Corporate Presentation

November 2023

PeptiDream Inc.

(TSE: 4587)



PeptiDream - Investment Highlights





Industry Leading Peptide Discovery Platform

PeptiDream's proprietary Peptide Discovery Platform System (PDPS) technology

- Unparalleled peptide library generation (trillions) and hit finding platform
- Unrivaled # of building blocks
- Continuous evolution of the technology, translating learnings from advancing programs back into the platform improvements
- World-class chemistry, biology, bioinformatics, structural biology, modeling, profiling and ADME teams to turn hit peptide candidates into development candidates

Strong IP portfolio

Foundational in Leading and Expanding the Field

PeptiDream at the center of a large and diverse network of discovery and development partnerships

- Collaborations with large, mid, and small sized pharma companies all over the world creating the ecosystem
- Licensing of the PDPS discovery platform to global and Japan pharma partners solidifies the network around a common platform.
- Further grow the network and modality through strategic partnerships
- Develop products in house and license to network partners



Diverse Big Pharma-Sized Pipeline

PeptiDream has a large diverse pipeline of programs spanning peptide modality, disease areas and development partners

- Over 120+ discovery and development programs
- Spans variety of peptide modalities, from peptide therapeutics to peptide-drug conjugates (PDCs) to multifunctional peptide conjugates (MPCs)
- Across broad range of therapeutic areas and discovery and development partners

Markets 24 radiodiagnostic and 8 radiotherapeutic products in Japan through PDRadiopharma

Business Model Driving Profitability and Growth

PeptiDream's unique multifaceted business model has allowed company to be profitable since 2011

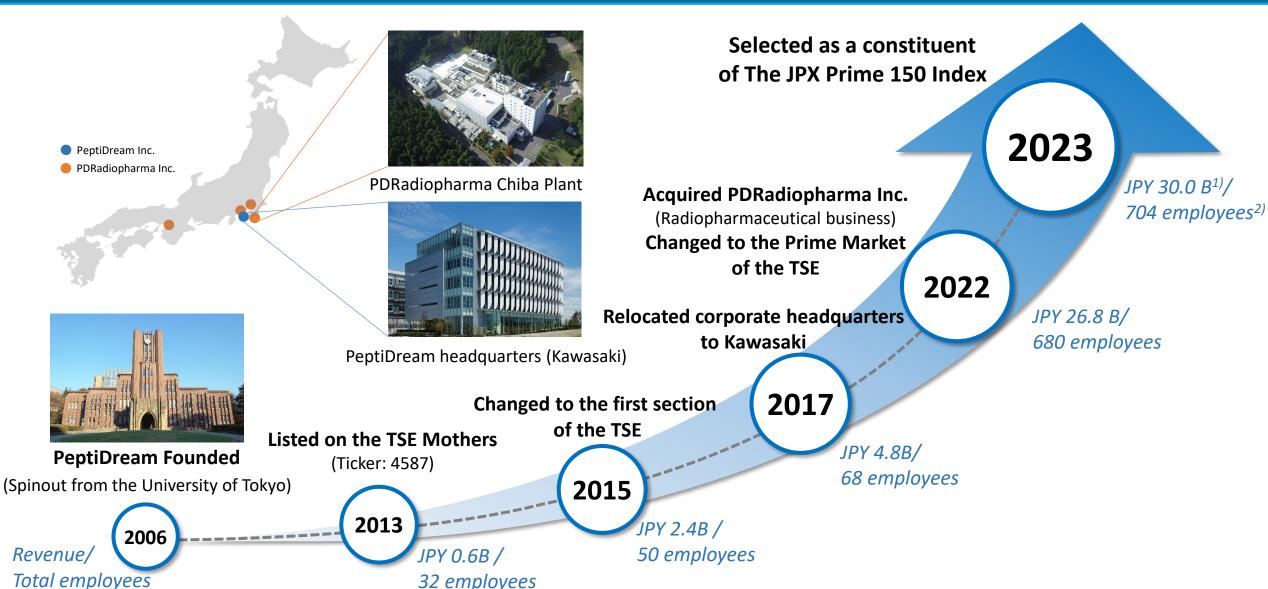
- Year over year growth in revenue and profits from three complementary and synergistic business strategies
- Grow the business and the pipeline through partnerships and cash flow, not through capital raises
- Phenomenal growth potential as the pipeline matures

Japan radiopharmaceutical and radiodiagnostic business provides stable, positive cash flow

PeptiDream – Historical Snapshot



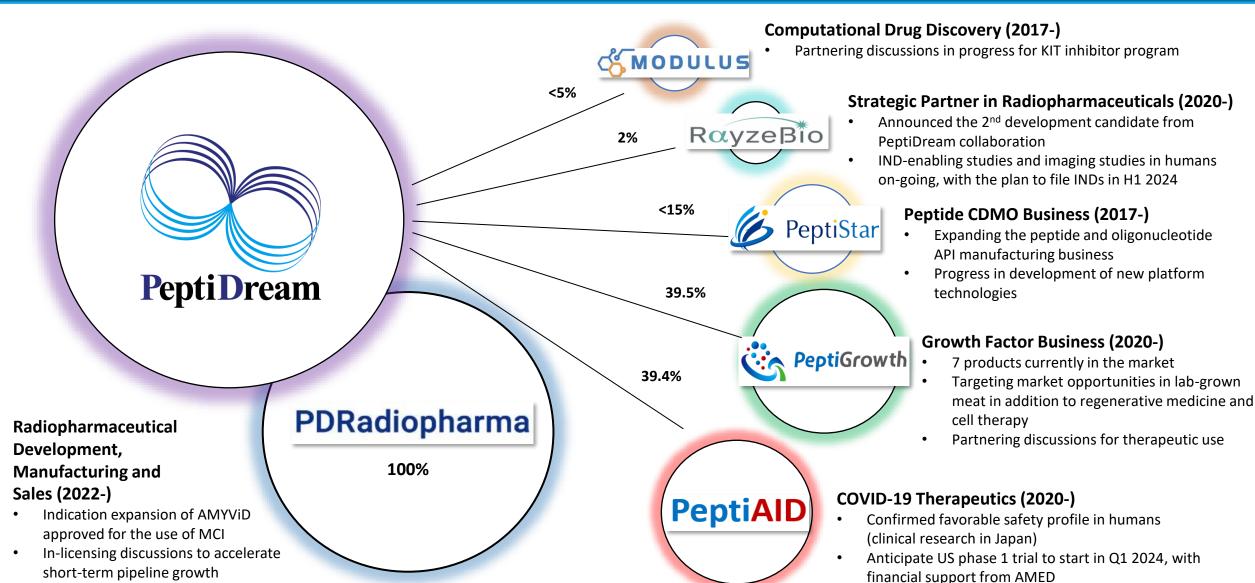
From University Startup to Growing Japan-Based Drug Discovery Powerhouse



PeptiDream's Equity Holdings

Key progress on programs with the partners





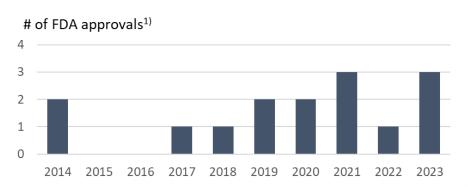
Note: (Year) represents the year that PeptiDream invested in the company.

Macrocyclic Peptides as an Expanding Drug Class

Several Approved Macrocyclic Peptide Drugs With Over \$1B in Annual Sales



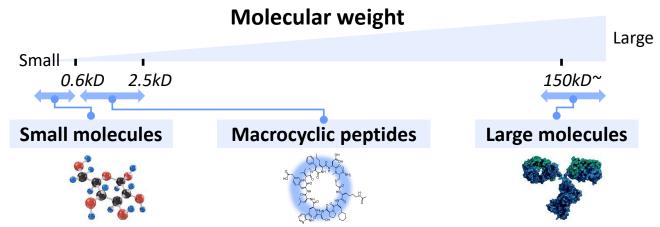
Long History of Macrocyclic Peptides As Drugs



Blockbuster Macrocyclic Peptides

Drug name	Indication	Peak Sales (\$M)
Restasis (cyclosporine)	Chronic dry eye	1,488
Somatuline (lanreotide)	Acromegaly; Neuroendocrine tumors	1,424
Sandostatin (octreotide)	Acromegaly; Symptoms of Carcinoid tumors and VIPomas	1,413
Sandimmune/Neoral (cyclosporine)	Transplant rejection	1,338
Cubicin (daptomycin)	complicated skin and skin structure infections (cSSSI)	1,187

Macrocyclic Peptides Have Positive Features of Both Small & Large Molecules



- Good at recognizing binding pockets but not PPIs or shallow surfaces
- Orally bioavailable
- Membrane permeable
- Near limitless targets
- However difficult and time consuming to find

- High affinity and specificity
- Good at inhibiting PPIs
- Good at recognizing shallow interacting surfaces and binding pockets
- Oral bioavailability possible
- Near limitless targets
- Relative ease and speed in finding a suitable hit

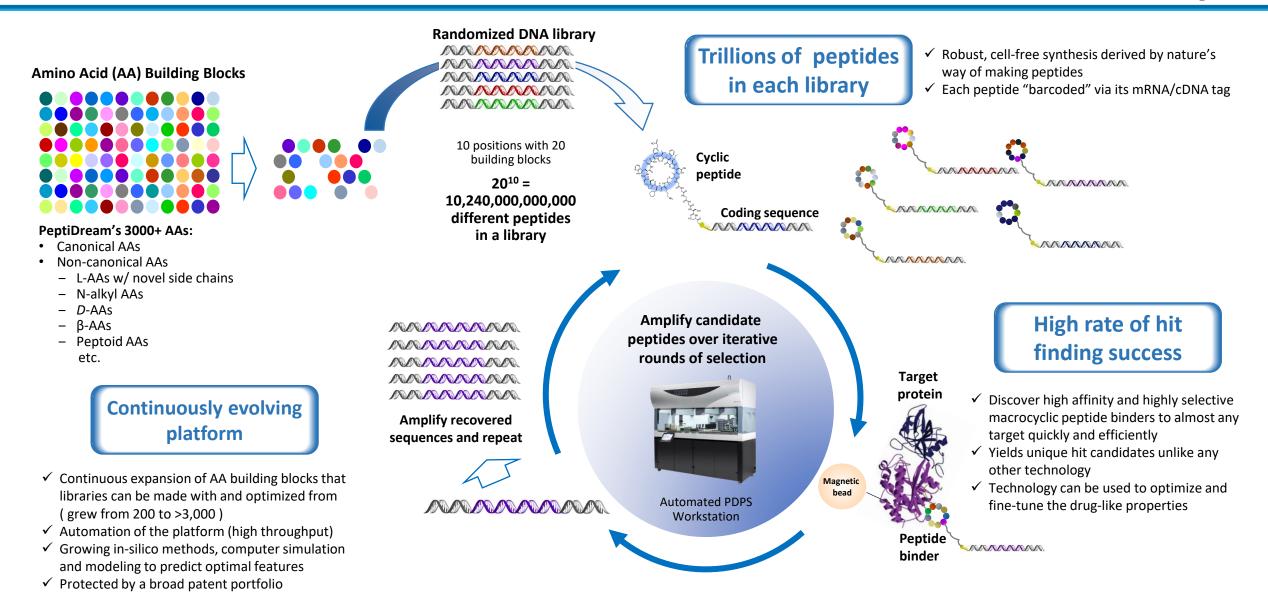
- High affinity and specificity
- Good at inhibiting PPIs
- Good at recognizing shallow interacting surfaces of proteins
- Not oral limited targets
- Relative ease and speed in finding a suitable hit

Most approved macrocyclic drugs arose from natural products, limiting discovery!

PDPS is a Powerful Peptide Discovery Platform

Pepti Dream

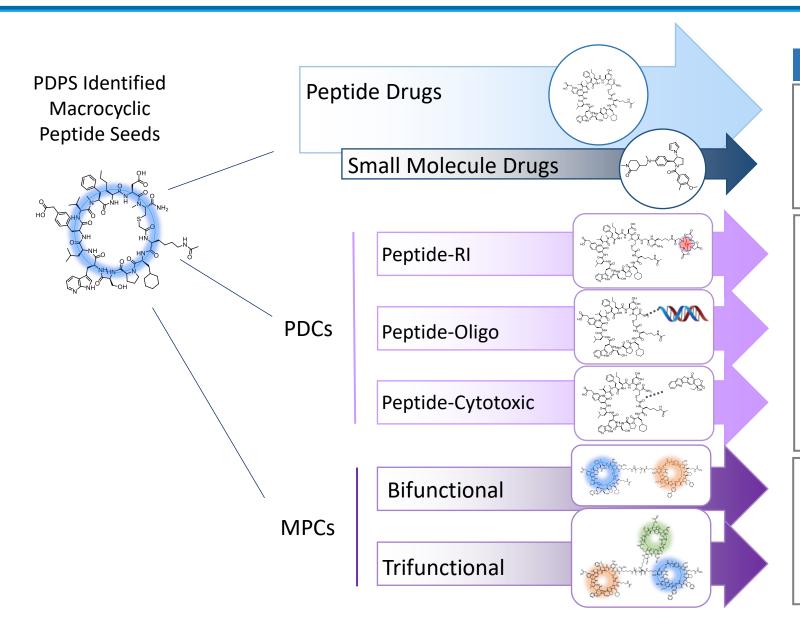
Unparalleled Macrocyclic Peptide Library Generation and Hit Finding Technology



The Expanding Applications of Macrocyclic Peptides

PeptiDream PeptiDream

Turning PDPS Identified Seeds Into a Growing Array of Peptide Therapeutics



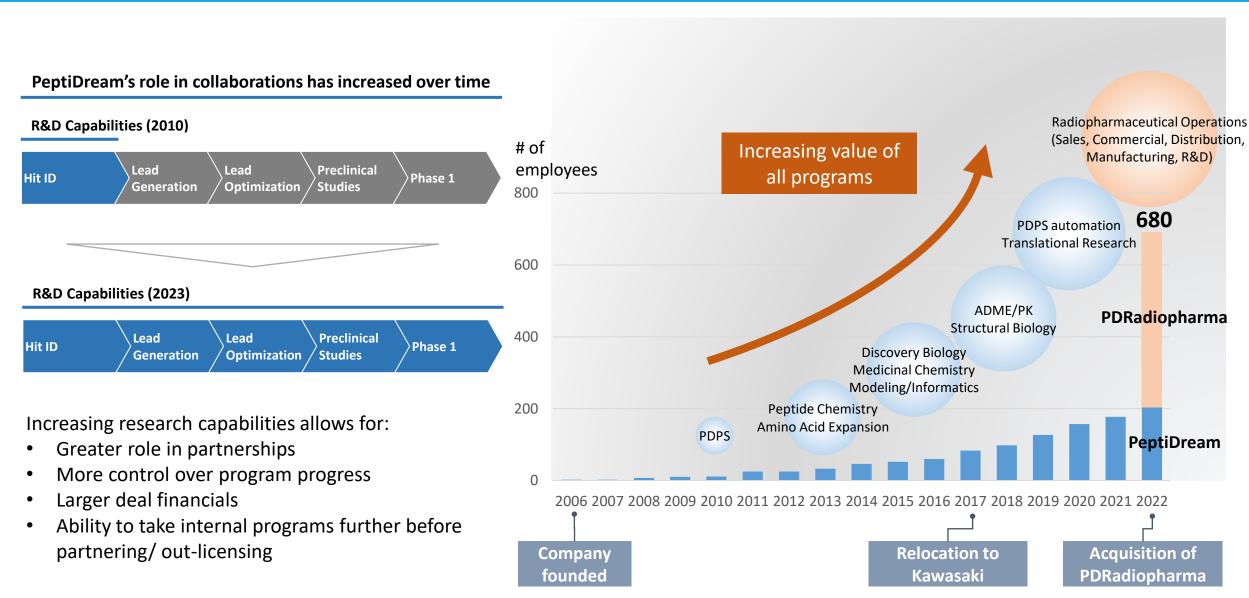
Key Advantages

- Affinity and selectivity comparable to antibodies
- Unique epitopes and MOAs
- Differentiating PK & ADME characteristics
- Oral administration & other routes possible
- Enable small molecule discovery
- Peptide ideal at targeting and payload delivery
- More amenable to a greater array of payloads compared to other modalities.
- Simple robust conjugation chemistry
- Tunable PK/ Differentiating route of elimination
- **RI-PDC:** Ideal fit with radioisotope payloads
- Oligo-PDC: Enable delivery of oligonucleotide/siRNA drugs to specific tissues/cells
- **Cytotoxic-PDC:** unique beneficial attributes
- Extremely powerful and modular
- Design and generate multi-functional peptide drugs by conjugating/linking several peptides with different MOAs together
- Various configurations, such as bifunctional, trifunctional, and more

Expansion of R&D Capabilities

Unlocking Greater Value and Increasing Control

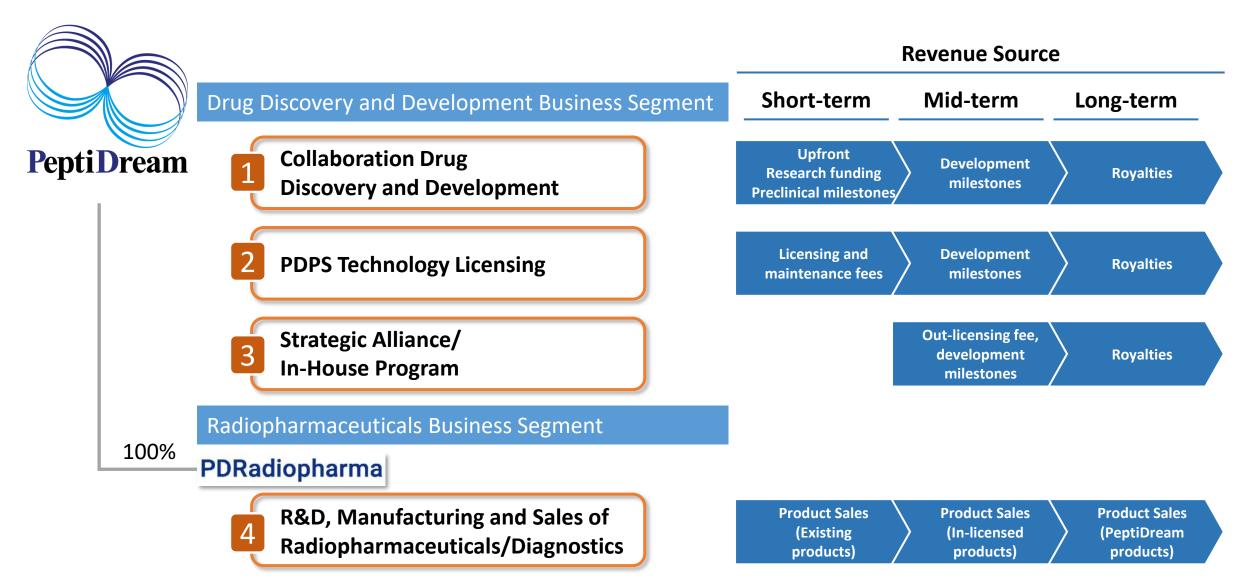




Unique Multifaceted Business Model

Business Model Spread Across 4 Strategies





1 Collaboration Drug Discovery and Development



Combining PeptiDream's Expertise With Big Pharma's Drug Development Know-How and Capabilities

Lead & Expand:

Leadership position in the space – drive expansion of macrocyclic peptide ecosystem

• More Programs:

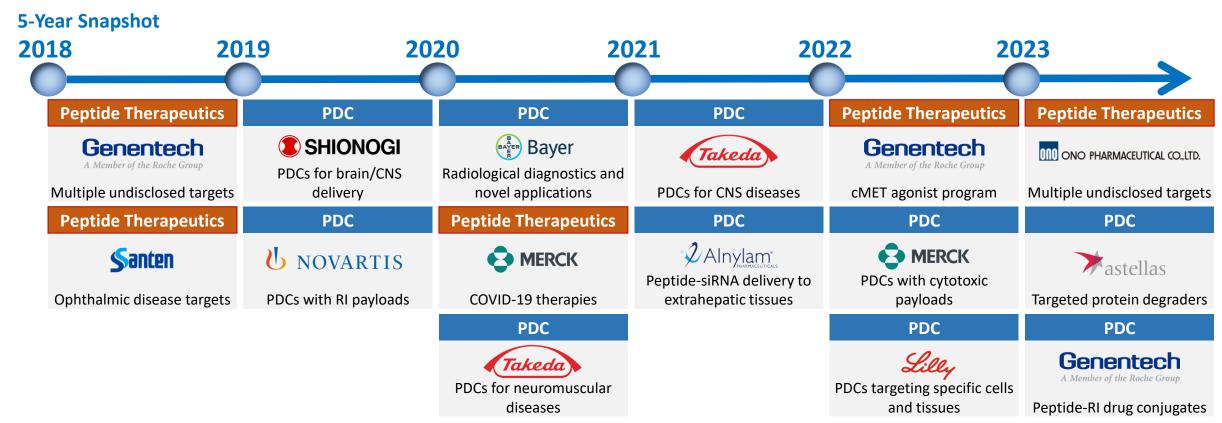
Allows PeptiDream to work on a larger number of programs with less staff/resources than otherwise possible

Build Expertise:

Continuously build in-house expertise by working with and learning from big pharma

• Diversify Risk:

Diversify business risk with a broad portfolio of programs and partners (success not tied to any one program or partner)



Note: Merck & Co., Inc., Rahway, NJ, USA.

2

PDPS Technology Transfer/Licensing



Transfer and Establish Operation of PDPS Technology Within Partner Companies

- Platform Validation:
- Establish as Standard:
- Grow People:
- Licensing Revenue:
- Carveout PDCs:

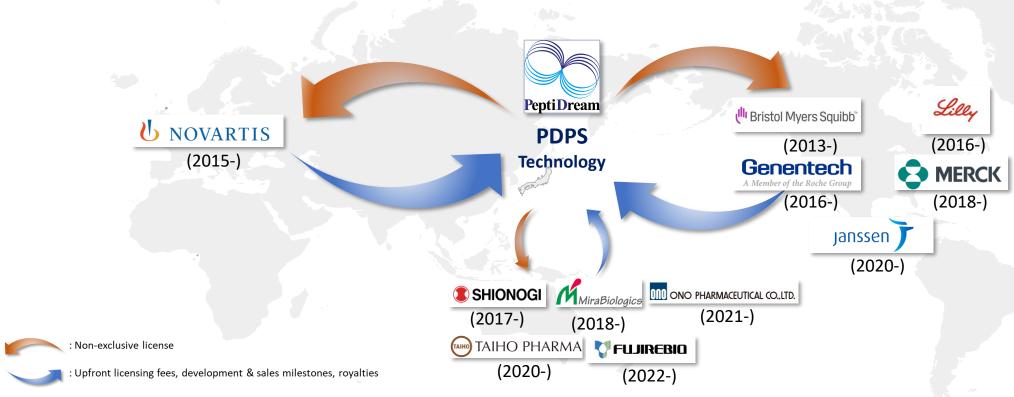
Non-exclusively licensed PDPS technology to 11 companies

Make PDPS technology the global standard to discover macrocyclic peptides

Partners expand staff, resources, capabilities around PDPS and peptide discovery and development

PeptiDream receives licensing revenue along with downstream milestones/royalties on any products

PDPS technology licenses included PDC carveout, partners must work with PeptiDream to do PDCs



Note: Merck & Co., Inc., Rahway, NJ, USA.



In-House/Strategic Discovery and Development



Growing and Accelerating In-house Discovered Programs Through Strategic Partnerships

Increased Speed/Control:

- Access expertise/technology: Access to expertise and/or technology/know-how PeptiDream does not possess Streamlined focus and decision making, defined roles, greater control = program acceleration
- Greater Upside:

Faster and greater monetization of programs at lower cost/risk

In-House Programs

Develop internally and out-license to third party for clinical development

Jan 2018



Started internal program to develop GhR antagonists

Dec 2020



Formed strategic partnership with licensing option

Sep 2021

Amolyt exercised license option

June 2023 •

Amolyt Initiated Phase1 Clinical Trial

Strategic Partnership

Joint - Development and out-license to third party for clinical development

Feb 2016





Started research collaboration

May 2019 •

Successfully identified TfR binding peptides that could deliver to muscle and CNS

Dec 2020



Exclusive research and license deal to peptide-oligo PDCs for neuromuscular diseases

Jul 2021



Extended deal to certain CNS targets

Preclinical Collaboration

Joint – Development and partner takes over clinical development

Jul 2017

Started research collaboration with Biohaven

Jun 2019

Identified CD38-ARM[™] as clinical candidate

Feb 2020 •

IND authorization obtained for CD38-ARMTM

Sep 2020

Orphan Drug Designation by FDA to CD38-ARMTM

Oct 2021

Phase1a/1b started for CD38- ARM^{TM}

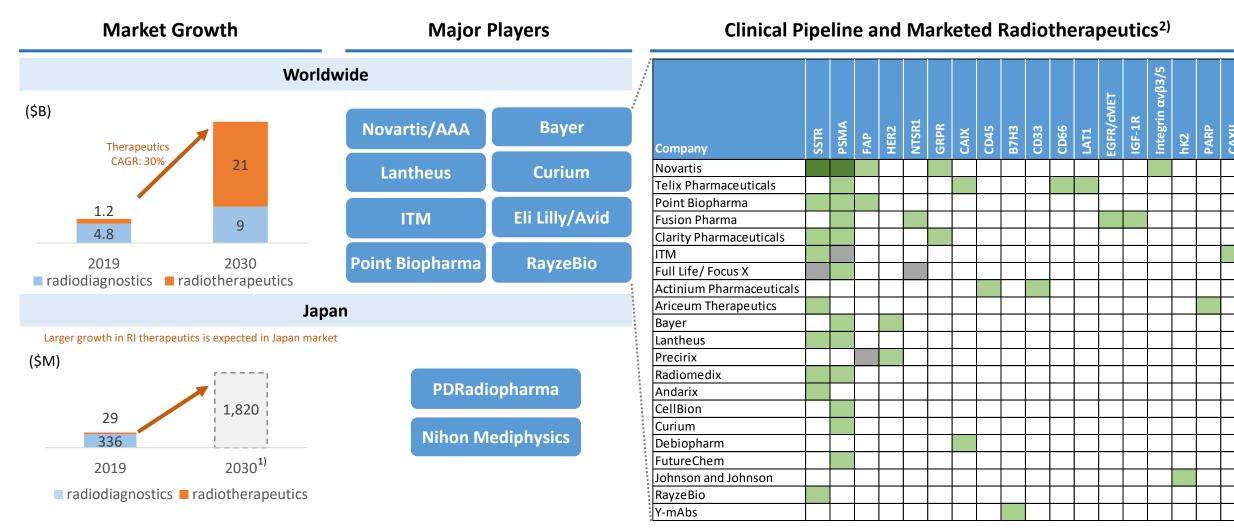


Global Radiopharmaceutical Market



Experiencing Significant Growth From Targeted Radiotherapeutics/Diagnostics

• Targeted radiotherapy: Lutathera and Pluvicto demonstrating high efficacy – driving further investment/products in the space





PD/PDR Ideally Positioned to be a Major Player



Leveraging PD's Radiotherapeutic Discovery Role With PDR's Unique Japan Market Presence

Key Features of the Radiopharmaceutical Market in Japan

- Only 2 licensed radiopharmaceutical companies in Japan due to highly regulated market
- High barrier to Japan market entry, strict regulations and supply chain requirements to handle radiopharmaceuticals
- Partnering with a local Japanese company is essential for global pharma companies to commercialize their radiopharmaceutical products in Japan





___ (1

PDRadiopharma

- Already playing a leading global role in the discovery and development of target radiotherapies (peptide-RI conjugates) through partnerships with Novartis, RayzeBio and Bayer
- Growing pre-clinical pipeline of peptide-RI conjugates
- Strong global reputation and connections with big pharma and the other major radiopharmacuetical players

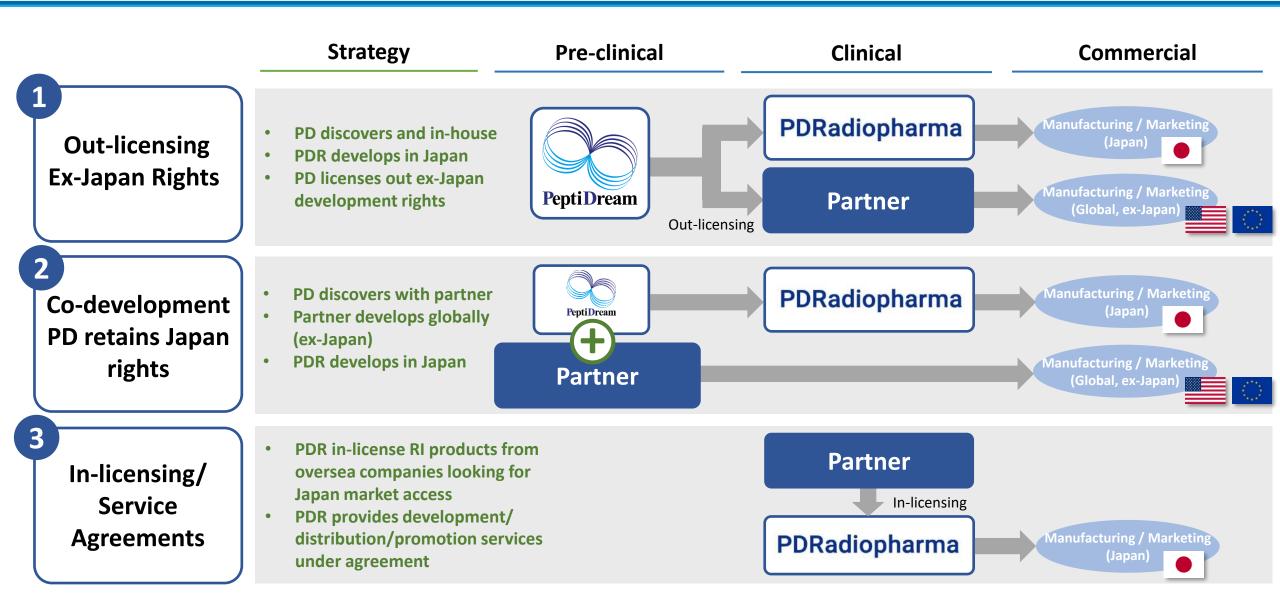
- Founded in 1968: experts with deep experience in radiopharmaceuticals
- Long relationships with regulators, KOLs, radiologists/hospitals
- Vertically integrated infrastructure with R&D, manufacturing and commercialization capabilities in Japan
- 8 therapeutic and 24 diagnostic products on the market
- Network of global radioisotope suppliers and vendors

Combining with PDRadiopharma enables PeptiDream to both accelerate and maximize the value of the peptide-RI products it is discovering and developing

PD/PDR Radiopharmaceutical Product Offerings

PeptiDream

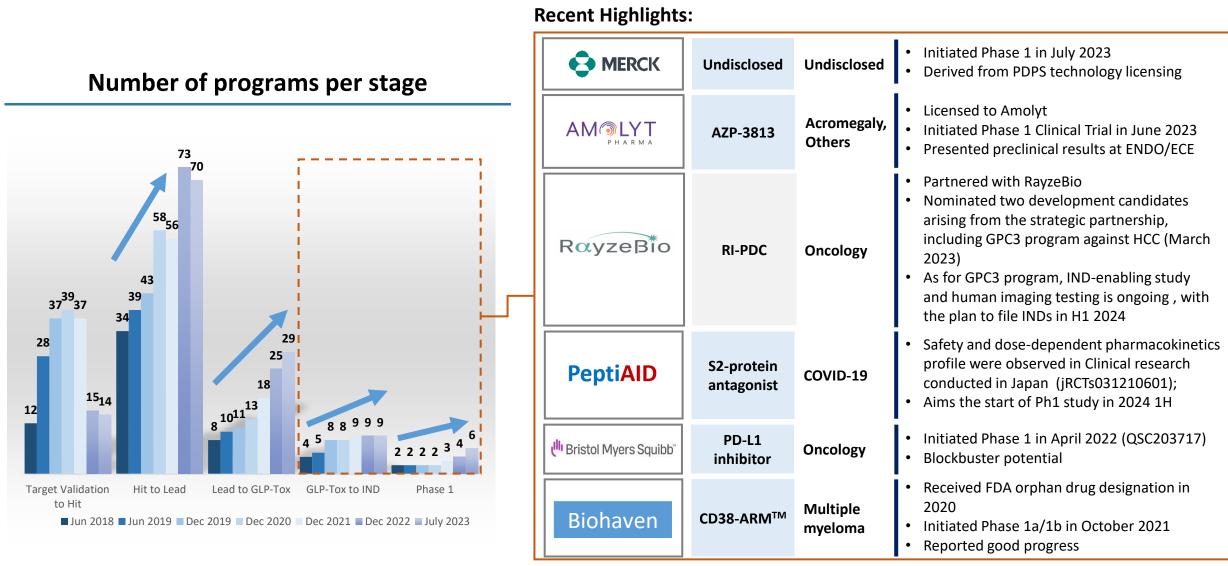
3 Strategies to Grow PD/PDR Product Portfolio and Revenue



PeptiDream Pipeline Snapshot



Consistent Year-Over-Year Advancement of Programs Through Preclinical Into Clinical Development



PeptiDream's Clinical Stage Pipeline



Program		Indication	Partner	Pre-clinical		Clinical		Status
					Ph1	Ph2	Ph3	-
PD-L1 Therapeutic Peptide	0	Oncology	وا ^{اا} Bristol Myers Squibb ٔ			>		 Phase 1 started Apr. 2022 (ISRCTN17572332) Assessment the safety and tolerability of PD-L1 inhibitor in healthy subjects
PD-L1 BMS-986229 RI-PDC (PET diagnostic)	0-•	Oncology	ر ^{اال} Bristol Myers Squibb ّ			>		Phase 1 started Nov. 2019 (NCT04161781) • 18F-labeled PET tracer that specifically binds to cancer cells expressing PD-L1 • Evaluate PD-1/PD-L1 expression in patients
CD38 BHV-1100 + NK Cells Therapeutic MPC	ಂ	Multiple Myeloma	Biohaven			>		 Phase 1a/1b started Oct. 2021 (NCT04634435) Evaluate the safety, tolerability, and exploratory efficacy in multiple myeloma patients Orphan Drug Designation
GhR AZP-3813 Therapeutic Peptide	0	Acromegaly/NET	AM@LYT PHARMA			>		Phase 1 started Jun. 2023 Evaluate the safety, tolerability, pharmacokinetics, and pharmacodynamics following single and multiple ascending doses in healthy subjects
Undisclosed Therapeutic Peptide	0	Undisclosed	MERCK			>		Phase 1 started Jul. 2023
S2-protein PA-001 Therapeutic Peptide	0	COVID-19	PeptiAID			>		Safety and clear dose-dependent pharmacokinetics profile were observed in Clinical research conducte in Japan (jRCTs031210601); • Aims the start of Ph1 study in 2024 1H

Note: As of August 2023, Merck & Co., Inc., Rahway, NJ, USA.

PeptiDream's Late-Stage Pre-Clinical Pipeline



Program		Indication	Partner	Pre-clinical		Clinical		Status
Piograffi		illuication		TTC cillical	Ph1	Ph2	Ph3	Status
Glypican-3 RI-PDC	Q- •	Liver Cancer	RayzeBio		>			Selected clinical candidate (Mar. 2023) Clinical Imaging/IND enabling, , with the plan to file INDs in H1 2024
Undisclosed RI-PDC	()-•	Oncology	RayzeB [*] to					Selected clinical candidate (Dec. 2022) GLP-Tox to IND stage
KIT Therapeutic Small Molecule	°°04°°	Mast Cell-Driven Allergic Diseases	∜MODULUS					Selected Clinical Candidate (Aug. 2023) Partnering discussions
Myostatin Therapeutic Peptide	0	Obesity/SMA/DMD/ Muscle Disorders	In-house (Kawasaki Med. School)					Selecting clinical candidate Partnering discussions
Undisclosed RI-PDC	O-•	Oncology	U NOVARTIS					Lead to GLP-Tox stage
TfR Oligo-PDC	○ ~/\/	Neuromuscular Disorders	Takeda					Lead to GLP-Tox stage
C-Met Therapeutic Peptide	0	Undisclosed	Genentech A Member of the Roche Group					Lead to GLP-Tox stage
Undisclosed Therapeutic Peptide	0	Undisclosed	Asahi KASEI					Lead to GLP-Tox stage
Undisclosed Therapeutic MPC	Undisclosed	Undisclosed	S anten					Lead to GLP-Tox stage
HA-protein PD-001 Therapeutic Peptide	٥	Influenza	In-house					Considering partnering options in light of changir global market environment

Note: As of August 2023, above list not inclusive of all programs

PDRadiopharma Product Portfolio

8 Therapeutic and 24 Diagnostic Products on the Market



• Promote use and indication expansion of existing approved products

	Product/Program	Radio-	Indication Partner		Preclinical —	Clinical			— Marketed
	Target	isotope	indication	Partner	Preclinical —	Ph1	Ph2	Ph3	Iviai keteu
Tx	Sodium Iodide Capsule	¹³¹	Hyperthyroidism/Primary and Metastatic Thyroid Cancer	In-house					
Tx	Raiatt MIBG	¹³¹	MIBG avid Pheochromocytoma/ Paraganglioma	In-house					
Tx	Zevalin [®] CD20	⁹⁰ Y	, Low-grade non-Hodgkin's B-cell Lymphoma/Mantle Cell Mundipharma						
Dx	OctreoScan® SSTR	¹¹¹ ln	In Somatostatin Receptor Scintigraphy Curium						
Dx	Techne® MDP	^{99m} Tc	Bone Scintigraphy	In-house					
Dx	Neurolite®	^{99m} Tc	Cerebral Blood Flow	Lantheus Medical Imaging					
Dx	Cardiolite®	^{99m} Tc	Heart Disease/ Hyperparathyroidism	Lantheus Medical Imaging					
Dx	MyoMIBG [®]	¹²³	Heart Disease/ Pheochromocytoma/ Neuroblastoma	In-house					
Dx	Tl201	²⁰¹ TI	Heart Disease	In-house					
Dx	Ultra-Techne Kow®	^{99m} Tc	Brain Diseases/Thyroid Disease/Salivary Gland Disease	In-house					
Dx	Amyvid® β-Amyloid	¹⁸ F	Visualization of beta amyloid plaques in the brain of patients with MCI or suspected to have dementia due to AD	Eli Lilly/ Avid Radiopharmaceuticals					
Dx	FDG	¹⁸ F	Malignant Tumor/ Heart Disease/ Intractable Partial Epilepsy/ Large-vessel Vasculitis	In-house					

Note: Tx: Therapeutics, Dx: Diagnostics; FDG = Fluorodeoxyglucose; AD: Alzheimer's disease; MCI: mild cognitive impairment. As of August 2023.

Clinical Pipeline of PDRadiopharma



- 4 clinical-stage programs currently in development
- Planning to further expand PDRadiopharma's pipeline and product portfolio in the future
 - In-license assets already approved or in late-stage development overseas / service agreements to develop/commercialize in Japan
 - Develop PeptiDream's in-house and partnered development programs in Japan

	Program/	Radioisotope	Indication .		Clinical		Marketed	Notes	
	Target	Radioisotope		Ph1	Ph2	Ph3	- Warketeu		
Dx	Tauvid® Tau	¹⁸ F	Alzheimer's disease	Co-dev US (Eli Lilly)	elopment witl	n Eli Lilly in Japan		Approved by US FDA in 2020	
Dx	F-1311 PSMA	^{99m} Tc	Prostate cancer	Japan (PDR) US (Lantheus)				In-licensed from Lantheus Medical Imaging	
Thx	FF-10158 Integrin ανβ3/5		Malignant glioma and others	US/ EU (NVS)				Out-licensed ex-Japan rights to Novartis PDR retains Japan rights	
Thx	PPMX-T002 Cadherin3	-	Advanced and recurrent solid tumors	Japan (PPMX) US (PPMX)				Co-owned with Perseus Proteomics (PPMX) PPMX leading out-licensing activities	

Note: Dx: Diagnostics, Thx: Theranostics; As of July 2023.

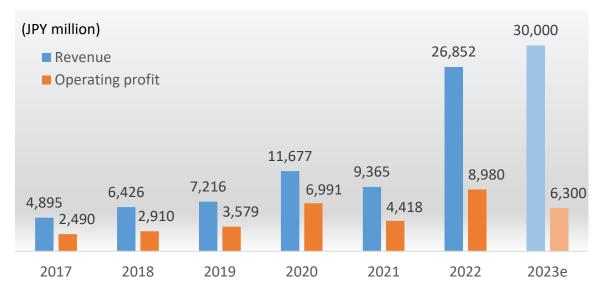
PeptiDream Financial Performances and Near-term Catalysts

Year-Over-Year Revenue and Profit Growth



Financial performance

- Consistent revenue and profit growth
- Reinvesting profits to further grow the business and pipeline
- Acquisition of PDRadiopharma adds cash flow/revenue
- Goal of JPY100B in revenue by 2030



Market Capitalization¹⁾ JPY 141.7 B (As of Oct. 31, 2023)

Future catalysts

Progress of On-going Clinical Programs

- Next-Generation PD-L1 Inhibitor (BMS): Ph1 clinical results
- CD38-ARM (Biohaven): Ph1a/1b clinical results
- AZP-3813 (Amolyt): Ph1 clinical results
- New target (MSD): Ph1 clinical results

Initiation of New Clinical Programs

- GPC3 (RayzeBio): IND-enabling study, entry into clinical trials
- RI-PDC Program (in-house): Selection of development candidate
- Myostatin Inhibitor (in-house): Selection of development candidate/ out-licensing
- Oligo-PDC Program (Takeda/ Alnylam) : Selection of development candidate
- Other programs (undisclosed): Selection of development candidate

Other Catalysts

- New license/collaboration agreements
- Milestone achievements on existing programs
- Partnering for KIT selective inhibitor (Modulus)
- Development of new radiopharmaceuticals in Japan, new partnering

References

Leadership Team at PeptiDream





Representative Director, President, CEO Patrick C. Reid, Ph.D.

- Co-founder of PeptiDream, after working as Associate Professor at University of Tokyo
- CSO, Head of R&D until 2017
- CEO at PeptiDream 2017 to current
- Ph.D. in Biochemistry from Dartmouth Medical School



Chief Medical Officer
Masato Murakami, M.D., Ph.D., MBA

- Joined PeptiDream in Jan 2022, previously Vice President of the Global Precision Medicine Department at Daiichi-Sankyo
- M.D. from Tokai University School of Medicine (trained pathologist)
- · Ph.D. in Medicine from University of Tokyo



Director, COO Keiichi Masuya, Ph.D.

- Joined PeptiDream in Jul 2014, previously Head of PPI Drug Discovery at Novartis International AG
- Director of PDRadiopharma, Director at PeptiGrowth, Representative Director and President at PeptiAID
- Ph.D. in Chemistry from Tokyo Institute of Technology



Head of Business Development Yen Ting Chen, Ph.D.

- Joined PeptiDream in May 2022, previously Vice President at Locust Walk Japan
- Ph.D. in Chemistry from Brown University



Director, CFO Kiyofumi Kaneshiro, Ph.D.

- Joined PeptiDream in Jan 2018, previously Partner and Managing Director at the Boston Consulting Group
- Director of PDRadiopharma, Director at PeptiAID
- Ph.D. in Oncology from University of Tokyo



Head of IR & Public Affairs Yuko Okimoto, Ph.D.

- Joined PeptiDream in May 2020, previously Director at Global Investment Banking Division of Mizuho Securities
- Ph.D. in Chemistry from University of Tokyo

External Directors at PeptiDream





Independent External Director (Auditing Committee Member) Michio Sasaoka, Ph.D.

- Joined PeptiDream in May 2012, after working at Massachusetts Institute of Technology as Postdoctoral Research Associate, Otsuka Chemical Co., Ltd. as Director of Explorative Laboratory
- Currently Independent Outside Director (Auditing Committee Member) at PeptiDream



Independent External Director (Auditing Committee Member)
Junko Utsunomiya (Attorney)

- Joined PeptiDream in Mar 2021, after working at Nagashima Ohno & Tsunematsu, Utsunomiya Shimizu & Haruki Management Legal Office as a founding partner
- Currently Independent Outside Director (Auditing Committee Member) at PeptiDream



Independent External Director (Auditing Committee Member) Toshio Nagae

- Joined PeptiDream in Sep 2015, after working at Shionogi & Co., Ltd., Sanofi K.K. as Executive Officer of Aventis Pharma, York Pharma K.K as President and Representative Director
- Currently Independent Outside Director (Auditing Committee Member) at PeptiDream



Independent External Director
(Auditing Committee Member)
Yukinori Hanafusa (Certified Public Accountant)

- Joined PeptiDream in Mar 2016, after working at Aoyama Audit Corporation, Accounting Works Co., Ltd. as Founding Representative Director, ARCLAND SERVICE HOLDINGS CO., LTD as Director
- Currently Independent Outside Director (Auditing Committee Member) at PeptiDream

Forward-Looking Statements



This presentation contains forward-looking statements. These forward-looking statements are current plans, forecasts, assumptions and strategies based on currently available information. There are various inherent risks as well as uncertainties involved. The actual results of business performance may differ from those forecasts due to various factors.

These factors include, but are not limited to: (1) risks of delays, interruptions or failures associated with drug discovery and development; (2) risks of unexpected program disruptions or terminations due to changes in client policies; (3) risks associated with manufacturing products and the procurement of raw materials; (4) the impact of reduced competitiveness due to the competitors and competing technologies; (5) declining product sales capabilities; (6) adverse rulings in infringements or significant litigation against our Group's intellectual property rights; (7) adverse changes in economic conditions and related laws and regulations; and (8) fluctuations in interest rates and currency exchange rates.

The information in this material with respect to drugs (including those under development) is not intended to provide advertising or medical advice.

This material is intended to provide information on our Group's business and is not intended to solicit investment in securities.

PeptiDream assumes no responsibility for any damages resulting from the use of this material or its content, including without limitation damages related to the use of erroneous information.