

Consolidated Financial Results for the Six Months Ended June 30, 2022 [IFRS]

August 9, 2022

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 Supplementary briefing materials on quarterly financial results: No
 Explanatory meeting on quarterly financial results: Yes (for institutional investors)

(Amounts of less than one million yen are rounded down)

1. Consolidated Financial Results for the Six Months Ended June 30, 2022 (January 1, 2022 to June 30, 2022)

(1) Consolidated operating results

	Revenue		Core operating profit		Operating profit		Profit before tax	
	Million yen	%	Million yen	%	Million yen	%	Million yen	%
Six Months ended June 30, 2022	5,024	72.2	(1,180)	-	(1,559)	-	(1,484)	-
Six Months ended June 30, 2021	2,916	-	436	-	436	-	312	-

	Profit attributable to owners of parent		Total comprehensive income	
	Million yen	%	Million yen	%
Six Months ended June 30, 2022	(1,056)	-	(622)	-
Six Months ended June 30, 2021	(8)	-	875	-

	Basic earnings per share	Diluted earnings per share
	Yen	Yen
Six Months ended June 30, 2022	(8.13)	(8.13)
Six Months ended June 30, 2021	(0.07)	(0.07)

(2) Consolidated financial position

	Total assets	Net assets	Equity attributable to owners of parent	Ratio of equity attributable to owners of parent to total assets
	Million yen	Million yen	Million yen	%
As of June 30, 2022	51,895	24,739	24,739	47.7
As of December 31, 2021	27,034	25,350	25,350	93.8

2. Payment of Dividends

	Annual dividends				
	1st quarter-end	2nd quarter-end	3rd quarter-end	Year-end	Total
	Yen	Yen	Yen	Yen	Yen
Fiscal Year ended December 31, 2021	-	0.00	-	0.00	0.00
Fiscal Year ending December 31, 2022	-	0.00			
Fiscal Year ending December 31, 2022 (forecast)			-	0.00	0.00

(Note) Revisions to the dividend forecast announced most recently: No

3. Consolidated Financial Forecasts for the Fiscal Year Ending December 31, 2022 (January 1, 2022 to December 31, 2022)

	Revenue	Core operating profit	Operating profit	Profit before tax	Profit attributable to owners of parent
Fiscal Year ending December 31, 2022	Million yen / % 24,500 / 160.0	Million yen / % 6,600 / 61.2	Million yen / % - / -	Million yen / % - / -	Million yen / % - / -

(Note) Revisions to the consolidated financial forecast announced most recently: Yes

The Company is in the process of examining the impact of the March 28, 2022 acquisition of PDRadiopharma Inc. on its financial results, such as the purchase price allocation, and plans to disclose the consolidated financial forecasts for the fiscal year ending December 31, 2022 for items other than revenue and core operating profit as soon as they are finalized.

From the consolidated financial forecasts for the fiscal year ending December 31, 2022 onward, the Company will disclose core operating profit, which excludes non-recurring revenues and expenses from operating profit, as a metric that indicates profitability on a recurring basis. Items that are excluded from operating profit to calculate core operating profit include accounting effects of business acquisitions and acquisition-related costs, impairment loss on property, plant and equipment, intangible assets and goodwill, gains or losses on compensation, settlements, non-recurring and significant gains and losses, and amortization of intangible assets from introduction of individual products or developments.

[Notes]

Changes in significant subsidiaries during the period (changes in specified subsidiaries resulting in change in scope of consolidation) : Yes

Newly included : 1 company (PDRadiopharma Inc.)

Excluded : -

(2) Changes in accounting policies and changes in accounting estimates

- | | |
|--|--------|
| 1) Changes in accounting policies required by IFRS | : None |
| 2) Changes in accounting policies due to other reasons | : None |
| 3) Changes in accounting estimates | : None |

(3) Number of shares issued (common stock)

1) Number of shares issued at the end of the period (including treasury stock)	As of June 30, 2022	130,010,400 shares	As of December 31, 2021	130,010,400 shares
2) Number of treasury stock at the end of the period	As of June 30, 2022	179,405 shares	As of December 31, 2021	182,964 shares
3) Average number of shares during the period	Six months ended June 30, 2022	129,828,143 shares	Six months ended June 30, 2021	127,966,687 shares

(Note) The number of treasury shares at the end of the period includes shares in the Company held by the Custody Bank of Japan, Ltd. (Trust Account E) (182,800 shares as of December 31, 2021 and 179,200 shares as of June 30, 2022). In addition, the shares in the Company held by the Custody Bank of Japan, Ltd. (Trust Account E) are included in treasury shares excluded from calculating the average number of shares during the period (190,017 shares for the six months ended June 30, 2021 and 182,064 shares for the six months ended June 30, 2022).

* Quarterly financial results reports are not required to be subjected to quarterly review by a certified public accountant or an audit firm

* Explanation on the appropriate use of operating forecasts and other special instructions

(Caution regarding forward-looking statements)

Financial forecasts and other statements regarding the future presented in these materials are based on information currently available and certain assumptions deemed to be reasonable and are not meant to be taken as commitment of the Company to achieve such results. Actual performance may differ substantially due to various factors.

(Adoption of International Financial Reporting Standards (IFRS))

IFRS is applied from the three months ended March 31, 2022, in place of the Japanese standard. Accordingly, the figures for the six months ended June 30 of the previous fiscal year and the previous fiscal year are also calculated in accordance with IFRS for comparison purposes.

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1. Qualitative Information on Quarterly Financial Results for the Period under Review

(1) Explanation of Operating Results

During the six months ended June 30, 2022 (from January 1, 2022 to June 30, 2022), PeptiDream Inc. (“the Company”) continued to make excellent progress in leveraging the PDPS (Peptide Discovery Platform System) technology, its proprietary drug finding platform, across its two (2) business segment; Drug Discovery and Development, and Radiopharmaceutical.

(A) Drug Discovery and Development Business Segment

The Drug Discovery and Development Business Segment is composed of three businesses; 1) Collaboration Discovery and Development Business, 2) PDPS Technology Transfer Business, 3) In-House/Strategic Discovery and Development Business,.

As of June 30, 2022, the Company’s pipeline consisted of 124 discovery & development programs (representing no net change in programs from the end of the prior fiscal quarter ending March 31, 2022).

The below table is a snapshot of the Company’s program(s) across the three drug discovery approaches at the end of the current fiscal quarter.

【Number of programs for each drug discovery approach】	As of June 30, 2022
Peptide drugs	73
Small molecule drugs	
Peptide drug conjugates (“PDCs”)	51
Multi-functional peptide conjugates (“MPCs”)	
Total	124

The below table is a snapshot of the number of program(s) currently at each stage of the discovery and development process, compared to the end of March.

【Number of programs at each stage of the discovery and development process】	As of March 31, 2022	As of June 30, 2022
Target Validation-to-Hit Stage	31	29
Hit-to-Lead Stage	60	62
Lead-to-GLP-Tox Stage	21	21
GLP-Tox-to-IND Stage	8	8
Phase I	4	4
Phase II	0	0
Phase III	0	0
Total	124	124

The figures in the above table include programs in the Collaboration Discovery and Development business and the In-House/Strategic Discovery and Development business, and DO NOT include programs in the PDPS Technology Transfer business nor the Radiopharmaceuticals Business Segment.

The below table is a snapshot of the development status of main programs.

Program	Indication	Partner	Preclinical		Clinical		Status
			GLP-Tox to IND	PhI	PhII	PhIII	
PD-L1 Therapeutic Peptide	Oncology	Bristol-Myers Squibb BMS-986189					PhI completed Dec 2016 (NCT02739373)
PD-L1 Therapeutic Peptide	Oncology	Bristol-Myers Squibb					PhI ongoing ~April 2022 (ISRCTN17572332)
PD-L1 Diagnostic PDC	Oncology	Bristol-Myers Squibb BMS-986229					PhI ongoing ~Nov 2019 (NCT04161781)
CD38 Therapeutic MPC	Multiple Myeloma	Biohaven BHV-1100 + NK Cells					PhIa/lb ongoing ~Oct 2021 (NCT04634435)
S2-protein Therapeutic Peptide	COVID-19	PeptiAID PA-001					Clinical Research ongoing ~Feb 2022 (jRCTs031210601)
HA-protein Therapeutic Peptide	Influenza	PeptiDream PD-001					Partnering Discussions / Planning clinical studies
GhR Therapeutic Peptide	Acromegaly/NET	Amolyt AZP-3813					Anticipating entering clinic in 2022
Myostatin Therapeutic Peptide	DMD/ Muscle Disorders	Kawasaki Medical School					Anticipating entering clinic in 2023 / Partnering Discussions
Undisclosed Therapeutic Peptide	Undisclosed	Undisclosed					Anticipating entering clinic in 2023
CD38 Therapeutic MPC	Multiple Myeloma	Biohaven BHV-1100					GLP-Tox to IND stage
Undisclosed Therapeutic Peptide	Undisclosed	Undisclosed					GLP-Tox to IND stage
Undisclosed Diagnostic PDC	Oncology	Undisclosed					GLP-Tox to IND stage
Undisclosed Diagnostic PDC	Oncology	Undisclosed					GLP-Tox to IND stage

In the Collaboration Discovery and Development Business;

On April 28, 2022, the Company announced that Bristol-Myers Squibb had initiated PhI Study (ISRCTN17572332; Quotient Code: QSC203717) investigating a candidate derived from PDPS technology. The Company, using its PDPS technology, previously identified peptide inhibitors against PD-L1 in collaboration with BMS, and BMS previously completed a PhI study (BMS-986189) in December 2016. The newly initiated PhI study (ISRCTN17572332), led by BMS will investigate the safety and tolerability in healthy volunteers of a derivative of the original candidate.

On May 23, 2022, the Company announced that it has partnered its cMET agonist program with Genentech. The cMET agonist program originated from its affiliated company PeptiGrowth, which has been discovering and developing peptide alternatives to growth factors for use in various cell therapy and regenerative medicine applications. PeptiGrowth holds the commercialization rights to such ex-vivo cell therapy and regenerative medicine uses, whereas the Company holds the therapeutic development and commercialization rights for such programs. The Company received an undisclosed upfront payment and is eligible to receive payments tied to certain predetermined development milestones, as well as, royalties on future sales of any therapeutic products that arise.

The Company continues to receive various R&D support payments from its big pharma discovery and development partners, in addition to being eligible for potential pre-clinical and clinical milestones payments as the programs advance, as well as being eligible for commercial sales milestones and royalties on net sales of any commercialized products. The Company looks forward to announcing future updates as additional milestones are met, and as allowed by the partner companies. In addition, the Company continues to receive considerable interest from multiple big pharma companies interested in partnering with the Company on discovery and development programs.

In the PDPS Technology Transfer Business;

As of June 30, 2022, the Company has non-exclusively licensed its PDPS technology to 10 companies; Bristol-Myers Squibb (2013), Novartis (2015), Lilly (2016), Genentech (2016), Shionogi (2017), MSD (U.S.-Merck & Co. Kenilworth, NJ, USA) (2018), MiraBiologics (2018), Taiho Pharmaceutical (2020), Janssen (2020), and Ono Pharmaceutical (2021).

In accordance with all PDPS technology license agreements, the Company is not informed as to what specific discovery and development programs are being prosecuted by the licensee company until certain initial pre-clinical milestones are achieved. The Company continues to receive various technology license and management payments from the licensee companies, in addition to

potential preclinical and clinical milestone payments as programs advance. In addition, the Company continues to receive interest from multiple companies interested in licensing the PDPS technology.

In the In-House/Strategic Discovery and Development Business;

The Company continues to advance and expand the number of In-House/Strategic Discovery and Development programs. The goal of these efforts is to develop the programs to at least the lead and/or clinical candidate stage or potentially post-Phase I/II stage, before seeking to license these programs out to big pharma companies, leveraging the Company's existing network of partners, for significantly higher financials than can be attained from standard discovery and development deals. The Company has continually been expanding its capabilities in turning hit candidates identified from the PDPS technology into 1) peptide therapeutics, 2) small molecule therapeutics, 3) peptide drug conjugates ("PDCs") and 4) multi-functional peptide conjugates ("MPCs"). Programs being developed with Strategic partners, Strategic partners being companies that bring proprietary technology/know-how to combine with the Company's, are under a cost-sharing agreement, in which the costs of discovery and development are shared, allowing for the Company to have a far larger share in the program and future revenues if successful. In addition, the Company continues to pursue a number of in-house fully-owned programs and looks forward to providing future updates as these programs progress toward the clinic.

The Company has announced strategic partnerships with JCR Pharmaceuticals Co., Ltd. ("JCR Pharma"), Modulus Discovery, Inc. ("Modulus Discovery"), Heptares Therapeutics Ltd., ("Sosei-Heptares"), Kleo Pharmaceuticals, Inc. (now Biohaven Pharmaceutical Holding Company Ltd. ("Biohaven")), POLA Chemical Industries ("POLA"), Kawasaki Medical School, the Bill & Melinda Gates Foundation ("Gates Foundation"), JSR Corporation ("JSR"), Mitsubishi Corporation ("MC") (PeptiGrowth Inc. ("PeptiGrowth")), RayzeBio Inc. ("RayzeBio"), PeptiAID Inc. ("PeptiAID"), and Amolyt Pharma ("Amolyt"). On July 6, 2022, the Company and Nihon Medi-Physics Co., Ltd. ("NMP") agreed to conclude strategic alliance for the discovery and development of peptide-based theranostics, with NMP agreeing to transfer the shared rights to the programs back to PeptiDream and PeptiDream taking over full development of the programs as fully owned in-house programs.

The Company and JCR Pharma have successfully development a series of constrained peptides that bind to the transferrin receptor (TfR) and are capable of carrying various therapeutic payloads across the blood-brain barrier (BBB) for delivery/targeting to the brain, and for the delivery of therapeutic payloads to muscle, arising from the joint research collaboration between the companies initiated in February 2016. Most therapeutics do not readily cross the BBB into the brain, with only a small fraction of the drug ever entering the central nervous system (CNS), posing a significant challenge to the development of effective therapeutics for the treatment of CNS disorders. The developed peptide carriers, when conjugated to various therapeutic payloads (herein referred to as a peptide-drug conjugates or "PDC"), function to facilitate the transport of the payload across the BBB into the brain, thereby significantly increasing the amount of the therapeutic in the brain, and/or can function to deliver the therapeutic payloads specifically to muscle, thereby significantly increasing the amount of therapeutic targeted to muscle. Potential payloads range from antibody and protein therapeutics to nucleic acid, peptide, and small molecules drugs. The two companies are focusing on third-party licensing activities, with PeptiDream leading such activities from execution of agreement to supply of peptide carriers, with the Dec 22, 2020 announced collaborative research and exclusive license agreement to create PDCs for neuromuscular diseases with Takeda Pharmaceutical Company Limited, representing the first of such licensing deals. The Company announced on July 27, 2021, a further expansion of the collaborative research and license agreement with Takeda Pharmaceutical Company extending into CNS Diseases. The companies are looking to conjugate the peptide carriers to a number of Takeda payloads, and the collaboration has the potential to yield a number of therapeutics products in the neuromuscular, muscular, and CNS disease space. The Company continues to discuss additional potential research and license agreements with various companies. The companies will share related revenues from licensing activities.

The Company and Modulus Discovery are working to leverage the expertise of both companies to jointly discover and develop small molecule clinical candidates based on peptide hit candidates identified from the PDPS technology against high value targets. Modulus Discovery is utilizing its computational chemistry technology and expertise to design small molecule candidates in collaboration with the Company and its internal efforts. The companies jointly share the costs of the discovery and development programs and will co-own any resulting products. The Company has already identified hit candidate peptides against a number of

high-value kinase targets, that exhibit the desired inhibition activity independent of ATP-binding (allosteric inhibitors) and obtained a number of crystal structures of these candidates in complex with their respective kinase targets yielding the structural information needed to enable computational small molecule design efforts. Using this approach, the companies have now identified highly selective and potent small molecule lead compounds for KIT, a specific high value kinase target which is considered to play an important role in allergic diseases and have recently completed in vivo proof of concept studies validating the lead candidate's efficacy. The companies are jointly continuing preclinical development efforts with the plan to nominate a development candidate in 2022 and are actively discussing a variety of partnering and out-licensing options for the program. The Company currently holds a less than 5% equity stake in Modulus Discovery.

The Company and Sosei-Heptares are working to discover, develop and commercialize novel therapeutics targeting Protease Activated Receptor 2 (PAR2), which is a well validated target for multiple indications in pain, cancer, and inflammatory disease. The strategic partnership brings together two powerful technologies, Sosei-Heptares's StaR platform for GPCR target protein production and the Company's PDPS hit finding technology, in addition to considerable preclinical and clinical development capabilities. Under the agreement, the companies jointly share the costs and will co-own any resulting products. As announced on May 12, 2021, the companies have previously identified high affinity and selective inhibitors against PAR2 and those candidates have been optimized to be sufficiently stable in the gut for oral administration, and therefore are now considered lead candidates. The candidates are now advancing through preclinical studies with the objective of developing a novel oral peptide therapy to treat inflammation and pain in gastrointestinal (GI) disorders, such as Inflammatory Bowel Disease. The companies aim to move this program into GLP-IND stage in 2022 and are actively discussing a variety of partnering and out-licensing options for the program.

The Company and Biohaven (As announced on January 4, 2021, Biohaven agreed to merge and take over full control of Kleo and its discovery and development programs) continue to work to co-discover and develop novel Antibody Recruiting Molecule ("ARMsTM") or Synthetic Antibody Mimic ("SyAMs") products in multiple indications. The Company will receive a tiered share of the proceeds of any products developed. Biohaven is developing the 2 clinical candidates, both of which are referred to as CD38-ARMs (ARMTM), and currently termed "BHV-1100 (KP1237, ARM) + Autologous NK cells" and "BHV-1100 (ARM)". The CD38-ARMs are designed to recruit endogenous antibodies to multiple myeloma ("MM") cancer cells, targeting them for destruction via the body's innate antibody-mediated immune mechanisms. CD38 is a validated "MM" target, which is also overexpressed in chronic lymphocytic leukemia and other cancers. "BHV-1100 (ARM) + Autologous NK cells" is a short-acting ARM, whereas "BHV-1100 (ARM)" is a long-acting ARM and intended for a larger market of MM patients relapsed / refractory to Daratumumab therapy. BHV-1100 (ARM) + Autologous NK cells received Orphan Drug Designation on September 8, 2020. BHV-1100 shows similar or better activity to Johnson & Johnson's Darzalex[®] (anti-CD38 antibody), with the significant advantage being that it does not deplete the patients CD38-expressing immune effector cells. As announced on October 27, 2021, the first patient has been enrolled in the Ph Ia/Ib study (ClinicalTrials.gov Identifier: NCT04634435). The clinical trial will assess the safety and tolerability, as well as exploratory efficacy endpoints, in newly diagnosed MM who have tested positive for minimal residual disease (MRD+) in first remission prior to autologous stem cell transplant (ASCT).

The Company and POLA Chemical Industries ("POLA") are working on the discovery and development of dermatology focused peptide-based cosmetics, quasi-drugs, and therapeutics. The Company has been identifying candidates using its PDPS technology against applicable dermatological targets based on POLA's extensive expertise in the field and the companies are working together to commercialize such cosmetic products. The Company retains the development and commercialization rights to any therapeutic use for any such products arising from the collaboration. The companies have identified a number of lead candidates that are now being tested in in-vitro and ex-vivo models for efficacy.

The Company and Kawasaki Medical School have been working to develop a novel Myostatin peptide inhibitor for the treatment of a broad range of muscular dystrophies, such as Duchenne Muscular Dystrophy ("DMD"). DMD is the most common type of muscular dystrophy, a fatal hereditary genetic disorder characterized by progressive weakness. Due to mutations in the dystrophin gene, dystrophin, which is important for maintaining muscle cells, becomes deficient or abnormal, with rapid muscle weakness in skeletal muscle and diaphragm resulting in difficulty with jumping, running, and walking, and later effecting the heart and respiratory muscles, which can eventually cause acute respiratory failure. It is a rare and fatal disease in which patients' quality of life is significantly reduced. Research and development efforts have largely focused on the discovery and development of

antibody-based therapeutics and/or nucleic acid based therapeutics, such as gene therapy, exon skipping, stop codon read-through, and gene repair, spanning multiple mechanisms of action, and while exciting progress has been made, there is no current effective therapeutic that can be used to treat a wide range of patients and be considered as a first line therapy, therefore there remains a significant unmet medical need for more broadly effective therapies for DMD. Myostatin (also known as growth differentiation factor 8, or GDF8) is a protein produced and released by myocytes that acts on muscle cells to inhibit muscle cell growth and is widely distributed in blood and muscle tissue (including diaphragm and extremity muscles) in normal individuals. Animals either lacking myostatin or that have been treated with myostatin inhibitors exhibit significantly more muscle mass and strength, and therefore represents an attractive target to inhibit to promote muscle growth and improve muscle function (stop or slow muscle degeneration), in patients with DMD and other muscle wasting diseases. The Company believe the current candidate could have a broad beneficial impact to all DMD patients and significantly increase their quality of life. Efforts in the discovery and development of myostatin inhibitors, largely focused on antibody-based therapeutics, and while they have shown significant promise in animal models, that promise has yet to translate into therapeutic benefits in humans for a variety of reasons. A constrained macrocyclic peptide-based myostatin inhibitor approach represents a potentially attractive alternative, as the current clinical candidate exhibits a high level of both potency and exposure in muscle tissue, both of which are known to be key attributes for any myostatin inhibitor. The companies plan to engage PeptiStar Inc., for candidate scale up and production of GLP/GMP batches, with the intention of conducting long-term safety studies, anticipating an entry into the clinic in 2023. Since DMD has been designated as a rare and intractable disease, the companies will work with the related agencies to seek priority review and shorten development timelines. The companies have initiated discussions with multiple potential partners for the joint development/partnering and/or out-licensing of the program.

The Company and the Gates Foundation are working on discovery and development programs aimed at identifying novel therapeutic macrocyclic peptide candidates to treat Malaria and Tuberculosis, two infectious diseases that disproportionately affect people in the world's poorest countries. On Nov 1, 2019, the Company announced that it had been awarded a second grant from the Gates Foundation to fund the next phase of development of a candidate series originally identified under the first grant, awarded in November 2017, for the potential treatment of Tuberculosis caused by Mycobacterium infection. The original grant provided funding for multiple discovery programs aimed at the original November 2017 grant provided funding for identifying novel therapeutic macrocyclic peptide candidates ("hit candidates") to treat Malaria and Tuberculosis, and the second November 2019 grant provided funding for turning one of the most promising hit candidate series into lead candidates ("hit-to-lead development funding") suitable for future preclinical development. The current lead candidate series is for the treatment of Tuberculosis, and the Company is currently focused on optimizing the lead candidates for orally bioavailability. One of the main advantages of the lead series is that it may be effective against dormant Tuberculosis. Bacterial infections are among the leading causes of morbidity and mortality globally. The global burden of tuberculosis is staggering, with up to one-third of the world's population latently-infected, and with 10.4 million new active cases and 1.8 million deaths occurring annually. Under the terms of the grant(s), any Gates Foundation-funded products will be made available by PeptiDream at an affordable price in lower middle-income countries (LMIC). PeptiDream will be able to merchandise each product in developed countries on its own, through licensees or a combination of both.

The Company and JSR are working to identify peptides suitable for use in affinity chromatography processes for the purification of certain biopharmaceuticals, namely antibody therapeutics. The manufacturing process for complex biopharmaceuticals, such as antibody therapeutics, generally consists of a target protein generation process, followed by a purification process that uses affinity chromatography to separate the target protein from the cells and various impurities by binding the proteins to a specific ligand or peptide. The development and commercialization of new affinity chromatography media based on unique, synthetic peptides has the potential to simplify the purification process and lower overall costs. This development effort will specifically focus on ensuring consistent quality and reliable mass production of ligands based on unique peptides that will enhance purification efficiency enabling the purification of biopharmaceuticals that are generally considered difficult to purify through conventional affinity chromatography.

The Company and MC established a joint venture company, PeptiGrowth to develop, produce and sell peptide alternatives to growth factors, key ingredients of cell culture, used in the manufacturing of cell therapy, regenerative medicines and other

biopharmaceuticals. PeptiGrowth will leverage the expertise and know-how of both parent companies to work towards the advancement of cell therapies, regenerative medicines, and other biopharmaceuticals in the pharmaceutical industry. Growth factors are a class of proteins that are widely present in humans and other animals. In addition to playing important roles in cell growth and proliferation, they are crucially involved in induction of differentiation of stem cells (iPS cells, ES cells, etc.) into nerve, blood, and other types of cells. Currently, growth factors are mainly extracted from animal serum or produced by recombination technology, however, their production presents a number of challenges to the pharmaceutical industry, including safety risks due to contamination with impurities, variation in quality among production lots, and high production costs. PeptiGrowth will utilize PeptiDream's proprietary drug discovery platform system, PDPS (Peptide Discovery Platform System), to identify alternative peptides that perform the equivalent function as growth factors and develop new chemical synthetic routes that do not use animal serum or recombination technology, and by establishing such a commercial manufacturing process, PeptiGrowth can produce homogenous products of high purity, ensuring less lot to lot variation, at lower costs. Dozens of growth factors have been identified to date, and in order to realize a completely Xeno-Free culture medium, multiple growth factors need to be replaced with chemically synthesized alternative compounds. This is a world-first in terms of the comprehensive development of chemically synthesized, peptide alternatives to multiple growth factors, and both MC and PeptiDream believe such an initiative is essential for further advancement of cell therapy and regenerative medicines in the industry. PeptiGrowth will fully leverage the MC Group's global network and its broad customer base to enhance marketing and sales functions. PeptiGrowth has already launched three products; PG-001 (a peptide alternative to hepatocyte growth factor (HGF)), PG-002 (a peptide inhibitor of TGF β 1) and PG-003 (a peptide alternative to brain derived neurotrophic factor (BDNF)). On June 30, 2022, PeptiGrowth announced the launch of PG-004, a peptide inhibitor of BMP4,7. The Company is progressing a number of peptide alternative growth factor programs in parallel, with additional products to follow. The Company is in active discussions with multiple potential partners regarding the therapeutic use of these alternative peptides, to which PeptiDream holds the exclusive development and commercialization rights. As highlighted above, the Company licensed the global therapeutic development and commercialization rights to PG-001 to Genentech. The Company currently holds a 39.5% equity stake in PeptiGrowth, with MC holding the remaining 60.5%.

The Company and RayzeBio are working to discover and development peptide-RI conjugates for use as therapeutics ("Peptide Radiotherapeutics"). The two companies are working on a number of programs against targets mutually agreed to, with PeptiDream providing peptide candidates, identified and optimized using its proprietary Peptide Discovery Platform System (PDPS) technology, to RayzeBio for further development as radiotherapeutics, with RayzeBio holding exclusive worldwide development and commercialization rights to the program peptides for use with RIs. PeptiDream will lead preclinical discovery and optimization efforts, with RayzeBio leading translational biology efforts to further characterize peptide-RI conjugates and advance such conjugates into clinical development and commercialization activities. Under the terms of the agreement, PeptiDream received an equity interest in RayzeBio, as an upfront payment in August 2020, and received subsequent milestone payments in November 2020 and June 2021. The Company is eligible to receive certain further milestone payments and royalties on future sales of any products that arise from the partnership. Additionally, as announced on August 9, 2022, the companies agreed to extend the research collaboration term to allow for additional peptide-RI conjugate discovery and development programs, and RayzeBio granted PeptiDream an option to attain development and commercialization rights in Japan to the joint peptide-RI conjugate programs. The Company currently holds a 5% equity stake in RayzeBio.

The Company and PeptiAID, a joint venture with Fujitsu, Mizuho Capital, Takenaka Corporation, and Kishida Chemical established November 12, 2020, are working on the development of therapeutics for the treatment of COVID19 and potentially any future coronavirus diseases. The Company has been applying its proprietary PDPS technology in a multi-pronged strategy toward identifying peptide candidates targeting different sites/regions of the COVID19 viral "spike" protein, which is essential for coronavirus to enter human cells, and PeptiAID, has obtained some of Company's COVID19 candidate compounds. On March 23, 2021, PeptiAID announced the initiation of preclinical studies of the Company's PA-001 candidate which exhibits highly potent antiviral activity against conventional SARS-CoV-2, as well as mutant strains such as the Alpha, Beta, Gamma, Delta and Omicron mutant strains. An in vitro study also demonstrated high synergistic effectiveness when used in combination with drugs that are currently approved for emergency use against COVID-19. Preclinical studies of PA-001, consisting of toxicity, safety pharmacology, and genotoxicity studies have been completed and confirmed the safety of PA-001. Early-stage exploratory clinical research of PA-

001 based on the Clinical Trials Act, was initiated in February 2022 (jRCT (Japan Registry of Clinical Trials) Trial ID: jRCTs031210601). In this clinical research, adverse events, injection site reaction and vital signs of the single ascending dose administration of PA-001 from Step1 (0.3mg/kg) to Step5 (8mg/kg) by intravenous injection for healthy Japanese adult volunteer, were investigated. As a results, PeptiAID confirmed without any compound related adverse event and favorable safety profiles. In addition, clear dose-response pharmacokinetics profile is obtained. As present, PeptiAID is preparing to initiate clinical trials in the United States, as this clinical research has confirmed the safety of PA-001 injection. Utilizing the safety data obtained from this clinical research, PeptiAID assumes that some of the studies required to be conducted in Phase 1 clinical trials can be omitted, and intend to accelerate clinical development in the future. The Company and PeptiAID are actively in discussions with interested third parties on potential partnering or licensing of the program. PeptiAID raised an additional JPY 803m in September 2021 and the Company currently holds a 39.4% equity stake in PeptiAID.

The Company and Amolyt entered into a strategic partnership and license option agreement, announced December 8, 2020, On September 9, 2021, the Company announced that Amolyt had exercised its option to globally license a portfolio of macrocyclic peptide growth hormone receptor antagonists (GHRA) under the terms of the research collaboration agreement with the Company announced in December 2020. PeptiDream will be eligible for certain payments associated with development, and commercial success of any GHRA product(s), as well as be eligible for certain royalties on future net sales. The identified, optimized drug candidate, AZP-3813, is being developed as a potential treatment for acromegaly and neuroendocrine tumors (NET), to be used in combination with somatostatin analogues (SSAs), for patients who do not adequately respond to SSAs alone. As presented by Amolyt at the 2022 European Congress of Endocrinology (ECE) in May, 2022, and the 2022 Endocrine Society Meeting (ENDO) in June, 2022, AZP-3813 was shown to be more effective in suppressing and controlling IGF1 levels in *in vivo* animal models than Pfizer's GHRA pegvisomant. Amolyt is currently working to advance AZP-3813 through IND-enabling studies with the goal of filing an IND and initiating the first clinical trial toward the end of 2022. On September 16, 2021, Amolyt announced the closing of an \$80 million Series B round, with the funds to be used in part toward the development of AZP-3813.

The Hemagglutinin (HA) program for the treatment of influenza: The Company has previously identified highly selective potent lead candidates for the treatment of influenza. The lead candidate (referred to as PD-001) binds to the highly conserved stalk region of the influenza viral envelope protein HA, and shows strong broad efficacy against group 1 strains, including the H5N1 strain, and further enhanced potency in combination with existing influenza treatments, such as Tamiflu, in *in vivo* animal studies. The Company has identified no preclinical toxicity for the lead candidates. The Company is continue discussing a variety of partnering and out-licensing options for the program.

IL17 and related inflammatory cytokine program(s) for inflammatory diseases: The Company has previously identified several highly selective potent lead candidates against a variety of pro-inflammatory cytokines for the potential treatment of a variety of inflammatory diseases. The Company is continuing preclinical development efforts against a number of high value pro-inflammatory targets, and has been investigating combining various candidates into multi-functional peptide conjugates (MPCs; by linking peptides together into heterodimeric/multimeric peptide conjugates), as there is growing clinical evidence that antagonizing multiple pro-inflammatory pathways in parallel may represent a superior therapeutic strategy to the treatment of inflammatory disease, and the belief that MPCs may represent a superior modality to bispecific antibodies toward this goal.

PDC programs for the treatment of cancer and other diseases: The Company has been actively working to develop a number of in-house fully owned peptide candidates to a variety of targets applicable to the treatment of cancer and/or specific tissue/organ targeting, for potential conjugation to radionuclide, siRNA, small molecule, etc., payloads, for use as PDCs. The recent acquisition of PDRadiopharma will allow the Company to rapidly move the most promising candidates into such *in vivo* bioimaging studies, as the existing business has such capabilities, and based upon those results, the Company anticipates prioritizing the most promising programs with the goal of nominating its first clinical candidate by the end of 2022. Additionally, upon the *in vivo* cell/tissue targeting validation of candidates as peptide-RI conjugates, the Company intends to actively investigate other potential payloads, on its own or potentially in collaboration with various existing and/or new partners.

The Company has previously announced, along with Shionogi & Co., and Sekisui Chemical Co., Ltd, the formation of PeptiStar Inc., a Contract Development and Manufacturing Organization ("CDMO") for the research and commercial manufacture of peptide therapeutics. PeptiStar brings together the most cutting-edge technologies and innovations in large-scale peptide production from

various companies throughout Japan in order to manufacture peptides of the highest quality and purity, while simultaneously driving down the cost of production. It is anticipated that PeptiStar will become the go-to CMO for many of the Company’s discovery and development partners, in addition to the Company’s own in-house/strategic partnered programs. The PeptiStar manufacturing facility is located in Osaka and became fully operational from October of 2019. On Dec 6, 2019, PeptiStar Inc., and AMED (The Japan Agency for Medical Research and Development) announced they had accomplished the CiCLE project goal, “establishment of a global leading contract manufacturing organization (CMO) for constrained peptide medicines”. On Dec 1, 2020, PeptiStar announced that it had successfully raised funds totaling 1,790 million yen through a third-party allotment. PeptiDream currently holds less than 15% equity stake in PeptiStar.

(B) Radiopharmaceutical Business Segment:

Through the acquisition of PDRadiopharma Inc., which became a 100% subsidiary on March 28, 2022, PeptiDream is engaged in the research, development, manufacture, and sales of radiopharmaceuticals products. PDRadiopharma currently markets 22 radiodiagnostic agents for SPECT (Single Photon Emission Computed Tomography), 2 PET (Positron Emission Tomography) imaging agents and 8 radiotherapeutic products (in 3 product categories). Radiodiagnostics combine compounds which accumulate in specific organs/tissues and gamma ray-emitting radioisotopes. The gamma rays are in turn, collected and visualized to diagnose abnormalities in the organs and tissues, and cancer in the patient’s body. The use of SPECT and PET agents differ depending on the diagnostic application and imaging camera. PDRadiopharma also develops and provides image analysis software which are used to assist interpretation of images obtained from the radiodiagnostic agents.

PDRadiopharma’s key radiopharmaceutical products are described in the table below.

• Radiodiagnostic Products (SPECT)

Product Name	Therapeutic Category
Neurolite® Injection Daiichi	Diagnosis of cerebral blood flow
Cardiolite® Daiichi	Diagnosis of cardiac disease, cardiac function and parathyroid diseases
Thallium Chloride-Tl 201 Injection	Diagnosis of cardiac disease, tumor, and parathyroid diseases
MyoMIBG®-I123 Injection	Diagnosis of cardiac disease, neuroblastoma and pheochromocytoma
Techne® MDP Injection	Diagnosis of bone diseases, brain tumor and cerebrovascular disorders
Ultra-Techne Kow®	Diagnosis of brain, thyroid, salivary glands and ectopic gastric mucosal diseases, and regional pulmonary ventilation
Octreoscan® Injection	Diagnosis of neuroendocrine neoplasm

• Radiodiagnostic Products (PET)

Product Name	Therapeutic Category
AMYVID® Injection	Amyloid imaging
Fludeoxyglucose(18F) Injection FRI	Diagnosis of tumor, ischemic heart disease and epilepsy

• Radiotherapeutics Products

Product Name	Therapeutic Category
Raiatt MIBG-I 131 Injection	Treatment of pheochromocytoma and paraganglioma
Sodium Iodide-131I Capsules	Treatment of thyroid cancer and diagnosis of thyroid diseases
ZEVALIN® Yttrium Injection	Treatment of CD20-positive non-Hodgkin lymphoma and mantle cell lymphoma

Radiotherapeutics are cancer treatments that combine compounds which accumulate specific organs/tissues and therapeutic radioisotopes which emit high-energy radiation such as beta or alpha rays to kill cancer cells by irradiation inside the body. In

cancer treatment, compounds that can accumulate in specific cancers can be used as diagnostic or therapeutic agents by combining with a radioisotope with the respective function. This field, called “Theranostics” due to the feature of combining treatment and diagnostics, is receiving worldwide attention from experts as a safe and highly effective approach for cancer treatment.

The Radiopharmaceuticals Business requires a high level of expertise in procuring raw material from limited manufacturing sites abroad, manufacturing, transporting, and marketing. The field also requires deep understanding of the unique regulations and supply chain requirements to handle radiopharmaceuticals, as well as ability and experience to actually transport products to medical institutions after manufacturing within a very short time frame because the radioisotopes decays over time.

In addition to pharmaceutical-related legislation, compliance with legislation related to the handling of radioisotopes is also required. PDRadiopharma has been working in the radiopharmaceutical business since 1968 and gained deep expertise as a pioneer in this area. PDRadiopharma has facilities in Chiba, Kawasaki (Kanagawa), and Ibaraki (Osaka), and 9 sales offices in Japan.

The current radiopharmaceuticals market in Japan is dominated by radiodiagnostics, but the growth of radiotherapeutics is expected in the future. In particular, targeted radiotherapeutics, which selectively delivers radioisotopes to target cells or tissues, is thought to drive market growth. The Company has been active in the discovery and development of peptide-RI conjugates for use as radiodiagnostics and radiotherapeutics in collaboration with BMS (radiodiagnostics), Bayer (radiodiagnostics), Novartis (radiodiagnostics/therapeutics), and RayzeBio (radiodiagnostics/therapeutics), and has established itself as one of the major players in this field. Additionally, the Company is expanding in-house programs on peptide-RI conjugates as part of its focus on PDC. Integrating the technologies, know-how and networks of PeptiDream and PDRadiopharma, the Company group strives to expand its radiopharmaceuticals business by developing new radiopharmaceuticals and in-licensing promising radiopharmaceuticals from overseas.

Other Information Related to the Company;

On September 17, 2021, the Company Group announced that it was successful in its bid for Lots 2-11 and 2-12 (Address: 3-chome, Tonomachi, Kawasaki-ku, Kawasaki City, Kanagawa) in the public tender for land that was conducted by the Urban Renaissance Agency as follows: Location: 102-20 and 102-21, 3-chome, Tonomachi, Kawasaki-ku, Kawasaki City, Kanagawa, Land area: 11,635.60 m2, Bid-winning price: 3.2 billion yen. KING SKYFRONT has been designated as an international strategic zone and the Keihin-Rinkai Life Innovation Comprehensive Global Strategic Special Zone. It is an open innovation hub for the creation of new industries based on world-class R&D in life science fields that are expected to grow globally. The Company originally planned to expand the Company's head office and research laboratory on the land, however, after the Company acquired radiopharmaceuticals business in March 2022, a building design needs to be revisited in consideration of utilizing a part of the land to enhance the function of radiopharmaceuticals business. With that, the schedule of the construction is currently under review. Details of the plan will be announced as soon as they are finalized. The Company purchased the land using fund on hand, and the construction of the future building is planned to use funds on hand and long-term loans from financial institutions.

PeptiDream Group continues its commitment to promoting ESG (Environmental, Social, and Governance) initiatives and its sustainability efforts including focus areas, ten most material issues, relevant policies and data are proactively disclosed on the corporate website and Sustainability Report. In addition, in order to further promote sustainability initiatives as a group, PDRadiopharma established a new "Sustainability Promotion Committee" to review and promote sustainability initiatives at PDRadiopharma.

As GHG (greenhouse gas) emissions (Scope 1+2) produced by our business operations mainly derive from electronic power consumption, the Company has selected an electricity supplier which proactively promotes the shift towards renewable energy. To further take this initiative, the Company has decided to introduce CO₂ (carbon dioxide)-free power from its supplier for use at our head office and laboratory. This means that we will achieve our medium-term goal of the realization of "carbon-neutral" business operations 4 years earlier than originally planned.

The Company believes as a R&D-driven innovative company that ensuring diversity is important in gaining a competitive advantage and nurturing innovation in order to fulfill its mission. In particular, the Company values the diversity of expertise and scientific sense of each individual employee, and believes it is important to ensure a framework which allows the managers and senior scientists who play core roles in R&D and management to engage in science-based discussion and decision-making regardless of their age, gender or cultural background. The Company has set four quantitative indicators which it considers to be constituent elements of the diversity of core human resources (*1) on which the foregoing is predicated, namely "ratio of doctorate (Ph.D.) holders(end of December 2021: 55.2%, target for 2030: 50% or more)," "female manager ratio(end of December 2021: 18.4%, target for 2030: 30% or more)," "ratio of foreign employees or employees with overseas work experience (*2) (end of December 2021: 31.5%, target for 2030: 30% or more)," and "ratio of young employees (in 20s/30s) (end of December 2021: 15.8%, target for 2030: 30% or more). " The current status of these indicators and the Company's 2030 targets are as follows.

*1: Managers and senior-ranking specialists (excludes officers)

*2: Employees with overseas research or work experience (excludes periods of less than one year and periods as a student studying abroad)

The Company have received high evaluations from various evaluation organizations through continuous efforts for sustainability. For the first time, the Company participated in the Climate Change Program of CDP (Carbon Disclosure Project), an organization engaged in environmental information disclosure initiatives, and received a score of B (management level) in 2021. On January 2022, the Company has been awarded as a "Top-Rated ESG Performer" for 2022 by Sustainalytics, a global ESG rating agency, and has been identified as top performer within the industry (rated No.2 among the 439 global biotech companies being evaluated). On April 2022, the Company has been selected as an index constituent of the FTSE Blossom Japan Sector Relative Index, constructed by global index provider FTSE Russel. In addition, on March 30, 2022, Japan's Government Pension Investment Fund (GPIF), which manages the public pensions, has announced that it has newly adopted the FTSE Blossom Japan Sector Relative Index as general ESG indices for Japanese equities.

As of June 30, 2022, the Group had a total of 680 employees (692 when including its 12 directors and approximately 25.7% of employees are women). The Company had a total of 197 employees and PDRadiopharma Inc. had a total of 483 employees, including temporary staff.

As a result of the above, for the six months ended June 30, 2022, the Drug Discovery and Development Business recorded revenue of 1,118,323 thousand yen (a 1,798,622 thousand yen decrease year on year), operating loss of 1,389,094 thousand yen (operating profit of 436,230 thousand yen in same period of the previous fiscal year), the Radiopharmaceutical Business recorded revenue of 3,906,073 thousand yen, operating profit of 197,529 thousand yen, and the Group recorded revenue of 5,024,397 thousand yen (a 2,107,450 thousand yen increase year on year), core operating loss of 1,180,034 thousand yen (core operating profit of 436,230 thousand yen in the same period of the previous fiscal year), operating loss of 1,559,688 thousand yen (operating profit of 436,230 thousand yen in same period of the previous fiscal year), loss before tax of 1,484,964 thousand yen (profit before tax of 312,177 thousand yen in the same period of the previous fiscal year), and loss attributable to owners of parent of 1,056,081 thousand yen (a 1,047,745 thousand yen increase year on year).

In addition to IFRS-based results, the Company discloses financial results on a core basis as an indicator of its recurring profitability. Certain items reported in financial results on a IFRS basis that are deemed to be non-recurring items by the Company are excluded as non-core items from these financial results on a core basis.

Items that are excluded from operating profit to calculate core operating profit include accounting effects of business acquisitions and acquisition-related costs, impairment loss on property, plant and equipment, intangible assets and goodwill, gains or losses on compensation, settlements, non-recurring and significant gains and losses, and amortization of intangible assets from introduction of individual products or developments.

A reconciliation of core operating income to operating income is as follows

(Thousands of yen)

	Results for the six months ended June 30, 2021	Results for the six months ended June 30, 2022	Change	%
Core operating profit (loss)	436,230	(1,180,034)	(1,616,265)	-
Accounting effects of business acquisitions and acquisition-related costs	-	368,122	368,122	-
Impairment loss on property, plant and equipment, intangible assets and goodwill	-	-	-	-
Gains or losses on compensation, settlements	-	-	-	-
Non-recurring and significant gains and losses	-	-	-	-
Amortization of intangible assets from introduction of individual products or developments	-	11,531	11,531	-
Operating profit (loss)	436,230	(1,559,688)	(1,995,919)	-

(2) Explanation of Financial Position

1) Analysis of financial position

Total assets at the end of the six months ended June 30, 2022 increased by 24,860,987 thousand yen from the end of the previous fiscal year to 51,895,583 thousand yen.

This was mainly because of an increase of 11,193,486 thousand yen in property, plant and equipment, and an increase of 11,259,562 thousand yen in goodwill, despite a decrease of 5,373,721 thousand yen in cash and cash equivalents. The increase in assets included the amount recognized in line with the consolidation of PDRadiopharma Inc.

Liabilities increased by 25,471,884 thousand yen from the end of the previous fiscal year to 27,156,230 thousand yen. This was mainly because of an increase of 21,641,498 thousand yen in borrowings. The increase in liabilities included the amount recognized in line with the consolidation of PDRadiopharma Inc.

Equity decreased by 610,897 thousand yen from the end of the previous fiscal year to 24,739,352 thousand yen. This was mainly because of a decrease of 1,056,081 thousand yen in retained earnings due to the recording of loss.

2) Analysis of status of cash flows

Cash and cash equivalents for the six months ended June 30, 2022 decreased 5,373,721 thousand yen from the end of the previous fiscal year to 6,372,808 thousand yen.

Status of cash flows and related factors during the six months ended June 30, 2022 are described below.

(Cash flows from operating activities)

Cash flows from operating activities resulted in a cash outflow of 9,837 thousand yen (compared with an inflow of 4,959,002 thousand yen in the same period of the previous fiscal year). This was mainly due to the recording of loss before tax of 1,484,964 thousand yen, despite the recording of decrease (increase) in trade and other payables of 597,710 thousand yen.

(Cash flows from investing activities)

Cash flows from investing activities resulted in a cash outflow of 26,679,922 thousand yen (a 26,229,612 thousand yen increase in outflow year on year). This was mainly due to payments for acquisition of subsidiaries of 23,460,335 thousand yen.

(Cash flows from financing activities)

Cash flows from financing activities resulted in a cash inflow of 21,557,472 thousand yen (a 21,512,888 thousand yen increase in inflow year on year). This was mainly due to proceeds from long-term borrowings of 22,400,000 thousand yen.

(3) Explanation of Consolidated Financial Forecasts and Other Forward-looking Information

The full year consolidated financial forecasts have been revised from the original forecasts announced on March 12, 2022, are shown below.

Revisions to the consolidated financial forecasts for fiscal year ending December 31, 2022 (January 1, 2022 to December 31,

2022)

(JPY millions)

	Revenue	Core operating profit	Operating profit	Profit before tax
Previous forecasts (A)	24,500	-	-	-
Revised forecasts (B)	24,500	6,600	-	-
Change (B-A)	-	-	-	-
Change (%)	-	-	-	-
(Reference) Fiscal Year ending December 31, 2021	9,422	4,093	4,066	3,803

The Company is in the process of examining the impact of the March 28, 2022 acquisition of PDRadiopharma Inc. on its financial results, such as the purchase price allocation, and plans to disclose the consolidated financial forecasts for the fiscal year ending December 31, 2022 for items other than revenue and core operating profit as soon as they are finalized.

【Key indices】

	Results for the full year ended December 31, 2020	Results for the six months ended June 30, 2021	Results for the full year ended December 31, 2021	Results for the six months ended June 30, 2022	Forecasts for the full year ending December 31, 2022
	2020/Jan ~ 2020/Dec	2021/Jan ~ 2021/June	2021/Jan ~ 2021/Dec	2022/Jan ~ 2022/June	2022/Jan ~ 2022/Dec
Capital Expenditures (JPY millions)	566	350	1,300	3,088	3,860
Depreciation Expense (JPY millions)	559	305	633	746	-
Research and Development Expenses (JPY millions)	1,460	748	1,638	1,154	3,165
Year-end headcount (people)	157	175	177	692	696

- (Notes)
1. The amount that will actually be paid is shown for capital expenditures.
 2. Capital Expenditures of fiscal year ending December 31, 2021, includes advance payments (644 million yen) for the purchase of the land.
 3. The Group has adopted International Financial Reporting Standards (IFRS) from the results for the first quarter of the fiscal year ending December 31, 2022, and major management indicators for the Group as a whole are listed.
 4. The Company is in the process of examining the impact of the March 28, 2022 acquisition of PDRadiopharma Inc. on its financial results, such as the purchase price allocation, and plans to disclose the forecasts of depreciation expense for the fiscal year ending December 31, 2022 as soon as they are finalized.

The Company announced a new Mid-Term Management Targets on March 25, 2021 for the period from the fiscal year ended December 31, 2021 to the fiscal year ending December 31, 2026. Specifically, the Company anticipates 4 or more new therapeutic drugs (not including diagnostics) to be launched (approved), 32 or more programs to be in clinical development, and 160 or more programs to be in preclinical development, by the end of FY2026. In order to fully support and promote these targets, the Company will continue to actively expand through the hiring of highly skilled and talented professionals. In addition, in order to realize our goal of being a global “Drug Discovery Powerhouse”, the Company will continue to expand our partnership network and our leading position as the hub in the global peptide-based drug discovery ecosystem (*1).

Mid-Term Targets by the end of FY2026		As of June 30, 2022
(1) New drugs* ² launched (approved)	4 or more	0
(2) Number of clinical programs	32 or more	4
(3) Number of preclinical drug discovery programs	160 or more	120
(4) Number of employees	220 or more	204
(5) Establishing foundation as a “Drug Discovery Powerhouse”		

*1 Mid-Term Targets on a non-consolidated basis.

*2 Diagnostic agents and products other than therapeutics are not included.

Regarding the 5th target, the aim to solidify PeptiDream’s position and reputation as a global “Drug Discovery Powerhouse”, we will particularly focus our efforts on the following five initiatives:

- ① To further lead the expansion of the global peptide-based drug discovery eco-system and our partnership network through expanding our role as the central hub.
- ② To continue to expand the number of licensees of our proprietary PDPS technology and its position as “the most widely-used peptide-based drug discovery platform”.
- ③ To create a healthy, safe, and diverse work environment where all employees can maximize their abilities, have equal opportunities, and be considered a “best place to work”
- ④ To strive toward a “transparent, responsive, and balanced corporate governance structure”, ensure the highest business ethical standards, and maintain a continuous and open dialogue with all internal and external stakeholders.
- ⑤ To promote operational efficiency for the sustainable growth of society, minimize our environmental impact with a focus on water, waste, and energy efficiency, and become “carbon neutral” in our operations by 2026.

2. Condensed Quarterly Consolidated Financial Statements and primary notes

(1) Condensed Quarterly Consolidated Statements of Financial Position

(Thousands of yen)

	As of January 1, 2021 (Transition date)	As of December 31, 2021	As of June 30, 2022
Assets			
Current assets			
Cash and cash equivalents	7,149,358	11,746,529	6,372,808
Trade and other receivables	7,530,584	811,096	5,437,622
Other financial assets	6,241	69,047	420,340
Inventories	585,981	925,138	2,232,348
Income taxes receivable	–	10,415	405,369
Other current assets	369,353	274,197	593,712
Total current assets	15,641,519	13,836,425	15,462,202
Non-current assets			
Property, plant and equipment	5,766,856	6,437,151	17,630,637
Goodwill	–	–	11,259,562
Intangible assets	78,683	75,502	348,449
Investments accounted for using equity method	294,927	603,003	493,031
Other financial assets	3,800,421	6,080,133	6,461,393
Deferred tax assets	549,646	–	–
Retirement benefit asset	–	–	200,217
Other non-current assets	8,921	2,379	40,088
Total non-current assets	10,499,457	13,198,170	36,433,380
Total assets	26,140,976	27,034,596	51,895,583

	As of January 1, 2021 (Transition date)	As of December 31, 2021	As of June 30, 2022
Liabilities and equity			
Liabilities			
Current liabilities			
Trade and other payables	2,562,788	886,124	2,890,047
Borrowings	–	–	2,187,893
Other financial liabilities	–	–	291,658
Income taxes payable	1,586,784	14,404	20,258
Provisions	–	–	10,962
Other current liabilities	712,595	475,517	964,283
Total current liabilities	4,862,168	1,376,047	6,365,102
Non-current liabilities			
Borrowings	–	–	19,453,605
Other financial liabilities	–	–	436,583
Deferred tax liabilities	–	308,298	756,368
Retirement benefit liability	–	–	144,570
Total non-current liabilities	–	308,298	20,791,128
Total liabilities	4,862,168	1,684,345	27,156,230
Equity			
Share capital	3,933,885	3,956,738	3,956,738
Capital surplus	10,305,306	4,452,358	4,451,502
Treasury shares	(655,383)	(620,123)	(607,255)
Retained earnings	7,503,531	16,372,687	15,316,606
Other components of equity	191,468	1,188,589	1,621,761
Total equity attributable to owners of parent	21,278,808	25,350,250	24,739,352
Total equity	21,278,808	25,350,250	24,739,352
Total liabilities and equity	26,140,976	27,034,596	51,895,583

(2) Condensed Quarterly Consolidated Statements of Profit or Loss

Six months ended June 30, 2021 and June 30, 2022

(Thousands of yen, unless otherwise stated)

	Six months ended June 30, 2021	Six months ended June 30, 2022
Revenue	2,916,946	5,024,397
Cost of sales	962,469	3,003,772
Gross profit	1,954,476	2,020,624
Selling, general and administrative expenses	776,214	2,425,234
Research and development expenses	770,906	1,154,597
Other income	29,054	518
Other expenses	179	1,000
Operating profit (loss)	436,230	(1,559,688)
Finance income	235,513	250,800
Finance costs	-	66,104
Share of profit (loss) of investments accounted for using equity method	(359,567)	(109,972)
Profit (loss) before tax	312,177	(1,484,964)
Income tax expense	320,513	(428,883)
Loss	(8,335)	(1,056,081)
Profit attributable to:		
Owners of parent	(8,335)	(1,056,081)
Loss	(8,335)	(1,056,081)
Earnings (loss) per share		
Basic earnings (loss) per share (Yen)	(0.07)	(8.13)
Diluted earnings (loss) per share (Yen)	(0.07)	(8.13)

(3) Condensed Quarterly Consolidated Statements of Comprehensive Profit or Loss
Six months ended June 30, 2021 and June 30, 2022

(Thousands of yen)

	Six months ended June 30, 2021	Six months ended June 30, 2022
Loss	(8,335)	(1,056,081)
Other comprehensive income		
Items that will not be reclassified to profit or loss:		
Financial assets measured at fair value through other comprehensive income	884,151	433,171
Total of items that will not be reclassified to profit or loss	884,151	433,171
Other comprehensive income	884,151	433,171
Comprehensive income	875,816	(622,909)
Comprehensive income attributable to:		
Owners of parent	875,816	(622,909)
Comprehensive income	875,816	(622,909)

(Note) The above statement items are disclosed net of tax.

(4) Condensed Quarterly Consolidated Statements of Changes in Equity

Six months ended June 30, 2021

(Thousands of yen)

	Equity attributable to owners of parent					Total equity attributable to owners of parent	Total equity
	Share capital	Capital surplus	Treasury shares	Retained earnings	Other components of equity		
Balance at January 1, 2021	3,933,885	10,305,306	(655,383)	7,503,531	191,468	21,278,808	21,278,808
Loss	–	–	–	(8,335)	–	(8,335)	(8,335)
Other comprehensive income	–	–	–	–	884,151	884,151	884,151
Total comprehensive income	–	–	–	(8,335)	884,151	875,816	875,816
Issuance of new shares	22,852	22,852	–	–	–	45,704	45,704
Purchase of treasury shares	–	–	(362)	–	–	(362)	(362)
Disposal of treasury shares	–	–	30,584	–	–	30,584	30,584
Transfer from other components of equity to retained earnings	–	–	–	(24,175)	24,175	–	–
Share-based payment transactions	–	385,355	–	–	–	385,355	385,355
Total transactions with owners	22,852	408,208	30,221	(24,175)	24,175	461,282	461,282
Balance at June 30, 2021	3,956,738	10,713,515	(625,162)	7,471,019	1,099,795	22,615,906	22,615,906

Six months ended June 30, 2022

(Thousands of yen)

	Equity attributable to owners of parent					Total equity attributable to owners of parent	Total equity
	Share capital	Capital surplus	Treasury shares	Retained earnings	Other components of equity		
Balance at January 1, 2022	3,956,738	4,452,358	(620,123)	16,372,687	1,188,589	25,350,250	25,350,250
Loss	—	—	—	(1,056,081)	—	(1,056,081)	(1,056,081)
Other comprehensive income	—	—	—	—	433,171	433,171	433,171
Total comprehensive income	—	—	—	(1,056,081)	433,171	(622,909)	(622,909)
Purchase of treasury shares	—	—	(87)	—	—	(87)	(87)
Disposal of treasury shares	—	—	12,956	—	—	12,956	12,956
Share-based payment transactions	—	(856)	—	—	—	(856)	(856)
Total transactions with owners	—	(856)	12,868	—	—	12,012	12,012
Balance at June 30, 2022	3,956,738	4,451,502	(607,255)	15,316,606	1,621,761	24,739,352	24,739,352

(5) Condensed Quarterly Consolidated Statements of Cash Flows

	(Thousands of yen)	
	Six months ended June 30, 2021	Six months ended June 30, 2022
Cash flows from operating activities		
Profit (loss) before tax	312,177	(1,484,964)
Depreciation and amortization	305,498	746,539
Interest and dividend income	(175)	(1,049)
Interest expenses	–	66,104
Foreign exchange loss (gain)	(75,987)	241,433
Share of loss (profit) of investments accounted for using equity method	359,567	109,972
Decrease (increase) in trade and other receivables	7,285,072	(135,091)
Decrease (increase) in inventories	(171,382)	(275,141)
Increase (decrease) in trade and other payables	(1,643,432)	597,710
Increase (decrease) in defined benefit asset and liability	–	80,852
Other	174,168	139,828
Subtotal	6,545,505	86,193
Interest and dividends received	175	1,049
Interest paid	–	(51,805)
Income taxes paid	(1,586,809)	(56,233)
Income taxes refund	131	10,958
Net cash provided by (used in) operating activities	4,959,002	(9,837)
Cash flows from investing activities		
Proceeds from sale of securities	145,222	–
Payments for acquisition of subsidiaries	–	(23,460,335)
Loan advances to subsidiaries and associates	(414,097)	–
Collection of loans receivable	3,120	65,926
Grant amount received	136,323	–
Purchase of property, plant and equipment	(316,109)	(3,218,559)
Purchase of intangible assets	(4,770)	(58,228)
Other	–	(8,724)
Net cash provided by (used in) investing activities	(450,310)	(26,679,922)
Cash flows from financing activities		
Proceeds from long-term borrowings	–	22,400,000
Repayments of long-term borrowings	–	(560,000)
Payments of borrowing fee	–	(212,800)
Repayments of lease liabilities	–	(69,639)
Proceeds from issuance of shares resulting from exercise of share acquisition rights	44,940	–
Purchase of treasury shares	(356)	(87)
Net cash provided by (used in) financing activities	44,583	21,557,472
Effect of exchange rate change on cash and cash equivalents	75,987	(241,433)
Net increase (decrease) in cash and cash equivalents	4,629,263	(5,373,721)
Cash and cash equivalents at beginning of period	7,149,358	11,746,529
Cash and cash equivalents at end of period	11,778,622	6,372,808

(6) Notes to Condensed Quarterly Consolidated Financial Statements

(Notes regarding going concern assumption)

Not applicable.

(Notes in case of significant changes in equity)

Not applicable.

(Segment information)

(1) Outline of reportable segments

Since the Group operated in a single business segment, for the six months ended June 30, 2021, the description of segment information is omitted.

On March 28, 2022 in the first quarter of the fiscal year under review, the Company acquired the entire shares of a newly established company, PDRadiopharma Inc., which succeeded the radiopharmaceutical business of Fujifilm Toyama Chemical Co., Ltd. through an absorption-type split. As a result of this transaction, effective from the six months ended June 30, 2022, the Board of Directors of the Company is monitoring the two reportable segments of the Drug Discovery and Development Business Segment and the Radiopharmaceutical Business Segment to determine the allocation of management resources and evaluate financial results. Therefore, from the second quarter ended June 30, 2022, the Group reorganized its reportable segments to the above two segments of the Drug Discovery and Development Business Segment and the Radiopharmaceutical Business Segment.

[Description of reportable segments]

Reportable Segment	Business description
Drug Discovery and Development Business Segment (Collaboration, PDPS Licensing, In-House/Strategic)	The Drug discovery and development business centers around the use of PDPS, the Company's proprietary drug discovery platform system. This segment engages primarily in the discovery, research and development of new therapeutics and diagnostics through collaborative research and development with pharmaceutical companies in Japan and overseas, PDPS technology licensing, and in-house/strategic partnering and compound licensing.
Radiopharmaceutical Business Segment	The Radiopharmaceutical business engages in the research and development, manufacturing, and sale of: diagnostic radiopharmaceuticals (diagnostic agents for SPECT and PET), used to examine blood flow of the heart and brain and bone metastasis of cancers; and therapeutic radiopharmaceuticals that address unmet medical needs, such as pheochromocytoma.

(2) Segment revenues and performance

Revenues and performance for each of the Group's reportable segments were as follows. Inter-segment revenues are based on prevailing market prices.

Six months ended June 30, 2021 (January 1, 2021 to June 30, 2021)

For the six months ended June 30, 2021, segment information is omitted as the Group engaged in a single segment of the Drug Discovery and Development Business Segment.

Six months ended June 30, 2022 (January 1, 2022 to June 30, 2022)

(Thousands of yen)

	Reportable Segment			Adjustment	Consolidated Statement
	Drug Discovery and Development Business Segment	Radiopharmaceutical Business Segment	Total		
Revenue					
External revenue	1,118,323	3,906,073	5,024,397	—	5,024,397
Inter-segment revenue	—	—	—	—	—
Total	1,118,323	3,906,073	5,024,397	—	5,024,397
Segment profit (loss)	(1,389,094)	197,529	(1,191,565)	—	(1,191,565)
(Adjustments)					
Business combination-related expenses (Note 1)					368,122
Operating profit					(1,559,688)
Finance income					250,800
Finance costs					66,104
Share of profit (loss) of associates accounted for using the equity method					(109,972)
Profit before income taxes					<u>(1,484,964)</u>

(Note 1) Business combination-related expenses include 368,122 thousand yen in acquisition-related expenses for business combination.