Investor Presentation

May 2023

LANTHEUS

Safe Harbor Statements

Cautionary Statement Regarding Forward-Looking Statements

This document contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, that are subject to risks and uncertainties and are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements may be identified by their use of terms such as "anticipate," "believe," "confident," "continue," "could," "estimate," "expect," "guidance," "intend," "introduce," "may," "momentum," "plan," "predict," "progress," "project," "promising," "should," "target," "will," "would" and other similar terms. Such forward-looking statements are based upon current plans, estimates and expectations that are subject to risks and uncertainties that could cause actual results to materially differ from those described in the forward-looking statements. The inclusion of forward-looking statements should not be regarded as a representation that such plans, estimates and expectations will be achieved. Readers are cautioned not to place undue reliance on the forward-looking statements contained herein, which speak only as of the date hereof. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law. Risks and uncertainties that could cause our actual results to materially differ from those described in the forward-looking statements include: (i) continued market expansion and penetration for our established commercial products, particularly PYLARIFY and DEFINITY, in the face of competition; (ii) our ability to have third parties manufacture our products and our ability to manufacture DEFINITY in our in-house manufacturing facility; (iii) the global availability of Molybdenum-99 ("Mo-99") and other raw material and key components; (iv) the efforts and timing for clinical development, regulatory approval and successful commercialization of our product candidates and new clinical applications and territories for our products, in each case, that we or our strategic partners may undertake; (v) our strategies, future prospects, and our projected growth, including revenue related to our collaboration agreements with POINT Biopharma Global Inc. (vi) our ability to successfully continue existing clinical development partnerships using MK-6240 as a research tool and to further develop and commercialize such research tool; (vii) our ability to identify and acquire or in-license additional diagnostic and therapeutic product opportunities in oncology and other strategic areas; and(viii) the risk and uncertainties discussed in our filings with the Securities and Exchange Commission (including those described in the Risk Factors section in our Annual Reports on Form 10-K and our Quarterly Reports on Form 10-Q).

Non-GAAP Financial Measures

The Company uses non-GAAP financial measures, such as adjusted net income and its line components; adjusted net income per share - fully diluted; and free cash flow. The Company's management believes that the presentation of these measures provides useful information to investors. These measures may assist investors in evaluating the Company's operations, period over period. However, these measures may exclude items that may be highly variable, difficult to predict and of a size that could have a substantial impact on the Company's reported results of operations for a particular period. Management uses these and other non-GAAP measures internally for evaluation of the performance of the business, including the allocation of resources and the evaluation of results relative to employee performance compensation targets. Investors should consider these non-GAAP measures only as a supplement to, not as a substitute for or as superior to, measures of financial performance prepared in accordance with GAAP.

LANTHEUS

Lantheus provides **innovative diagnostics, targeted therapeutics and artificial intelligence solutions** that empower clinicians to **Find. Fight. Follow.** disease to deliver better patient outcomes.

FIND. FIGHT. FOLLOW.™

Lantheus – A Growth Company

FOUNDED: 1956 | 2022 Revenues $935M | 1Q 2023 Revenues $301M | 28% 5-Year Revenue CAGR[1] | ~700 Employees

Delivering life-changing science to patients and providers; going further to improve outcomes and lives

Leader in radiopharmaceuticals

65 years of radiopharmaceutical expertise, including development, manufacturing, and commercialization

PSMA PET with PYLARIFY: #1 PSMA PET Imaging Agent - with sustainable competitive advantages

DEFINITY: #1 Ultrasound Enhancing Agent - used in the U.S. for more than 20 years[2]

Executing On Our Strategy to:

SUSTAIN
double-digit growth

DIVERSIFY
our portfolio

LEAD
Achieve category leadership where compete

Continue to advance our purpose to
FIND. FIGHT. FOLLOW.
disease to deliver better patient outcomes

Impacted the lives of 6M+ patients in 2022

1. 5-year revenue CAGR ending 4Q 2022.
2. DRG Echo Monthly Monitor.

LANTHEUS

Radiopharmaceutical Oncology

Diagnostics and therapeutics that aid healthcare professionals (HCPs) in Finding, Fighting and Following cancer

Precision Diagnostics

Our leading diagnostic products assist HCPs in Finding and Following diseases with a current focus in cardiology

Strategic Partnerships and Other

Strategic Partnerships with a focus on enabling precision medicine with biomarkers, digital solutions and pharma services platforms

Lantheus, a Growth Company

Portfolio categories:

1 Radiopharmaceutical Oncology

- PYLARIFY® Piflufolastat F 18 Injection
- PYLARIFY AI™*
- AZEDRA® iobenguane I 131 injection for intravenous use

2 Precision Diagnostics

- DEFINITY® VIAL FOR (Perflutren Lipid Microsphere) INJECTABLE SUSPENSION
- DEFINITY® RT (Perflutren Lipid Microsphere) INJECTABLE SUSPENSION
- TechneLite® Technetium Tc 99m Generator
- Xenon Xe 133 Gas
- NEUROLITE® Kit for the Preparation of Technetium Tc 99m Bicisate for Injection
- Cardiolite® Kit for the Preparation of Technetium Tc99m Sestamibi for Injection

* Revenue will be reported under the Strategic Partnerships & Other category

Lantheus, a Growth Company

Portfolio categories:

3

Strategic Partnerships & Other

Pharma Services: Biomarker Platforms

LANTHEUS-OWNED

LNTH-1363S (FAP)* ****

NM-01 (PDL1)*

MK-6240 (tau)*

piflufolastat F 18 (PSMA)

NOVARTIS**

Alnylam PHARMACEUTICALS

POINT BIOPHARMA**

REGENERON**

janssen

Eisai

MERCK

Biogen

Microbubble Partnerships***

AHN

CARTHERA Advanced Brain Therapy

CEREVAST™

INSIGHTEC®

SONOTHERA™

Other Key Strategic Partnerships

RELISTOR® methylnaltrexone bromide

BAUSCH Health

piflufolastat F 18** aPROMISE

CURIUM™ Europe ONLY

flurpiridaz F 18*

GE HealthCare

aPROMISE aBSI

SIEMENS | GE HealthCare

1404*

ROTOP

PSMA TAC*

BAYER

Highlights selected strategic partnerships.

*Product candidates; ** Revenue will be reported under the Radiopharmaceutical Oncology category; *** Revenue will be reported under the Precision Diagnostics category. **** Also known as NTI-1309

PYLARIFY®
Piflufolastat F 18 Injection

PYLARIFY® (piflufolastat F 18) Injection is a radioactive diagnostic agent indicated for positron emission tomography (PET) of prostate-specific membrane antigen (PSMA) positive lesions in men with prostate cancer

- with suspected metastasis who are candidates for initial definitive therapy
- with suspected recurrence based on elevated serum prostate-specific antigen (PSA) level

Radiopharmaceutical Oncology

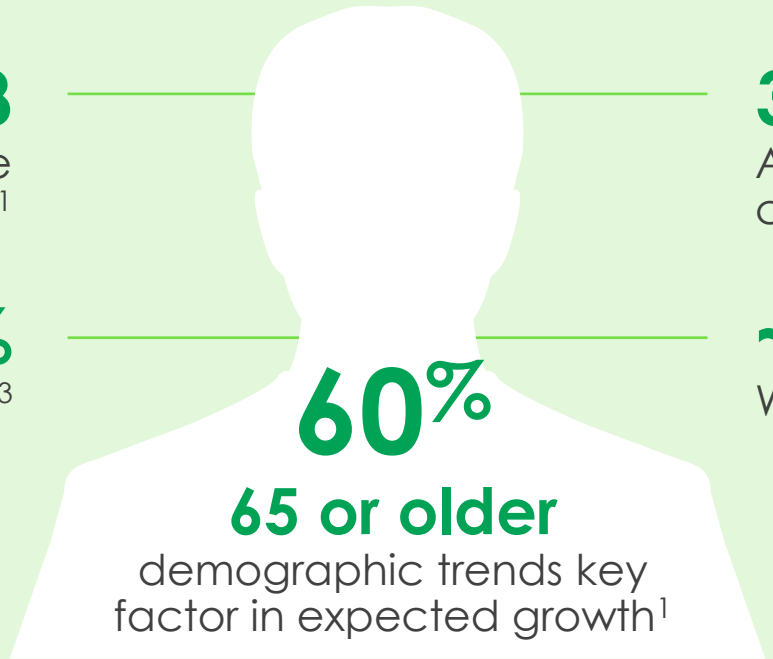
PYLARIFY® [package insert]. North Billerica, MA: Progenics Pharmaceuticals, Inc., a Lantheus company.

Prostate Cancer is the 2nd Most Common Cancer in American Men[1]

2023 Prostate Cancer Estimates

~279K new cases[2]

~34.5K deaths[1]



1:8
Diagnosed with prostate cancer during his lifetime[1]

Up to 50%
will experience a recurrence[3]

60%
65 or older
demographic trends key factor in expected growth[1]

3.2M+
Are living with prostate cancer today[1]

~1:41
Will die of prostate cancer[1]

1. American Cancer Society. Cancer Facts & Figures 2022. American Cancer Society; Atlanta, Ga. 2022.
2. American Cancer Society. Cancer Facts & Figures 2022. American Cancer Society; Atlanta, Ga. 2022, LNTH market research projection for 2023.
3. Farolfi & Ceci. ^{68}Ga-PSMA-11 PET/CT in prostate cancer patients with biochemical recurrence after radical prostatectomy and PSA <0.5 ng/ml. Efficacy and impact on treatment strategy. European Journal of Nuclear Medicine and Molecular Imaging https://doi.org/10.1007/s00259-018-4066-4 (Published online 15 June 2018).

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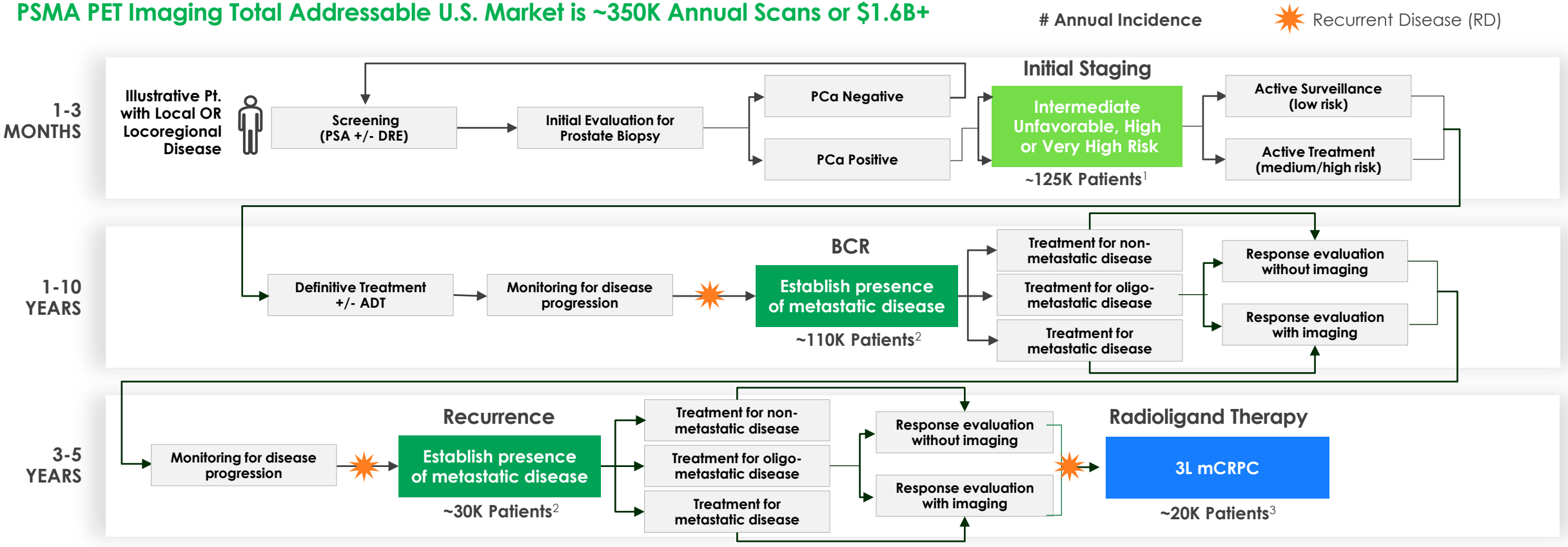
Prostate Cancer Patients May Undergo Imaging Several Times During Their Disease Journey

PSMA PET Imaging Total Addressable U.S. Market is ~350K Annual Scans or $1.6B+



Estimated 2-3% annual growth due to increasing incidence / prevalence[4]

1. Market research interviews, survey, and analysis, Wenzel 2021 Prostate, Nezolosky 2018 J. Clin. Oncol., Agrawal 2020 JAMA.
2. Scher HI, Solo K, Valant J, Todd MB, Mehra M. 2015. Prevalence of Prostate Cancer Clinical States and Mortality in the United States: Estimates Using a Dynamic Progression Model. PloS one 10: e0139440. Based on: CDC.gov, SEER Database, NCCN.org and Axiom Primary and Secondary Market Research and Analysis, validated by Bohm Epidemiology 2020.
3. Global Data 3rd line treatment for metastatic castration-resistant prostate cancer ("mCRPC"), Lantheus primary market research informing imaging procedures performed during radioligand treatment.
4. Lantheus market research and analysis with ordering physicians, NCCN, ACS, UpToDate, SEER.

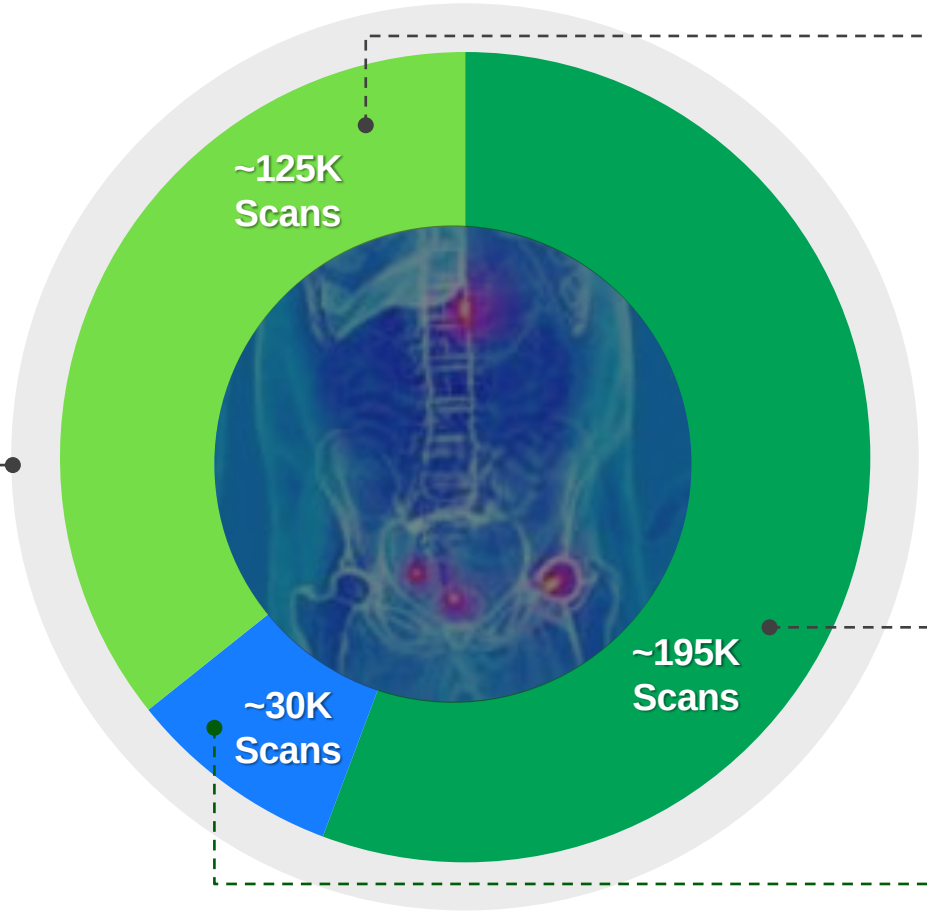
~$1.6B U.S. PSMA PET Imaging TAM[1]

Estimate +2%-3% annual growth due to increasing incidence / prevalence[2]

2023 Annual Scan Potential Estimates

~350K
ANNUAL SCANS

~$1.6B+
MARKET POTENTIAL[1]



INITIAL STAGING FOR SUSPECTED METASTASES[3]
~125K Patients staged with **Intermediate Unfavorable, High or Very High Risk** Prostate cancer (~125K potential scans)

SUSPECTED RECURRENCE[4]
~110K Patients with **Biochemical Recurrence** of Prostate Cancer (~195K potential scans)

PSMA-TARGETED RADIOLIGAND THERAPY[5]
~20k Patients with 3L mCRPC (~30K potential scans)

1. Total addressable market ("TAM") for PSMA PET imaging for prostate cancer based on: current management estimates, internal data and observed market price.
2. Lantheus market research and analysis with ordering physicians, NCCN, ACS, UpToDate, SEER.
3. Market research interviews, survey, and analysis, Wenzel 2021 Prostate, Nezolosky 2018 J. Clin. Oncol., Agrawal 2020 JAMA.
4. Scher HI, Solo K, Valant J, Todd MB, Mehra M. 2015. Prevalence of Prostate Cancer Clinical States and Mortality in the United States: Estimates Using a Dynamic Progression Model. PloS one 10: e0139440. Based on: CDC.gov, SEER Database, NCCN.org and Axiom Primary and Secondary Market Research and Analysis, validated by Bohm Epidemiology 2020.
5. 3L treatment of adult patients with PSMA-positive metastatic castration-resistant prostate cancer ("mCRPC") who have already been treated with other anticancer treatments (androgen receptor pathway inhibition and taxane-based chemotherapy).

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Advantages of PSMA PET with PYLARIFY

PET Imaging[1,2]

PET/CT Scans:

- Have high detection rates of metastatic disease even in patients with low PSA
- Are not limited by the size of lymph nodes in detection of nodal disease
- Visualize bone metastases when CT or bone scan cannot

PSMA Targeting[3]

- PYLARIFY works by binding to PSMA, a protein that is overexpressed on the surface of more than 90% of primary and metastatic prostate cancer cells which enables the reader of the PET/CT scan to detect and locate the disease

F 18 Radioisotope[4]

- Attributes help deliver high quality, improved spatial resolution leading to clear and reproducible images
- Cyclotron production offers high batch capacity
- 110-minute half-life allows for broad geographic distribution and clinical flexibility in administration

Technology[5,6]

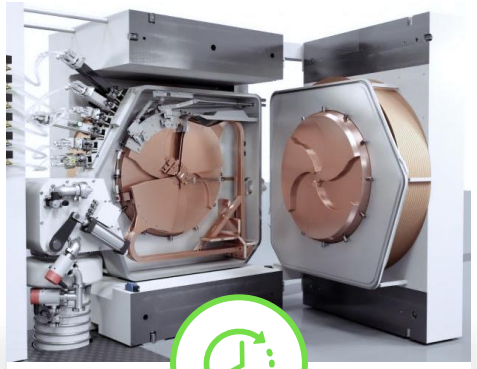
- PYLARIFY AI™ is the only FDA-cleared medical device software with Deep Learning technology to quantify PSMA PET/CT images
- Potential benefits of quantifying disease burden over time
- Regulatory Clearances:
  U.S. - 510(k)
  E.U. - CE mark

(1) Alipour R, Azad A, Hofman MS. Guiding management of therapy in prostate cancer: time to switch from conventional imaging to PSMA PET? Ther Adv Med Oncol. 2019;11:1-14. doi:10.1177/1758835919876828.; (2) Rousseau E, Wilson D, Lacroix-Poisson F, et al. A prospective study on 18F-DCFPyL PSMA PET/CT imaging in biochemical recurrence of prostate cancer. J Nucl Med. 2019;60(11):1587-1593. doi: 10.2967/jnumed.119.226381; (3) Ceci & Fanti. PSMA-PET/CT imaging in prostate cancer: why and when. Clinical and Translational Imaging volume 7, pages 377–379 (2019); (4) Werner RA, Derlin T, Lapa C, et al. 18F-labeled, PSMA-targeted radiotracers: leveraging the advantages of radiofluorination for prostate cancer molecular imaging. Theranostics. 2020;10(1):1-16; (5) Deep Learning-Enabled Comprehensive Detection and Quantification of 18FDCFPyL (PyL-PSMA) PET/CT. Brynolfsson J, Johnsson K, Sahlstedt H, Richter J, et al, OP-548, 1006: Cutting Edge Science Track – TROP Session: AI -Radiomics and Modelling, EANM 2020; (6) miPSMA Index: Comprehensive and Automated Quantification of 18F-DCFPyL (PyL-PSMA) PET/CT for Prostate Cancer Staging. Johnsson K, Sahlstedt H, Brynolfsson J, et al. J Nucl Med. 2020;61(1):1435.

LANTHEUS™

PYLARIFY Batch Manufacturing Process Produces a Large Quantity of Doses Needed for the Large Patient Population

PYLARIFY Synthesis, Distribution and Utilization



F 18 is produced on a cyclotron

PYLARIFY is manufactured and formulated in a synthesis box

Finished as a bulk vial

Robust quality control and testing

Drawn into patient-ready doses

PYLARIFY patient-ready doses "out the door"

110-minute half-life advantage

Easily transported any time of day within a ~3-hour radius

Patient is injected and scanned

Patient Treatment Logistics Require Real-Time Delivery of Doses

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PYLARIFY | PMF[1] Model Provides Significant Capacity

PYLARIFY Supply Advantages

Leverages Sizeable U.S. PMF Network

- U.S. cyclotron network already supports 2+ million FDG doses on an annual basis[2]

Significant Capacity per PMF

- PMFs have already demonstrated the ability to produce 40+ PYLARIFY doses per batch, with some PMFs producing 3 batches per day; 5 days per week

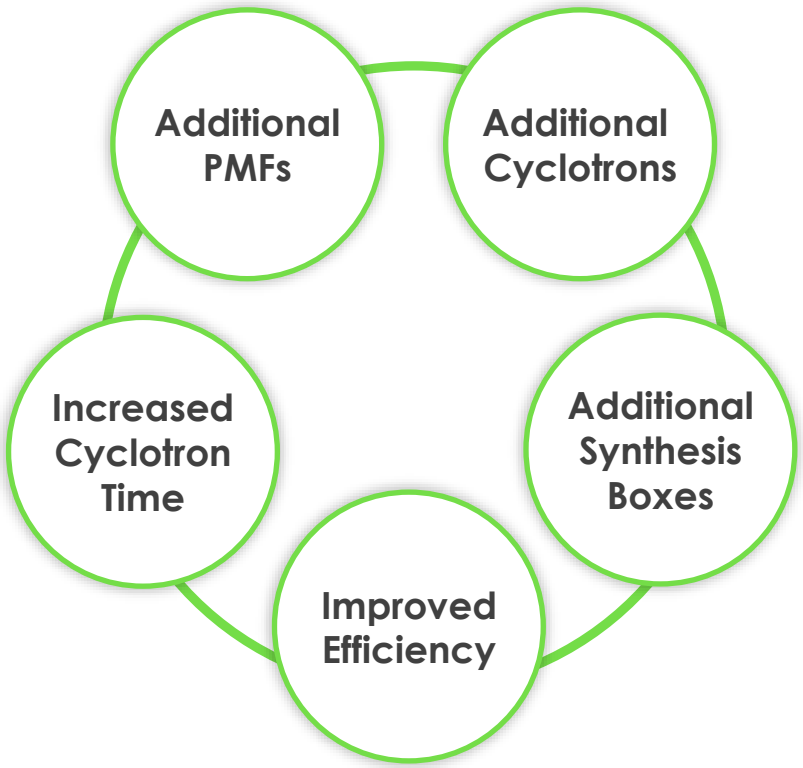
F 18 110-Minute Half Life

- Enables doses to be calibrated for ~3 hour transport from PMF, including flights

Flexible Patient Treatment Times

- Majority of activated PMFs have out-the-door times of 10am or earlier with customer dosing flexibility

PYLARIFY Capacity Enhancements



(1) PMF = PET Manufacturing Facility; (2) Source: IMV 2022 PET Imaging Market Summary Report

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PYLARIFY Market Access

90%

of covered lives have access to **PYLARIFY**

Positive coverage by: Commercial, Medicare Advantage, Radiology Benefits Managers (RBMs)

Tracer-agnostic approach for radioligand therapy selection for Medicare, and most Medicare Advantage and commercial plans

Guidelines Updated Noting:

NCCN National Comprehensive Cancer Network®

SNMMI SOCIETY OF NUCLEAR MEDICINE AND MOLECULAR IMAGING

2021 – Conventional imaging is not required prior to PSMA PET imaging

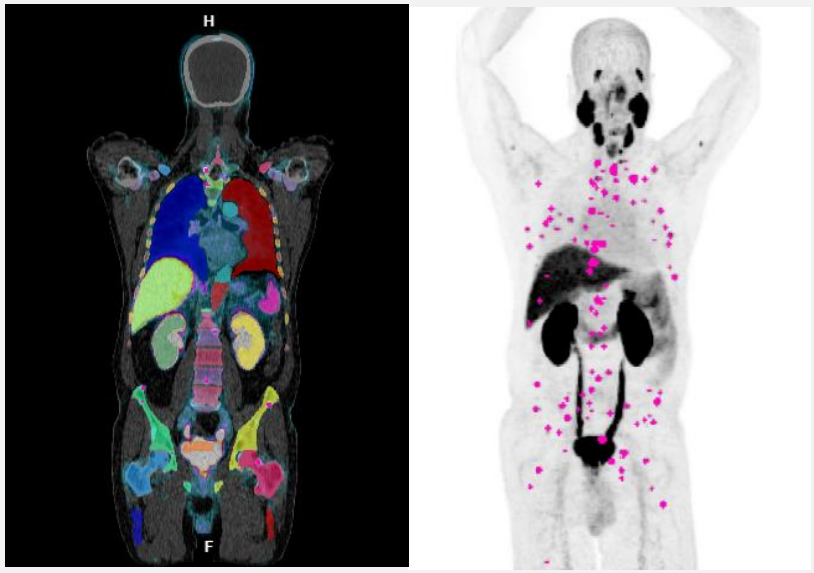
2022 – PSMA PET imaging, including PYLARIFY, can be used for patient selection for PSMA-targeted radioligand therapy

Healthcare Common Procedure Coding System (HCPCS) code and Pass-Through Payment: Effective January 1, 2022

Further facilitates customer and patient access

to our game-changing PSMA PET with PYLARIFY imaging agent for prostate cancer

PYLARIFY AI | Empowering Physicians with AI for Enhanced Clinical Utility



PYLARIFY AI Analysis

AI technology mines and contextualizes rich PYLARIFY imaging data to enhance clinical decision making:

- Standardize reporting
- Quantify the disease burden
- Enhance reproducibility and reliability of analysis
- Increase throughput of image analysis

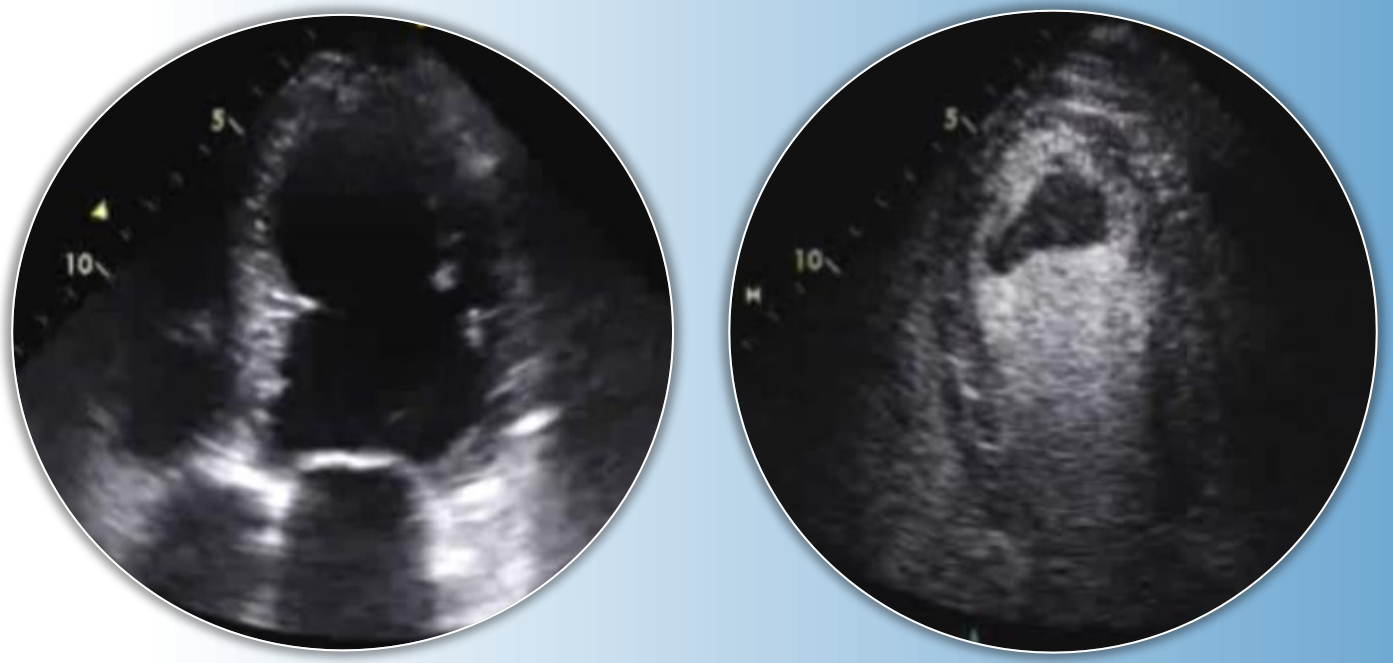
- Enable treatment selection and response to therapy
- Create composite biomarkers to provide clinical decision support

Enhancing Clinical Decision Making to Deliver Better Patient Outcomes

LANTHEUS

DEFINITY®
VIAL FOR (Perflutren Lipid Microsphere)
INJECTABLE SUSPENSION

DEFINITY® and DEFINITY® RT (Perflutren Lipid Microsphere) Injectable Suspension are indicated for use in patients with suboptimal echocardiograms to opacify the left ventricular chamber and to improve the delineation of the left ventricular endocardial border



UNENHANCED

DEFINITY®
VIAL FOR (Perflutren Lipid Microsphere)
INJECTABLE SUSPENSION

Precision Diagnostics

Heart Disease
#1 Cause of Death in the U.S.[1] with over 100M Impacted

2022
Heart Disease Estimates

18M Adults
WITH CAD[1,2]

~875K
DEATHS[3]

Every 40 seconds
on average, someone in the U.S. will have a myocardial infarction[1]

214.6 per 100,000
the age adjusted U.S. death rate attributable to CVD[2]

2 in 10 deaths
from CAD happen in adults less than 65 years old[2]

- Cardiovascular disease (CVD) accounts for 12% of total U.S. health expenditures, which is greater than any major diagnostic group[3]
- Heart disease costs the U.S. about $363B each year[3], which includes the cost of health care services and lost productivity
- After EKG, echocardiography is the next most utilized cardiac diagnostic modality, providing clinicians highly informative, non-invasive, inexpensive, and portable imaging for the assessment of cardiac structure and function

American Heart Association: 2022 Heart Disease and Stroke Statistics Update Fact Sheet: (1) 2022; (2) coronary artery disease; (3) 2019; (4) 2017 & 2018

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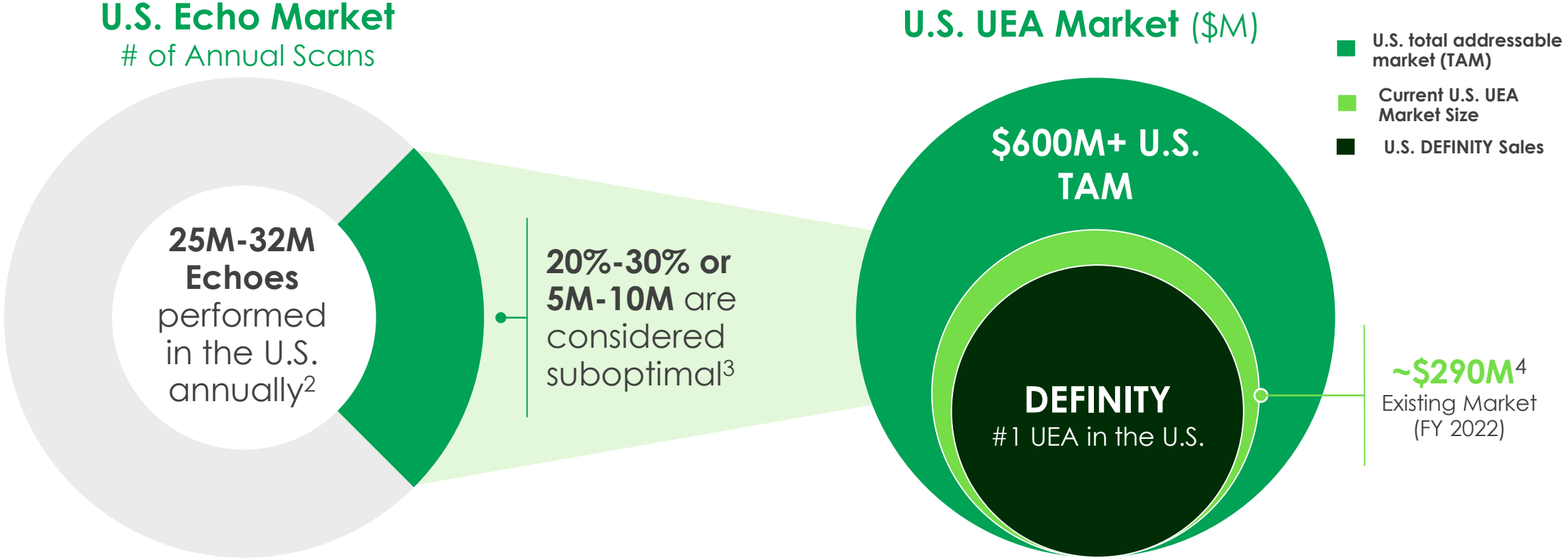
U.S. Ultrasound Enhancing Agent (UEA) TAM is $600M+[1]

Significant Opportunity Remains in the Suboptimal Echo Market



1. U.S. market; Internal Lantheus estimate.
2. Source: AMR, Echocardiography Monthly Monitor and Real World Data; Kurt M et al. Journal of the American College of Cardiology, March 2009; Senior R et al., The European Society of Cardiology, 2006. ©2020 Millennium Research Group, Inc. All rights reserved. Reproduction, distribution, transmission or publication is prohibited. Reprinted with permission.
3. 20%-30% of echocardiograms result in sub-optimal images. Sources: i. Kurt M et al. Impact of contrast echocardiography on evaluation of ventricular function and clinical management in a large prospective cohort. Journal of the American College of Cardiology, Vol 53, No 9, March 2009, 802-810; ii. Platts DG and Fraser JF. Contrast echocardiography in critical care: echoes of the future? A review of the role of microsphere contrast echocardiography. Critical Care and Resuscitation, Vol 12, No 1, March 2011, 44-55; iii. Senior R et al. Clinical benefits of contrast-enhanced echocardiography during rest and stress examinations. The European Society of Cardiology 6, Suppl. 2, 2005, S6-S13.
4. Internal Lantheus estimate.

DEFINITY: A Trusted Choice for Over 20 Years

Drivers of Success

- Clinical Differentiation
- Distribution Model
- Supporting Data & Publications
- Dedicated Sales Team

We are sustaining our **80+% share of the market**

DEFINITY®
VIAL FOR (Perflutren Lipid Microsphere)
INJECTABLE SUSPENSION

- Manufacturing and shipping DEFINITY from our Billerica-based manufacturing site. Billerica facility provides:
  - Supply chain redundancy
  - Margin expansion opportunity
- We continue to source DEFINITY from our long-term contract manufacturer
- Six Orange Book-listed method of use patents, one of which expires in 2035 and four of which expire in 2037

DEFINITY RT
(Perflutren Lipid Microsphere)
INJECTABLE SUSPENSION

- Room temperature formulation
- Provides clinicians an additional choice
- Well-suited for inclusion in product kits utilizing microbubbles for other indications and applications
- Eight Orange Book-listed patents, including a composition of matter patent which expires in 2035

VIALMIX RFID
Our next-generation activation device designed specifically for both DEFINITY and DEFINITY RT

Currently under development for inclusion in kits utilizing our microbubble platform for therapeutic applications

Strategic Partnerships with:

AHN SONOTHERA™ CARTHERA Advanced Brain Therapy INSIGHTEC

LANTHEUS™

TechneLite® Technetium Tc 99m Generator

The TechneLite® generator is a source of sodium pertechnetate Tc 99m for use in the preparation of FDA-approved diagnostic radiopharmaceuticals, as described in the labeling of these diagnostic radiopharmaceutical kits

Sodium Pertechnetate Tc 99m Injection is used in adults as an agent for:

- Thyroid Imaging
- Salivary Gland Imaging
- Urinary Bladder Imaging (direct isotopic cystography) for the detection of vesico-ureteral reflux
- Nasolacrimal Drainage System Imaging

Sodium Pertechnetate Tc 99m Injection is used in children as an agent for:

- Thyroid Imaging
- Urinary Bladder Imaging (direct isotopic cystography) for the detection of vesico-ureteral reflux

Precision Diagnostics

TechneLite Competes in the Technetium-99m (Tc-99m) Generator Market

TechneLite Generators

- TechneLite generators are primarily distributed through commercial radiopharmacies
- Due to the short half-lives of Mo-99 and Tc-99m, radiopharmacies typically purchase TechneLite generators on a weekly basis pursuant to standing orders

TechneLite Technetium Tc 99m Generator → Cardiolite Kit for the Preparation of Technetium Tc99m Sestamibi for Injection | NEUROLITE Kit for the Preparation of Technetium TC99m Bicisate for Injection

Our TechneLite generator produces Tc-99m, the radioisotope which is attached to an imaging agent (such as Cardiolite or NEUROLITE). The imaging agent has an affinity for and binds to specific tissues or organs enabling the Tc-99m to illuminate the functional health of the imaged tissues or organs.

Lantheus has built one of the most globally diverse Mo-99 supply chain[1]

ANSTO | institute for radioelements IRE | NTP Actively enhancing life NTP Radioisotopes SOC Ltd | SHINE[2] Health. Illuminated.™

We have extensive experience in complying with the stringent regulatory requirements for the handling of nuclear materials

Tc-99m is a critical component in 9 million annual U.S. medical imaging studies, of which the majority are cardiac studies[3]

(1) IRE: Institute for Radioelements; NTP: NTP Radioisotopes; ANSTO: Australian Nuclear Science and Technology Organisation; SHINE: SHINE Medical Technologies, Inc. representing four of the potential five suppliers for the U.S. market
(2) SHINE will provide Mo-99 to Lantheus once its facility becomes operational and receives all necessary regulatory approvals, which SHINE now estimates will occur in 2024.
(3) 2022 AMR "Imaging Market Guide".

Midterm Growth Catalysts

Radiopharmaceutical Portfolio Expands with Late-stage Therapeutic Candidates (1/2)

PNT2002

(Licensed from POINT, December 2022)

~$3.5B

TAM[1] (U.S.)

^{177}Lu-based PSMA-targeted radiopharmaceutical therapy in development to treat metastatic castration-resistant prostate cancer (mCRPC)

Combines a PSMA-targeted ligand, PSMA-I&T, with the beta-emitting radioisotope lutetium-177 (^{177}Lu)

Phase 3 SPLASH Trial for mCRPC Ongoing

Fast Track designation granted by the FDA

SPLASH top line data expected 2H 2023

Data from 27 patients enrolled in Lead-In cohort presented at ESMO 2022:

- 84.8% of individuals imaged with PSMA-PET met PSMA eligibility criteria
- Median rPFS was 11.5 months, longer than statistical assumptions of the protocol
- Reduction of ≥ 50% of PSA baseline PSA (PSA50 response) was achieved in 42% of patients
- Well tolerated with no treatment-related deaths and few treatment-related AEs of grade 3 or higher

70K+ men eligible for mCRPC treatment every year in the U.S.

1. Projected TAM in 2029 based on management estimates and internal data.

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Radiopharmaceutical Portfolio Expands with Late-stage Therapeutic Candidates (2/2)

PNT2003

(Licensed from POINT, December 2022)

~$800M

TAM[1] (U.S.)

Somatostatin receptor (SSTR) targeted radioligand therapy with non-carrier added ^{177}Lu in development to treat SSTR-positive gastroenteropancreatic neuroendocrine tumors (GEP-NETs)

- Uses the SSTR-targeted DOTA-TATE ligand, also utilized in a currently approved radiopharmaceutical product for the GEP-NETs indication
- SSTRs seen as ideal targets for GEP-NET and certain other NETs therapy
- Somatostatin analogs have been developed with anti-secretory and anti-proliferative effects for NET therapy
- Randomized clinical trials with somatostatin analogs have demonstrated efficacy

18K GEP-NET patients in the U.S.

1. Projected TAM in 2027 based on management estimates and GlobalData Neuroendocrine Tumors Global Drug Forecast and Market Analysis to 2030, published Sept 2021.

LANTHEUS

Pharma Services & Other Strategic Partnerships

Strategic Partnerships & Other

Pharma Services: Collaborative Development Platform

STRATEGIC AIMS

- Early access to innovation
- Through collaborations, co-fund and de-risk development and generate data
- Embed Lantheus technologies in the clinical ecosystem and establish clinical utility

By Supporting Pharma and Start-up Companies with Development of Novel Therapies

Novel Biomarkers Supporting Patient Selection, Monitoring of Disease Progression

Prostate	Immuno-Oncology	Pan Oncology	Alzheimer's Disease
• Piflufolastat F 18 – PSMA • PSMA AI • Bone Scan Index	NM-01 – PD-L1	LNTH-1363S* – FAP	MK-6240 – tau

Proprietary Platform Technologies Enabling Development of Therapeutics

Targeted Compounds & Services

PSMA Platform

BAYER

Drug Delivery Vehicles

Microbubble Platform

CARTHERA

INSIGHTEC

AHN

* Also known as NTI-1309

LANTHEUS

Strategic Partnerships & Other: Driving Value and Growth Options Through Collaboration

Key Strategic Partnerships

Monetize Assets Through Strategic Partnerships

- Optimize core assets geographically
- Drive value through non-core assets

PNT2002 PNT2003	PSMA Therapy SSR Therapy	POINT BIOPHARMA
RELISTOR® methylnaltrexone bromide	Opioid-Induced Constipation Therapy	BAUSCH Health
flurpiridaz F 18*	Cardiac PET Diagnostic	GE HealthCare
piflufolastat F 18* EU ONLY	PSMA PET Diagnostic	CURIUM™
PSMA TAC*	PSMA Antibody Radiotherapeutic	BAYER

Pharma Services

Drive Early Access to Innovation

- Co-fund and de-risk development
- Embed Lantheus technologies in the clinical ecosystem
- Establish clinical utility

Biomarkers

MK-6240	Tau Tracer Alzheimer's Disease	Eisai, Biogen, MERCK
piflufolastat F 18	PSMA PET Tracer Prostate Cancer	REGENERON, aPROMISE, NOVARTIS, POINT BIOPHARMA
LNTH-1363S* **	FAPi PET Tracer Oncology	Ratio THERAPEUTICS
NM-01	PD-L1 SPECT Tracer Immuno-Oncology	RAD RADIOPHARM THERANOSTICS, KING'S College LONDON

Microbubble Platform

Gene Therapy Delivery[2]	AHN	SONOTHERA™
Drug Delivery Across Blood Brain Barrier	CARTHERA Advanced Brain Therapy	INSIGHTEC®

Digital Solutions

Mine Rich Imaging Data for Clinical Value

- Enhance imaging value
- Enhance throughput, reproducibility and reliability of analysis
- Inform treatment selection and response to therapy

Commercialized Products[1]

PYLARIFY AI™ | aBSI AUTOMATED BONE SCAN INDEX

Channel Partners

GE HealthCare | BAYER | PeptiDream | CURIUM™ | SIEMENS Healthineers

Key Development Programs

pcdtc The Prostate Cancer Clinical Trials Consortium | DORA Metacure | U.S. Department of Veterans Affairs

*Product candidates; ** Also known as NTI-1309; 1. Outside Japan

Piflufolastat F 18: Progressing Use as a Biomarker in Prostate Cancer Therapeutic Trials

Ongoing Clinical Trials

POINT BIOPHARMA

Phase 3 Pivotal Trial

PNT2002, a lutetium-labeled PSMA agent, being developed for patients with mCRPC

Curium™

Phase 3 Trial

Added to Curium's U.S. ECLIPSE trial, a multi-center, open-label, randomized PSMA-targeted therapeutic trial

REGENERON

Phase 1/2 Trial

PSMAxCD28 bispecific antibody in combination with cemiplimab (PD-1 inhibitor) in patients with mCRPC

Phase 1/2 Trial

PSMAxCD3 bispecific antibody in combination with cemiplimab in patients with mCRPC

Piflufolastat F 18 used to assess PSMA expression levels in U.S. late-stage trials for prostate cancer therapeutics

Pharma Services: Enabling Oncology Precision Medicine with Biomarkers and Digital Solutions

Prostate

piflufolastat F 18

aBSI AUTOMATED BONE SCAN INDEX

aPROMISE

- Precision biomarkers offered to pharmaceutical companies developing therapies in prostate cancer
  - Clinical supply agreements with Curium, Novartis, POINT BioPharma, and Regeneron for use of piflufolastat F 18 in prostate cancer drug development programs
  - Development and commercialization collaboration with RefleXion Medical, Inc. to evaluate the use of piflufolastat F 18 with biology-guided radiotherapy in prostate cancer

Immuno-Oncology

NM-01 – PD-L1

- NM-01 imaging biomarker that targets PD-L1 expression in tumors
  - For potential use as an efficacy and safety biomarker by pharmaceutical companies and academic centers conducting clinical trials of immuno-oncology therapies, including combination therapies
  - Preliminary results from the Ph1 PECan study were presented at the 2022 SNMMI Annual meeting
  - Enrolled the first patients in the PELICAN study, a single arm Phase 2a study
- Radiopharm plans to initiate a Ph1 therapeutic trial in Australia using NM-01

Pan-Oncology

LNTH-1363S – FAP

- LNTH-1363S (also known as NTI-1309) is an innovative imaging biomarker that targets fibroblast activation protein (FAP)
  - FAP is an emerging target with broad potential applicability in oncology
  - Upon further clinical development, we will assess options to bring LNTH-1363S to market as a diagnostic or potentially a therapeutic agent

Current Partners NOVARTIS POINT BIOPHARMA REGENERON BAYER reflexion Ratio THERAPEUTICS RAD RADIOPHARM THERANOSTICS SIEMENS Healthineers CURIUM GE HealthCare

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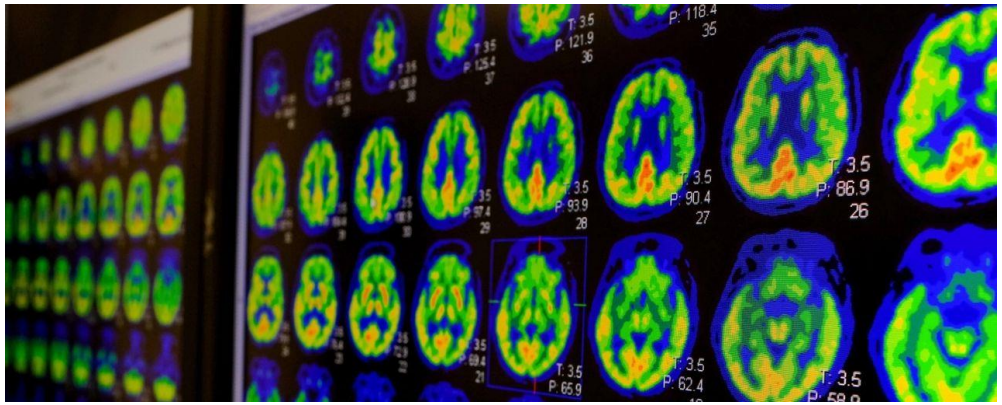
Pharma Services: Acquisition Diversifies Lantheus' Portfolio to Alzheimer's Disease With Tau Biomarker Used in Multiple Therapy Trials

The Asset: MK-6240

- MK-6240 is a second-generation F 18-labeled PET imaging agent that targets Tau tangles in Alzheimer's disease
- This biomarker has the potential to aid in diagnosing, staging, and informing treatment selection and response to therapy for Alzheimer's disease
- MK-6240 diversifies Lantheus' F-18 PET diagnostic portfolio to Alzheimer's disease



Pharma Partnerships Supporting Alzheimer's Therapy Development

- MK-6240 is currently being used in more than 60 academic and industry clinical trials for several late-stage Alzheimer's disease therapeutic candidates being developed by more than 16 pharmaceutical companies
- The Product is currently delivered through 36 PET manufacturing facilities in the US, Europe, Japan and Australia
- Representative partners include:

Eisai, Biogen, MERCK, janssen, abbvie, Takeda, Alnylam PHARMACEUTICALS

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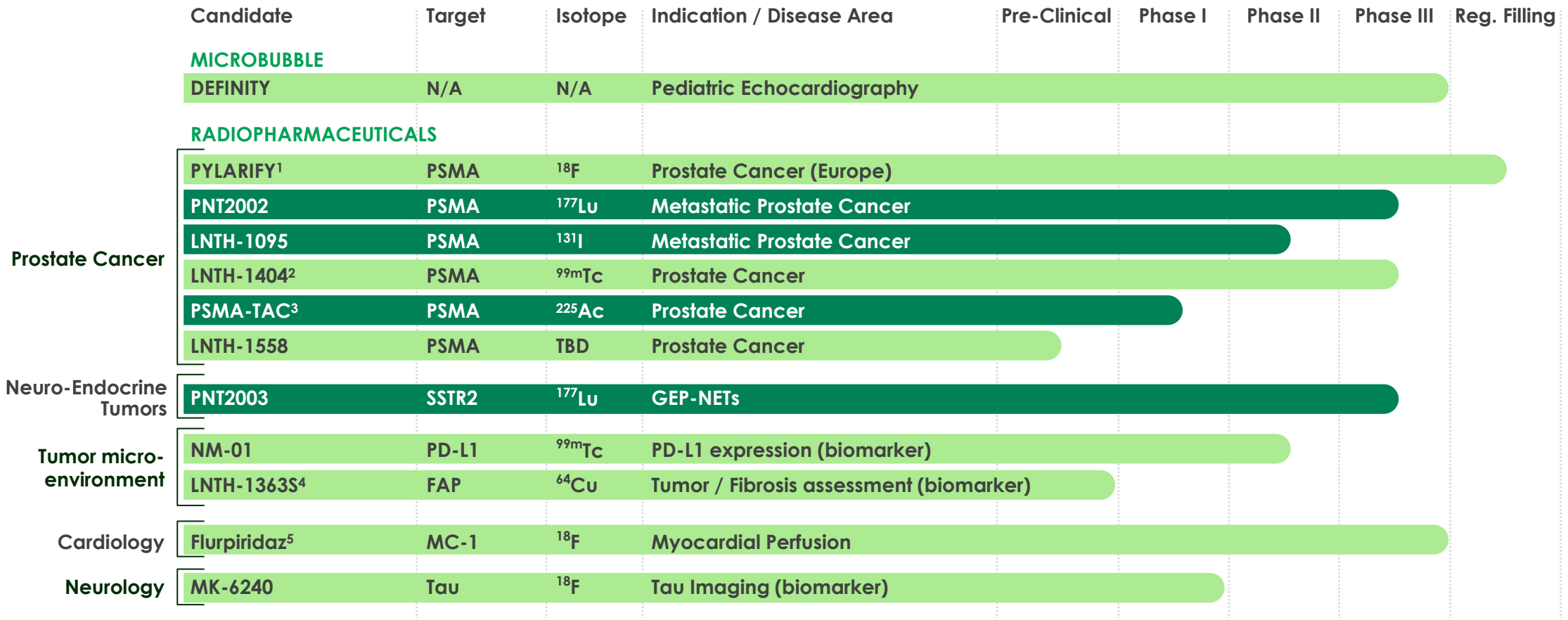
Pipeline

Investing in a Diversified Portfolio



1. Out-Licensed to Curium for Europe.
2. Out-Licensed to Rotop Pharmaka GmbH.
3. Out-Licensed to Bayer Pharmaceuticals.
4. Also known as NTI-1309.
5. Out-Licensed to GE Healthcare.

PSMA: Prostate specific membrane antigen
NE Transp.: Norepinephrine transporter
SSTR2: Somatostatin receptor 2
GEP-NETs: Gastroenteropancreatic neuroendocrine tumors
PD-L1: Programmed death-ligand 1
FAP: Fibroblast activation protein
MC-1: Mitochondrial complex 1

Diagnostic Therapeutic

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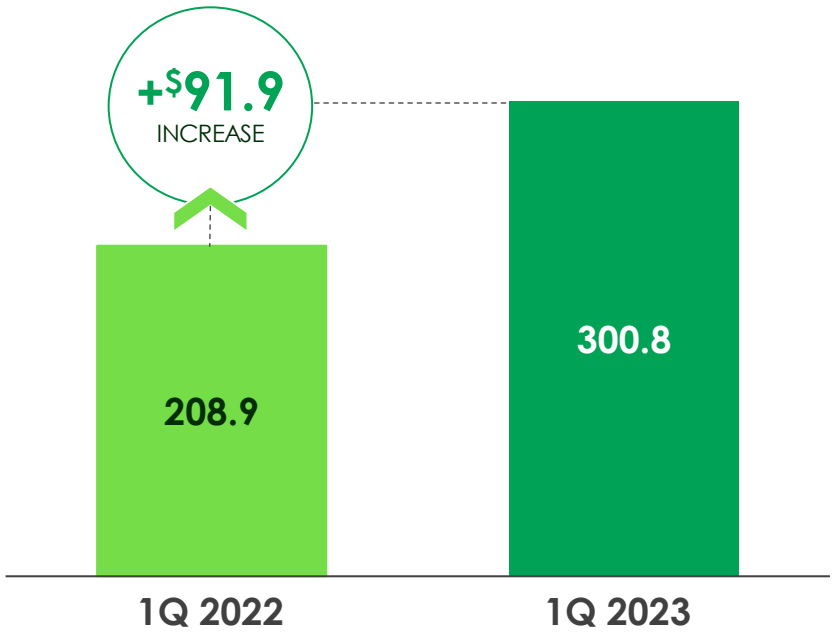
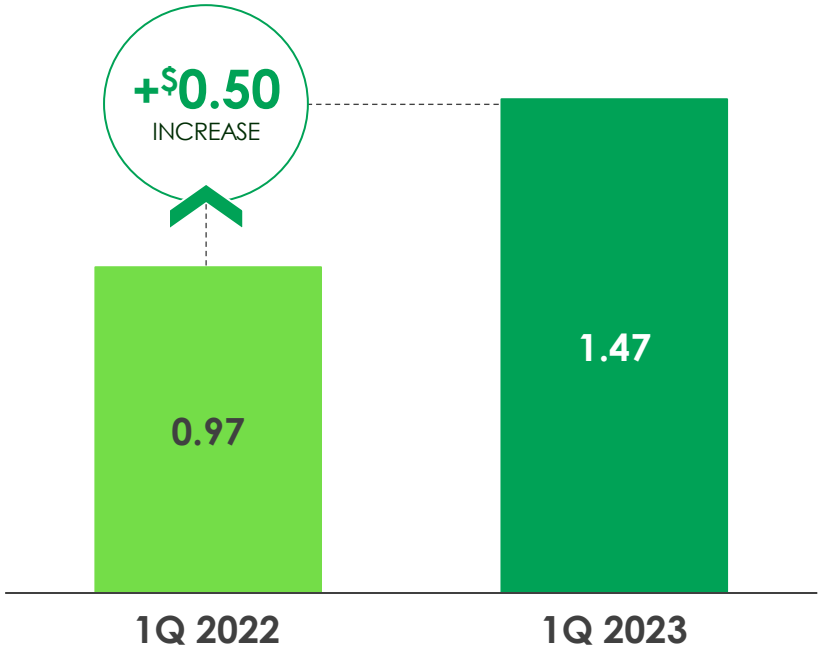
Financials

1Q 2023 Financial Highlights[1]

Revenue
USD Millions



Adjusted EPS[1]
USD



Cash and Cash Equivalents as of March 31, 2023:

$470.9M

1. See slide 41 for reconciliations of GAAP to non-GAAP financials; certain amounts may be subject to rounding.

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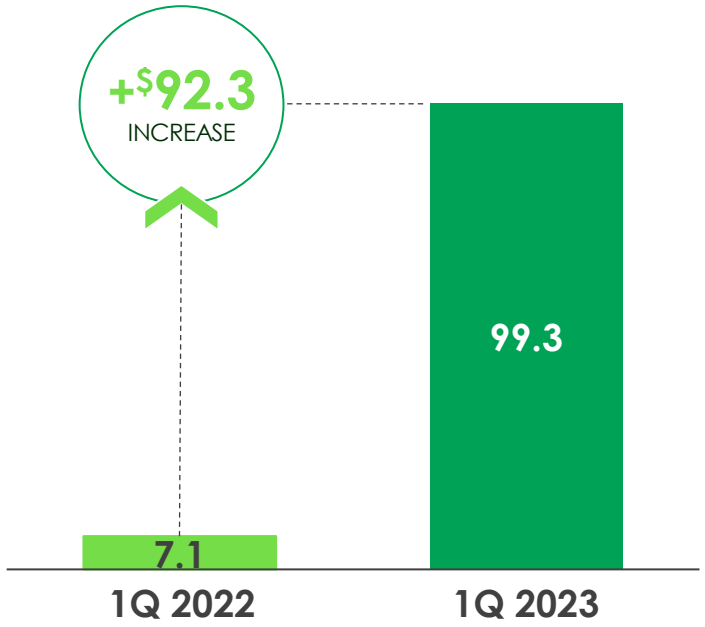
Strong Resources Provide Financial Flexibility[1]

Cash Flow Summary
Three Months Ending March 31

$M	2022	2023
Cash provided by operations	$10.3	$108.5
Cash used in investing	($1.4)	($44.5)
Cash used in financing	($2.2)	($8.7)

Free Cash Flow[2]
USD Millions



Resources
(1Q 2023)

$471M
CASH ON HAND[3]

$350M
AVAILABLE REVOLVING CREDIT

1. Certain amounts may be subject to rounding; 2. See slide 41 for reconciliations of GAAP to non-GAAP financials; 3. Cash, cash equivalents and restricted cash at the end of the period was $472.5M.

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2Q 2023 and Updated FY 2023 Financial Guidance[1]

The Company guidance for the second quarter and full year 2023 is as follows:

2Q 2023	**Revenue**	**$300M - $310M**
	Adjusted Fully Diluted EPS	**$1.25 - $1.33**
FY 2023	Prior Revenue	$1.14B - $1.16B
	Current Revenue	**$1.23B - $1.27B**
	Prior Adjusted Fully Diluted EPS[2]	$4.95 - $5.10
	Current Adjusted Fully Diluted EPS[2]	**$5.45 - $5.70**

Guidance Issued May 4, 2023

1. On a forward-looking basis, the Company does not provide GAAP income per common share guidance or a reconciliation of adjusted fully diluted EPS to GAAP income per common share because the Company is unable to predict with reasonable certainty business development and acquisition-related expenses, purchase accounting fair value adjustments and any one-time, non-recurring charges. These items are uncertain, depend on various factors, and could be material to results computed in accordance with GAAP. As a result, it is the Company's view that a quantitative reconciliation of adjusted fully diluted EPS on a forward-looking basis is not available without unreasonable effort.
2. FY 2023 guidance assumes fully diluted, weighted avg. shares outstanding of approximately 70M-71M, and depreciation and amortization of ~$12M and ~$36M, respectively.

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Appendix

Condensed Consolidated Statement of Operations – 1Q 2023

(in thousands, except per share data - unaudited)	Q1 2023 Amount	Q1 2023 % Revenue	Q1 2022 Amount	Q1 2022 % Revenue	% Increase/ (Decrease)
Revenues	$ 300,784	100.0	$208,880	100.0	44.0
Cost of goods sold	223,708	74.4	79,810	38.2	180.3
Gross profit	77,076	25.6	129,070	61.8	(40.3)
Operating expenses					
Sales and marketing	32,617	10.8	20,354	9.7	60.2
General and administrative	23,271	7.7	37,588	18.0	(38.1)
Research and development	30,532	10.2	12,203	5.8	150.2
Total operating expenses	86,420	28.7	70,145	33.6	23.2
Operating (loss) income	(9,344)	(3.1)	58,925	28.2	(115.9)
Interest expense	4,991	1.7	1,509	0.7	230.7
Other income	(3,231)	(1.1)	(485)	(0.2)	566.2
(Loss) income before income taxes	(11,104)	(3.7)	57,901	27.7	(119.2)
Income tax (benefit) expense	(8,297)	(2.8)	14,939	7.2	(155.5)
Net (loss) gain	$ (2,807)	(0.9)	$ 42,962	20.6	(106.5)
Net (loss) gain per common share - diluted	$ (0.04)		$ 0.61		
Weighted-average common shares outstanding - diluted	67,749		70,051		

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As Adjusted Condensed Consolidated Statement of Operations – 1Q 2023

(in thousands, except per share data - unaudited)	Q1 2023 Amount	Q1 2023 % Revenue	Q1 2022 Amount	Q1 2022 % Revenue	% Increase/ (Decrease)
Revenues	$300,784	100.0	$208,880	100.0	44.0
Cost of goods sold	94,381	31.4	68,983	33.0	36.8
Gross profit	206,403	68.6	139,897	67.0	47.5
Operating expenses					
Sales and marketing	30,355	10.1	19,341	9.3	56.9
General and administrative	20,515	6.8	16,360	7.8	25.4
Research and development	13,531	4.5	11,507	5.5	17.6
Total operating expenses	64,401	21.4	47,208	22.6	36.4
Operating income	142,002	47.2	92,689	44.4	53.2
Interest expense	4,991	1.7	1,509	0.7	230.7
Other income	(3,231)	(1.1)	(485)	(0.2)	566.2
Income before income taxes	140,242	46.6	91,665	43.9	53.0
Income tax expense	38,079	12.7	23,835	11.4	59.8
Net income	$102,163	34.0	$ 67,830	32.5	50.6
Net income per common share - diluted	$ 1.47		$ 0.97		
Weighted-average common shares outstanding - diluted	69,728		70,051		

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Reconciliation of GAAP to Non-GAAP Financial Measures
(in thousands, except per share data – unaudited)

Lantheus Holdings, Inc.

Reconciliation of GAAP to Non-GAAP Financial Measures

(in thousands, except per share data – unaudited)

	Three Months Ended March 31,	
	2023	2022
Net (loss) income	$ (2,807)	$ 42,962
Stock and incentive plan compensation	9,667	5,623
Amortization of acquired intangible assets	11,099	8,306
Campus consolidation costs	1,459	—
Contingent consideration fair value adjustments	(1,400)	18,400
Non-recurring refinancing related fees	261	—
Non-recurring fees	(2,734)	(732)
Acquisition-related costs	169	447
Impairment of long-lived assets	132,052	—
ARO Acceleration and other related costs	148	1,591
Other	625	129
Income tax effect of non-GAAP adjustments[(b)]	(46,376)	(8,896)
Adjusted net income	$ 102,163	$ 67,830
Adjusted net income, as a percentage of revenues	34.0 %	32.5 %

	Three Months Ended March 31,	
	2023	2022
Net (loss) income per share - diluted	$ (0.04)	$ 0.61
Stock and incentive plan compensation	0.14	0.08
Amortization of acquired intangible assets	0.16	0.12
Campus consolidation costs	0.02	—
Contingent consideration fair value adjustments	(0.02)	0.26
Non-recurring fees	(0.04)	(0.01)
Acquisition-related costs	—	0.01
Impairment of long-lived assets	1.89	—
ARO Acceleration and other related costs	—	0.02
Other[(a)]	0.03	—
Income tax effect of non-GAAP adjustments[(b)]	(0.67)	(0.12)
Adjusted net income per share - diluted	$ 1.47	$ 0.97
Weighted-average common shares outstanding - diluted	69,728	70,051

(a) This effect includes an adjustment related to the increase from basic to diluted shares as the Company changed from GAAP net loss to non-GAAP adjusted net income for the three months ended March 31, 2023.

(b) The income tax effect of the adjustments between GAAP net loss and non-GAAP adjusted net income takes into account the tax treatment and related tax rate that apply to each adjustment in the applicable tax jurisdiction.

Consolidated Statement of Operations
(in thousands, except per share data – unaudited)

Lantheus Holdings, Inc.

Consolidated Statements of Operations

(in thousands, except per share data – unaudited)

	Three Months Ended March 31,	
	2023	2022
Revenues	$ 300,784	$ 208,880
Cost of goods sold	223,708	79,810
Gross profit	77,076	129,070
Operating expenses		
Sales and marketing	32,617	20,354
General and administrative	23,271	37,588
Research and development	30,532	12,203
Total operating expenses	86,420	70,145
Operating (loss) income	(9,344)	58,925
Interest expense	4,991	1,509
Other income	(3,231)	(485)
(Loss) income before income taxes	(11,104)	57,901
Income tax (benefit) expense	(8,297)	14,939
Net (loss) income	$ (2,807)	$ 42,962
Net (loss) income per common share:		
Basic	$ (0.04)	$ 0.63
Diluted	$ (0.04)	$ 0.61
Weighted-average common shares outstanding:		
Basic	67,749	68,008
Diluted	67,749	70,051

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Consolidated Segment Revenues Analysis
(in thousands – unaudited)

Lantheus Holdings, Inc.

Consolidated Revenues Analysis

(in thousands – unaudited)

	Three Months Ended March 31,		
	2023	2022	% Change
PYLARIFY	$ 195,470	$ 92,777	110.7 %
Other radiopharmaceutical oncology	717	1,327	(46.0)%
Total radiopharmaceutical oncology	196,187	94,104	108.5 %
DEFINITY	68,824	58,328	18.0 %
TechneLite	20,986	22,605	(7.2)%
Other precision diagnostics	5,807	5,265	10.3 %
Total precision diagnostics	95,617	86,198	10.9 %
Strategic partnerships and other revenue	8,980	28,578	(68.6)%
Total revenues	$ 300,784	$ 208,880	44.0 %

Reconciliation of Free Cash Flow
(in thousands – unaudited)

Lantheus Holdings, Inc.

Reconciliation of Free Cash Flow

(in thousands – unaudited)

	Three Months Ended March 31,	
	2023	**2022**
Net cash provided by operating activities	$ 108,500	$ 10,264
Capital expenditures	(9,168)	(3,190)
Free cash flow	$ 99,332	$ 7,074
Net cash used in investing activities	$ (44,513)	$ (1,390)
Net cash used in financing activities	$ (8,669)	$ (2,179)

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Condensed Consolidated Balance Sheet
(in thousands – unaudited)

Lantheus Holdings, Inc.
Condensed Consolidated Balance Sheets
(in thousands – unaudited)

	March 31, 2023	December 31, 2022
Assets		
Current assets		
Cash and cash equivalents	$ 470,863	$ 415,652
Accounts receivable, net	242,106	213,397
Inventory	42,156	35,475
Other current assets	10,949	13,092
Assets held for sale	7,200	—
Total current assets	773,274	677,616
Property, plant and equipment, net	127,478	122,166
Intangibles, net	219,863	315,285
Goodwill	61,189	61,189
Deferred tax assets, net	133,874	110,647
Other long-term assets	33,606	34,355
Total assets	$ 1,349,284	$ 1,321,258
Liabilities and stockholders' equity		
Current liabilities		
Current portion of long-term debt and other borrowings	$ 422	$ 354
Accounts payable	30,798	20,563
Short-term contingent liability	99,700	99,700
Accrued expenses and other liabilities	145,468	127,084
Total current liabilities	276,388	247,701
Asset retirement obligations	22,636	22,543
Long-term debt, net and other borrowings	558,536	557,712
Other long-term liabilities	46,208	46,155
Total liabilities	903,768	874,111
Total stockholders' equity	445,516	447,147
Total liabilities and stockholders' equity	$ 1,349,284	$ 1,321,258

LANTHEUS

Proven Management Team with Deep Industry Expertise

Mary Anne Heino
Chief Executive Officer
2013

Previously: Janssen, Centocor, Inc, Angleini, Labopharm

Paul Blanchfield
President
2020

Previously: Takeda, Shire, McKinsey & Company

Robert Marshall
Chief Financial Officer and Treasurer
2018

Previously: Zimmerbiomet, Brown and Williamson Tobacco

Daniel Niedzwiecki
Chief Administrative Officer
General Counsel and Corporate Secretary
2013

Previously: Weil, Gotshal & Manges, Palmer & Dodge

Etienne Montagut
Chief Business Officer
2018

Previously: GE Healthcare, Ipsen

Jean-Claude Provost, M.D.
Chief Medical Officer
2022

Previously: Theranostics Consulting, GE Healthcare, Pfizer, Bayer, Merck-Serono

Seasoned and Experienced with a Strong Track Record of Value Creation

LANTHEUS

Investor Presentation

May 2023

LANTHEUS