identify the structure of GPCRs to be used for SBDD drug discovery as well as antibody drug discovery as antigens
SBDD	Structure-Based Drug Design	A method to design drugs on a computer base based on the analysis of the three-dimensional structure of the drug target (e.g., protein receptor)
TPD	Targeted Protein Degradation	Drugs that promote the degradation of target proteins (e.g., receptors) in cells and aim for therapeutic effects by reducing disease-causing proteins
PAM	Positive Allosteric Modulator	A regulator that binds to unusual active sites (allosteric sites) on the receptor to increase the affinity and effect of the agonist
NAM	Negative Allosteric Modulator	A regulator that binds to an unusual active site on the receptor (allosteric site) and reduces the affinity and effectiveness of the agonist
Ag	Agonist	A therapeutic drug that binds to a receptor and activates an intracellular signaling system similar to biological substances
Ant	Antagonist	A therapeutic drug that suppresses biological reactions by binding to receptors and preventing them from binding to biological substances
PK	Pharmacokinetics	Research and testing on the relationship between drug dosage and blood concentration. Mainly describes the rate process of ADME
PD	Pharmacodynamics	Research and testing on the relationship between drug concentration and pharmacological effects
ADME	Absorption, Distribution, Metabolism and Excretion	A series of process in the absorption of drugs into the body, distribution within the body, metabolism in the liver and other organs, and excretion in the kidneys and other organs
POM	Proof of Mechanism	Proof of mechanism of action, mainly through biomarkers. It can suggest the possibility of efficacy in fewer cases than POC
POC	Proof of Concept	Proof of a therapeutic concept, primarily through clinical efficacy and safety
Ach	Acetylcholine	A neurotransmitter released from the peripheral parasympathetic and motor nerves to transmit nerve stimuli
IND	Investigational New Drug	Information packages for development candidates to be submitted to the U.S. Food and Drug Administration (FDA) at the time of initiation of clinical trials
Ph1	Phase1	A study in humans. The main purpose is to confirm the safety of the drug candidate mainly by healthy volunteers.
Ph2	Phase2	A study in humans. The main purpose is to confirm the efficacy of the drug candidates on a small scale (however, the number of patients varies greatly depending on the disease)
Ph3	Phase3	A study in humans. The main purpose is to determine the efficacy of the drug candidates on a large scale (however, the number of patients varies greatly depending on the disease)
NDA	New Drug Application	An application to the U.S. Food and Drug Administration (FDA) for approval to market a new drug

		Disease/Drug
LAMA	Long Acting Muscarinic Antagonist	An inhalant that dilates bronchial tubes and improves respiratory function by inhibiting the action of acetylcholine receptors (M3), which increase parasympathetic nerves.
LABA	Long Acting Beta2-Agonist	An inhalant that improves respiratory function by stimulating sympathetic beta2 receptors to dilate the bronchi.
ICS	Inhaled Corticosteroid	An inhalant that suppresses airway inflammation to prevent coughing attacks and other symptoms caused by asthma, also promotes the action of beta 2 stimulants and improve airway hyperresponsiveness.
mCRPC	Metastatic Castration–Resistant Prostate Cancer	Cancer that has spread (metastasized) beyond your prostate gland and for which hormone therapy is no longer effective in stopping or slowing the disease.
COPD	Chronic Obstructive Pulmonary Disease	A group of diseases that causes damage to the bronchi and lung due to smoking or inhalation of toxic substances, resulting in breathing problems.
AD	Alzheimer's Disease	Alzheimer's disease is a progressive neurologic disorder that causes the brain to shrink (atrophy) and brain cells to die, the most common cause of dementia.
DLB	Dementia with Lewy Bodies	Protein deposits, called Lewy bodies, develop in nerve cells in the brain regions involved in thinking, memory and movement (motor control), the second most common type of dementia.







Midtown East, 9-7-2 Akasaka Minato-ku Tokyo 107-0052

Japan



F17, 410 Teheran-Ro GangHam-Gu Seoul 06192

South Korea



Steinmetz Building Granta Park, Cambridge CB21 6DG

United Kingdom



Spaces Grosspeter Tower, Grosspeteranlage 29, 4052 Basel

Switzerland

