NASDAQ: LNTH

LANTHEUS™

Lantheus Investor Presentation

BUILDING ON OUR FOUNDATION TO
POWER THE FUTURE OF RADIOPHARMACEUTICALS

2025 Truist Securities MedTech Conference

June 17, 2025

FIND. FIGHT. FOLLOW.™

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 "advance," "aim," "believes," "building," "continue," "could," "creating," "driving," "evolving," "expect," "guidance," "intend", "maintain," "may," "on track," "plan," "position," "potential," "predict," "should," "target," "will," "would" and other similar terms. Such forward-looking statements include our guidance for the fiscal year 2025, our plans to expand our portfolio of late-stage assets and high potential early-stage candidates, our acquisition of Evergreen Theragnostics Inc. ("Evergreen") and potential acquisition of Life Molecular Imaging Ltd. ("Life Molecular"), expectations relating to adding a commercial team in the Alzheimer's space from the Life Molecular acquisition, and our plans to divest our SPECT business to SHINE Technologies, LLC ("SHINE"), and 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 a competitive environment and our ability to clinically and commercially differentiate our products; (ii) our ability to have third parties manufacture our products and our ability to manufacture DEFINITY in our in-house manufacturing facility, in amounts and at the times needed; (iii) the availability of raw materials, key components, and equipment, either used in the production of our products and product candidates, or in the use by healthcare professionals of our products and product candidates, including, but not limited to positron emission tomography ("PET") scanners for PYLARIFY, MK-6240 and NAV-4694; (iv) our ability to satisfy our obligations under our existing clinical development partnerships using MK-6240 or NAV-4694 as a research tool and under the license agreements through which we have rights to MK-6240 and NAV-4694, and to further develop and commercialize MK-6240 and NAV-4694 as approved products, including the timing for any potential regulatory submissions for these investigational assets; (v) our ability to successfully integrate acquisitions, including of Life Molecular, subject to completion of our acquisition thereof, and Evergreen, including the potential for unforeseen expenses related to integration activities, the accuracy of our financial models, the potential for unforeseen liabilities within those businesses, the ability to integrate disparate information technology systems, retain key talent and create a merged corporate culture that successfully realizes the full potential of the combined organization; (vi) our ability to complete the transaction with SHINE on the proposed terms or on the anticipated timeline, or at all, including risks and uncertainties related to securing the necessary regulatory approvals and satisfaction of other closing conditions to consummate the transaction, unforeseen expenses related to the divestiture, and failure to realize the expected benefits of the transaction; (vii) our ability to obtain U.S. Food and Drug Administration ("FDA") approval for LNTH-2501, our investigational kit for the preparation of Gallium-68 DOTATOC, which may be used in conjunction with a PET scan to stage and localize gastroenteropancreatic neuroendocrine tumors in adults and children, and approval for PNT2003, and to be successful in the patent litigation associated with PNT2003; (viii) the cost, efforts and timing for clinical development, regulatory approval, adequate coding, coverage and payment 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; (ix) our ability to identify opportunities to collaborate with strategic partners and to acquire or in-license additional diagnostic and therapeutic product opportunities in oncology, neurology and other strategic areas and continue to grow and advance our pipeline of products; and (x) 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).

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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; adjusted operating income 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 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 is the **leading radiopharmaceutical-focused company** and is committed to enabling clinicians to **Find, Fight and Follow** disease to deliver better patient outcomes.

FIND. FIGHT. FOLLOW.®

Building on our Foundation to Power the Future of Radiopharmaceuticals

MARKET-LEADING COMMERCIAL PORTFOLIO

PYLARIFY® Piflufolastat F 18 Injection

DEFINITY® VIAL FOR (Perflutren Lipid Microsphere) INJECTABLE SUSPENSION

POSITIONED FOR SUCCESS IN HIGH GROWTH MARKETS[1]

- PSMA PET
- AD PET
- NET PET
- GEP-NET Tx

ROBUST BALANCE SHEET AND CASH GENERATION

$938.5M
Cash on Hand[3]
as of March 31, 2025

$98.8M
Free Cash Flow[4]
in Q1'25

Recent Transactions Enhance Capabilities Across the Value Chain and Sharpen Focus

ACQUISITION

EVERGREEN THERAGNOSTICS

Closed: APR 2025

ACQUISITION

Life HEALTH CARE Molecular Imaging

Close by: 2Q 2025[2]

- **STRENGTHEN** our radiodiagnostic and therapeutic capabilities
- **EXPAND** our commercial portfolio and pipeline
- **ENHANCE** long-term growth potential

1. Subject to submission to and/or receipt of FDA approval; 2. The acquisition is subject to the approval by the South African Reserve Bank, which is anticipated 2Q 2025; 3. Cash, cash equivalents and restricted cash at the end of the period was $940.2 M; 4. See slides 46 and 47 for a reconciliation of GAAP to non-GAAP financials.

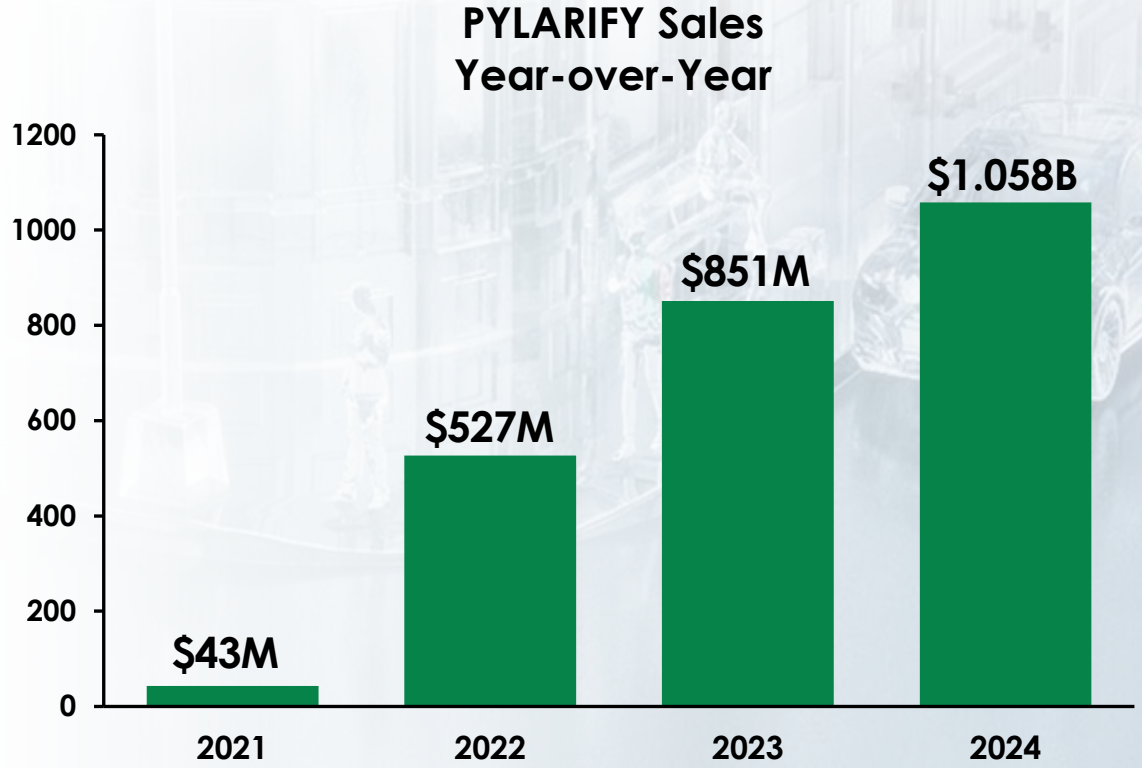
Market-Leading Commercial Portfolio

PYLARIFY®
Piflufolastat F 18 Injection

Utilized PSMA PET Imaging Agent[1]

$257.7M
1Q 2025 Net Sales

Well-positioned to maintain market leadership



First Radiodiagnostic to Achieve BLOCKBUSTER STATUS

1. Internal analyses and data on file.

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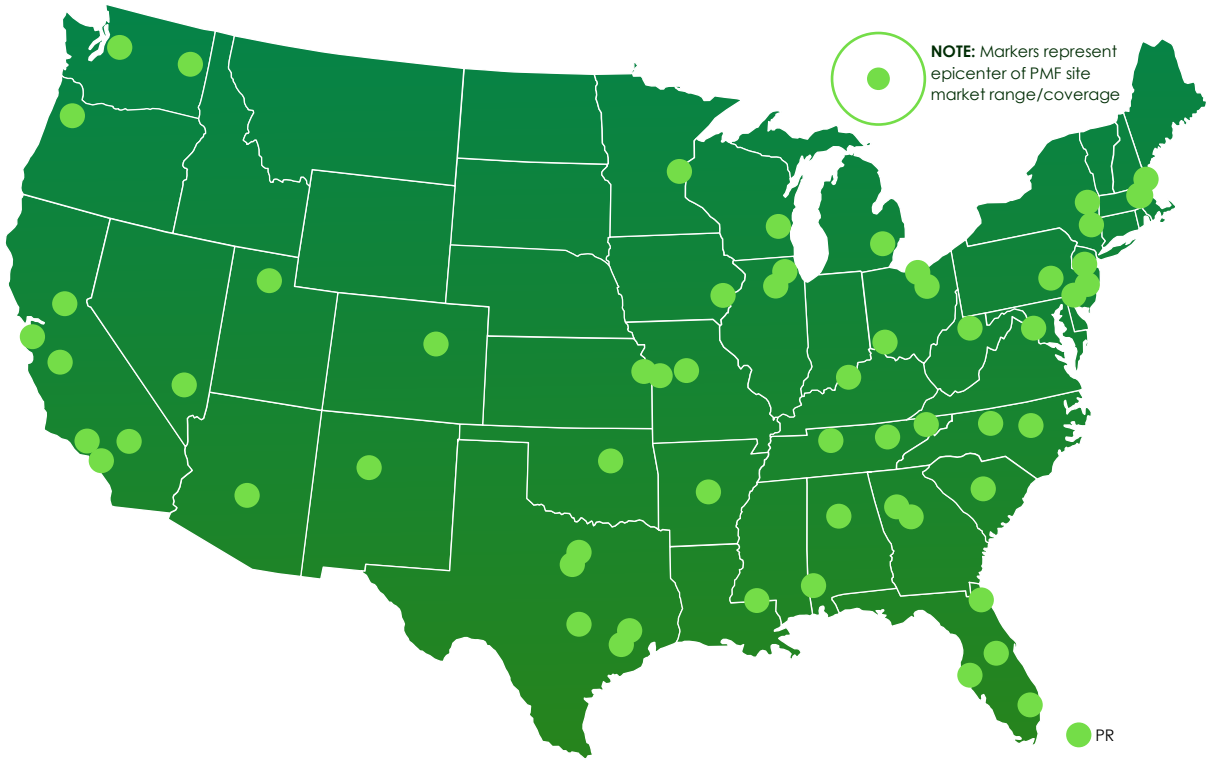
PYLARIFY is the only PSMA imaging agent that is widely available through an extensive, multi-partner ^{18}F distributor supply network, ensuring convenient and reliable supply

Manufacturing sites

As of May 2025



SOFIE From start to clinic · PharmaLogic Take The Lead · PETNET Solutions · JUBILANT RADIOPHARMA

- **Extensive manufacturing network** with multiple radiopharmacies serving imaging centers in 48 states, the District of Columbia, and Puerto Rico[1]
- Available from over **60 manufacturing facilities** nationally
- **Actively expanding PYLARIFY's multi-partner manufacturing network** to meet the growing needs of the PSMA PET market
- **Dedicated PYLARIFY Customer Experience team** for quick resolution of issues from order through delivery

Please see Indications and Important Safety Information for PYLARIFY and read accompanying full Prescribing Information available at PYLARIFY.com

Reference: 1. Data on file, Lantheus.

PYLARIFY® Piflufolastat F 18 Injection

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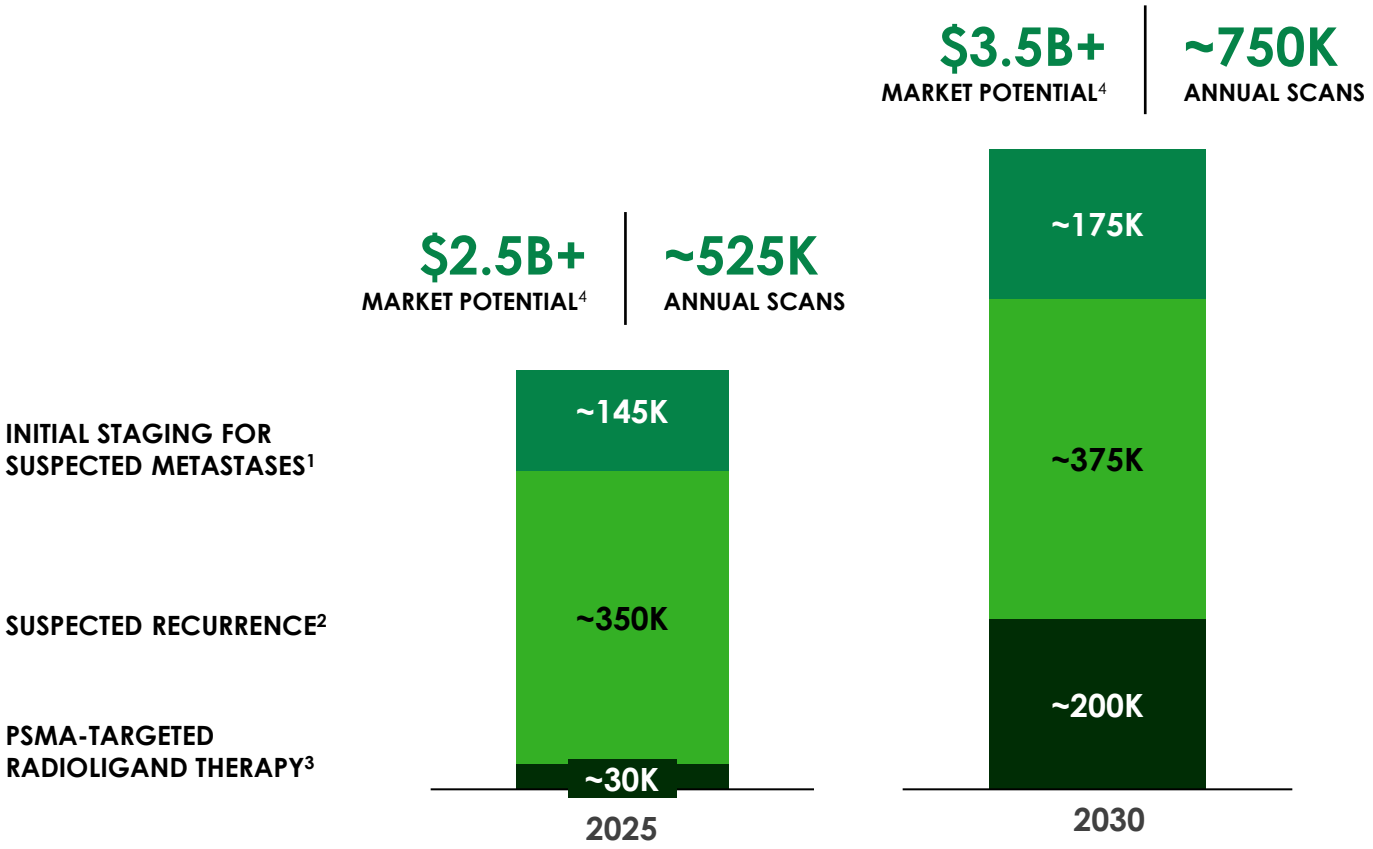
U.S. PSMA PET Imaging Market Potential of $3.5B+ by 2030

Annual Market and Scan Potential



Factors Influencing Market Expansion:

Expansion of Radiotherapeutics into earlier lines of treatment (i.e., from 3L mCRPC to include 2L, 1L and mHSPC populations)

Increasing clinical utility of PSMA PET imaging in BCR population (increased number of scans per patient)

Expansion of Initial Staging population to include patients with an Intermediate Favorable risk profile

Overall **increase in epidemiological population,** 2-3% per year

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. Expanded RLT indication from 3L only to 1L, 2L & mHSPC (metastatic Hormone Sensitive Prostate Cancer). 4. Addressable market based on current management estimates, internal data, and current WAC / 340B pricing and include assumptions as to key growth drivers described above.

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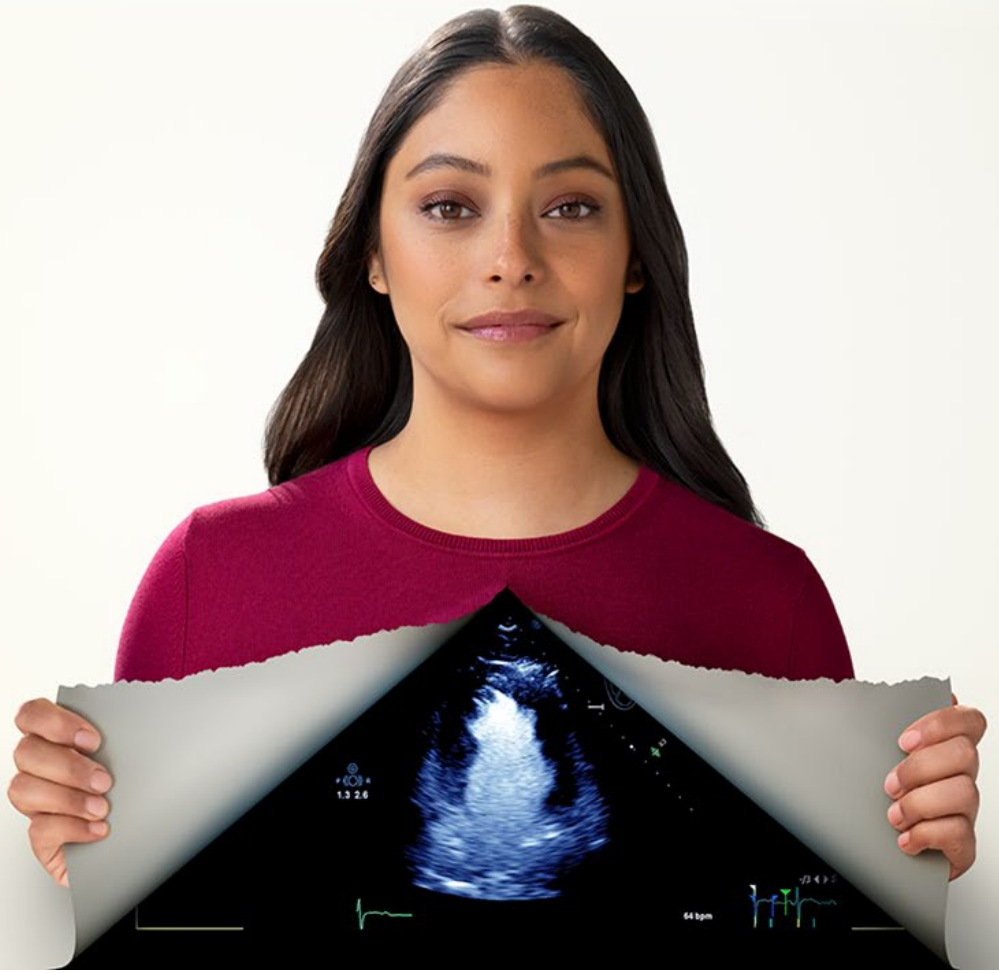
DEFINITY®
VIAL FOR (Perflutren Lipid Microsphere)
INJECTABLE SUSPENSION



#1 Utilized Ultrasound Enhancing Agent[1]

1Q 2025

$79.2M
1Q 2025 Net Sales

+3.5% Growth
1Q 2025 Year-over-Year

DEFINITY remains the #1 utilized ultrasound enhancing agent[2]

1. DRG Real World Data (RWD) report; 2. Internal analyses and data on file.

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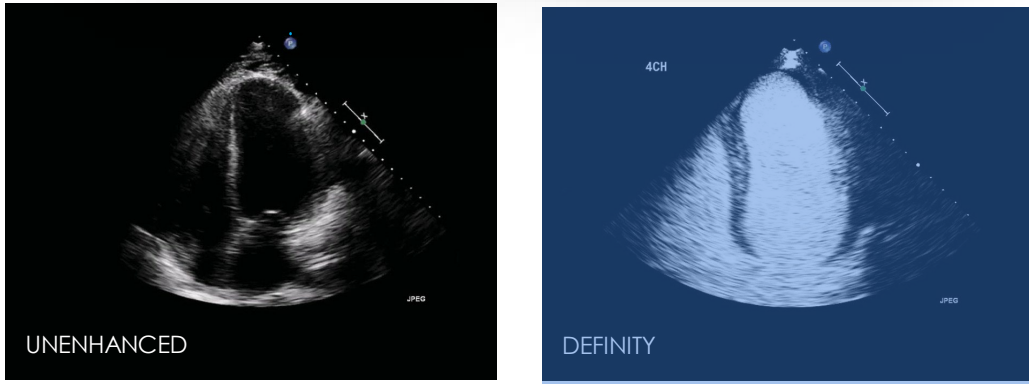
As the #1 Utilized UEA, DEFINITY is the Clear Standard for Patients Who Present With a Suboptimal Echocardiogram

#1 UTILIZED UEA
20 MILLION+ ECHOS
20+ YEARS EXPERIENCE

DEFINITY improved cardiac diagnosis and streamlined patient management[1-3]

CONVERTED 90%

of suboptimal echos → to adequate echos[3]



- **33%** of patients avoided additional diagnostic procedures[3,4]
- **36%** of patients experienced a significant change in medical management, procedures, or both[3,4]
- **>50%** of SICU patients avoided additional diagnostic procedures[3,4]

SICU, surgical intensive care unit; UEA, ultrasound enhancing agents.

1. Data on file, Lantheus. 2. DEFINITY. Prescribing Information. Lantheus. 3. Kurt M, Shaikh KA, Peterson L, et al. Impact of contrast echocardiography on evaluation of ventricular function and clinical management in a large prospective cohort. *J Am Coll Cardiol.* 2009;53(9):802-810. doi:10.1016/j.jacc.2009.01.005. 4. Results from a prospective study of the impact of UEAs on cardiac diagnoses in 632 patients with technically difficult echocardiograms.

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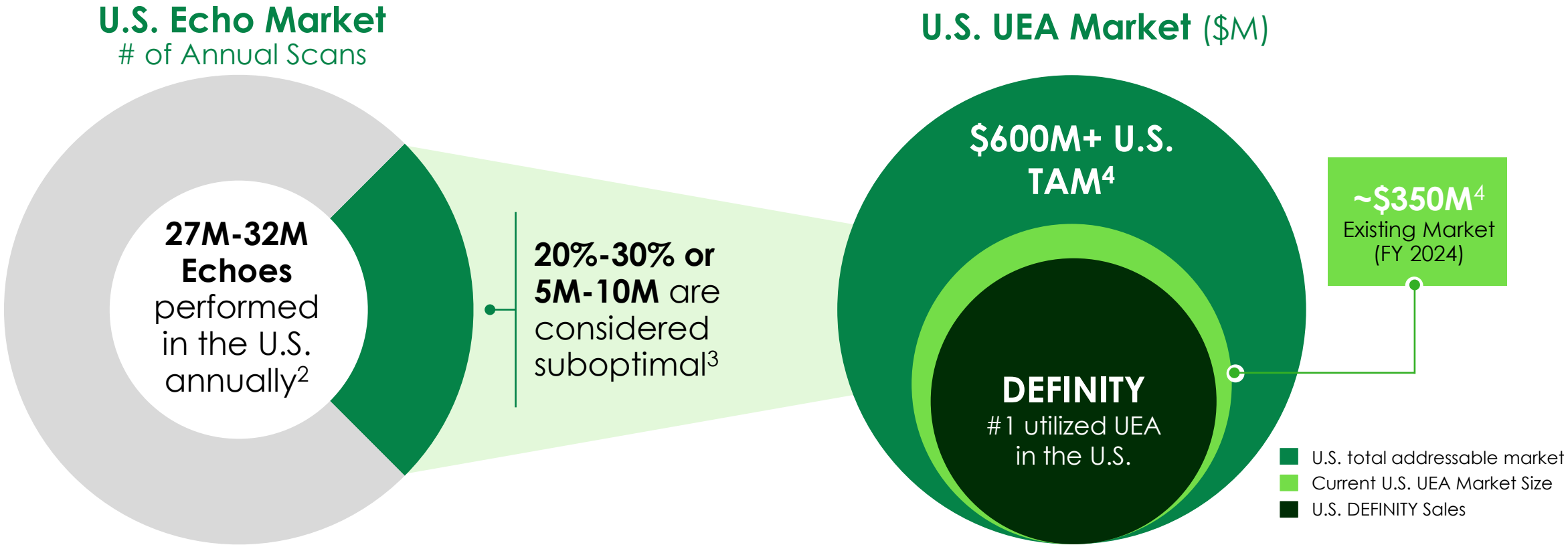
Significant Opportunity Remains in the Suboptimal Echo Market

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



1. U.S. market; Internal Lantheus estimate. 2. 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.

Advancing Our Innovative Pipeline

Innovation that Makes an Impact
Expanding Pipeline of Radiopharmaceuticals*

Lantheus: Diagnostic; Therapeutic; Theranostic
LMI*: Diagnostic

	Candidate	Target	Isotope	Indication/Disease Area
Prostate Cancer	LNTH-2401[1]	GRPR	^{68}Ga	Metastatic Prostate Cancer
	LNTH-2402[2]	GRPR	^{177}Lu	Metastatic Prostate Cancer
Neuro-Endocrine Tumors	PNT2003[3]	SSTR2	^{177}Lu	GEP-NETs
	LNTH-2501/EVG001	SSTR2	^{68}Ga	NETs
Other Solid Tumors	LNTH-1363S	FAP	64Cu	Tumor/Fibrosis assessment
	LNTH-2403	LRRC15	Undisc.	Osteosarcoma
	LNTH-2404	TROP2	Undisc.	Solid Tumors
	LNTH-2503/EVG321	CCK2R	^{177}Lu/^{68}Ga	SCLC
	LNTH-2505/EVG311	Undisc.	^{177}Lu/^{68}Ga	Glioblastoma
	LNTH-2507/EVG332	Undisc.	^{177}Lu/^{68}Ga	Pancreatic Ductal Adenocarcinoma
	LNTH-2509/EVG341	Undisc.	^{177}Lu/^{68}Ga	Lobular Breast Cancer
Neurology / Other	MK-6240 (florquinitau)	Tau	^{18}F	Alzheimer's Disease
	NAV-4694 (flutafuranol)	ß amyloid	^{18}F	Alzheimer's Disease
	Florbetaben	ß amyloid	^{18}F	Cardiac Amyloid Imaging
	PI-2620	Tau	^{18}F	AD, PSP, CBD
	DED	MAO-B	^{18}F	Neuroimaging
	GP-1	GPIIB-IIIA	^{18}F	Thromboembolism

Pre-Clinical | Phase I | Phase II | Phase III | Reg. Filing

*Pipeline includes assets from Life Molecular Imaging. These assets are not currently owned or controlled by Lantheus. The acquisition is subject to the approval by the South African Reserve Bank, which is anticipated 2Q 2025.

1. Also known as 68Ga-RM2 2. Also known as 177Lu-RM2. 3. Collaboration with POINT Biopharma Global Inc.

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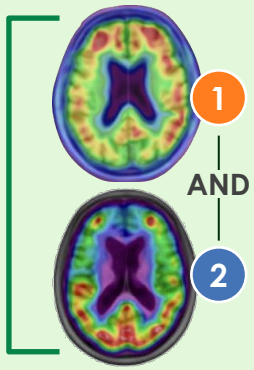
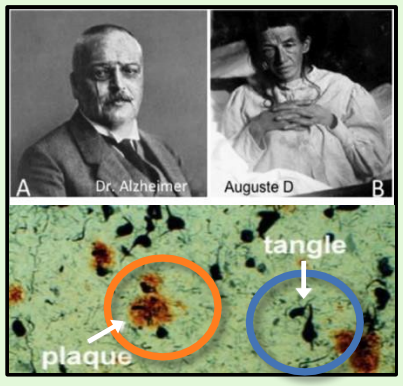
Alzheimer's Disease Is a Public Health Crisis

Alzheimer's disease is defined by pathological deposits of



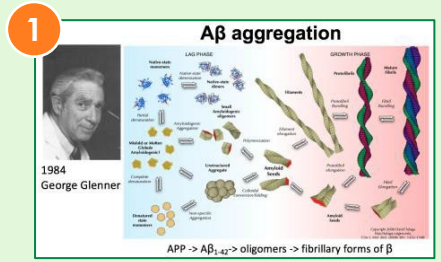
Amyloid plaque[1]

Tau tangles[1]

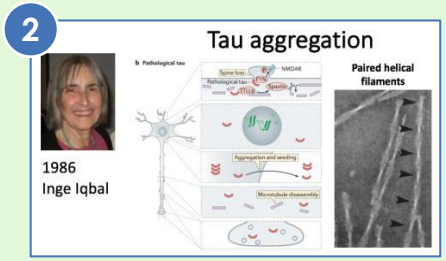


Alois Alzheimer, Auguste Deter (1906)

HALLMARK PATHOLOGICAL FEATURES OF ALZHEIMER'S DISEASE



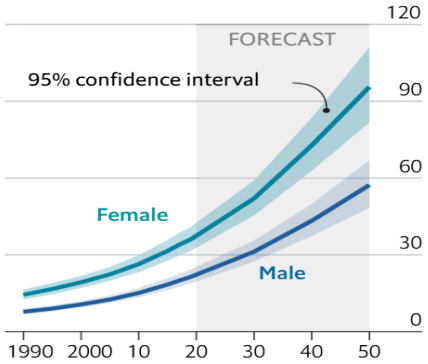
Amyloid-β plaques



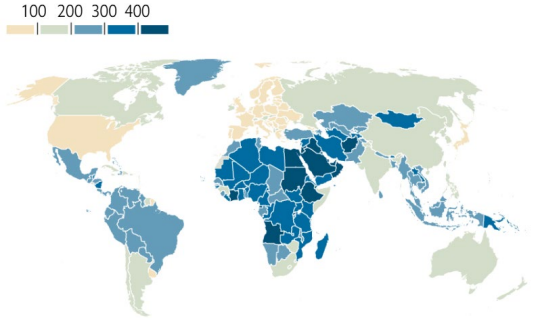
Tau tangles

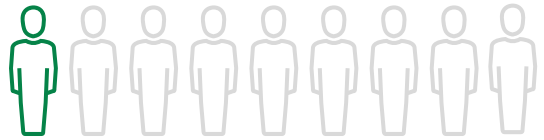
>50 MILLION PEOPLE LIVING WITH DEMENTIA

GLOBAL DEMENTIA PREVALENCE[2]



DEMENTIA PREVALENCE, 2019-50 FORECAST, % INCREASE[2]





1 in 9
PEOPLE AGE 65 OR OLDER has Alzheimer's Disease[3]

1 in 12
will be affected by Alzheimer's Disease—either by having it or caring for someone who does[3]

"

1. Sheppard O, Coleman M. Alzheimer's Disease: Etiology, Neuropathology and Pathogenesis. In: Huang X, editor. Alzheimer's Disease: Drug Discovery [Internet]. Brisbane (AU): Exon Publications; 2020 Dec 18. Chapter 1. Available from: https://www.ncbi.nlm.nih.gov/books/NBK566126/ doi: 10.36255/exonpublications.alzheimersdisease.2020.ch1; 2. Estimation of the global prevalence of dementia in 2019 and forecasted prevalence in 2050; an analysis for the Global Burden of Disease Study 2019", by Emma Nichols et al., *Lancet*, 2022; 3. https://www.alz.org/alzheimers-dementia/facts-figures

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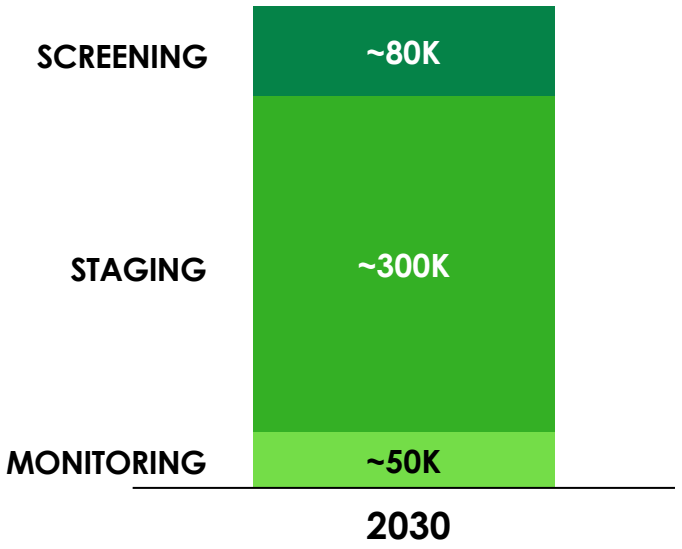
The Expanding Role of Radiodiagnostics in Alzheimer's Disease

Alzheimer's Disease PET Imaging
Annual Market & Scan Potential
~$1.5B[1]



ALZHEIMER'S ASSOCIATION®

SNMMI SOCIETY OF NUCLEAR MEDICINE & MOLECULAR IMAGING

recently updated their guidelines[2,3] to expand the appropriate use for both β Amyloid and Tau PET imaging

of ~300 dementia experts surveyed project Tau PET to add value to clinical practice[4]

Advancing the Diagnosis of Alzheimer's Disease: Detection, Staging, and Monitoring

1. Addressable market based on current management estimates, internal data, and current WAC / 340B pricing.; 2. Jack CR, et al. Revised criteria for diagnosis and staging of Alzheimer's disease: Alzheimer's Association Workgroup. *Alzheimer's Dement.* 2024; 20: 5143–5169; 3. Rabinovici GD, et.al. Updated appropriate use criteria for amyloid and tau PET: A report from the Alzheimer's Association and Society for Nuclear Medicine and Molecular Imaging Workgroup. *Alzheimers Dement.* 2025 Jan;21(1):e14338. Epub 2025 Jan 8.; 4. Vermeiren MR, et.al. Survey among experts on the future role of tau-PET in clinical practice and trials. *Alzheimers Dement.* (Amst). 2024 Nov 22;16(4):e70033.

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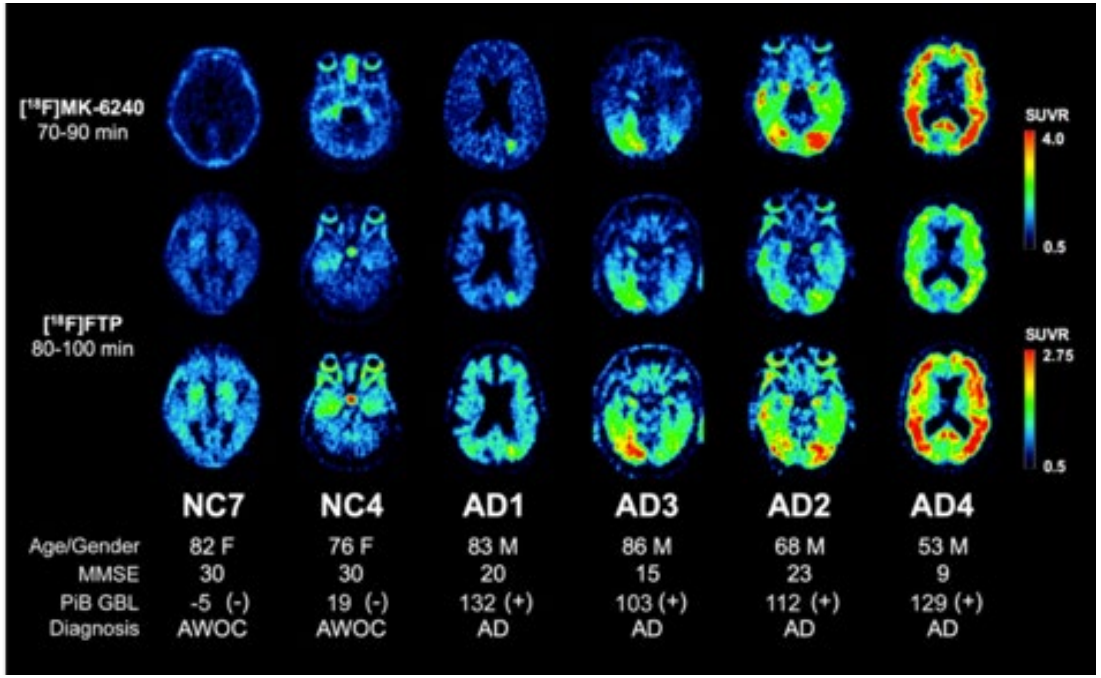
MK-6240: Potential Second-Generation Tau PET Imaging Agent With More Specific and Less Off-Target Binding

DIFFERENTIATING FEATURES ANTICIPATED[1]

Compared to Tauvid, ^{18}F-MK-6240 had an approximately 2-fold greater dynamic range in PET signal due to its higher affinity to tau



EVIDENCE FOR TARGET VALIDATION[2,3]

Tau is a protein that helps stabilize the internal skeleton of neurons; in Alzheimer's disease (AD) specifically, a build up of an irregular form of tau causes this internal skeleton to disassemble

Neurofibrillary tau is a pathological hallmark of AD and the extent of deposition in brain correlates with clinical severity

In human AD brains, tau is three to four-fold more hyperphosphorylated than the normal adult brain tau

MK-6240 binding is elevated in AD patients, and simplified measures such as standardized uptake value ratio (SUVR) correlate with results from kinetic modeling

DIFFERENTIATED VALUE PROPOSITION ANTICIPATED[2,3]

- Aid in diagnosing and staging as well as monitoring treatment progress and making informed decisions regarding the continuation or discontinuation of therapy
- High affinity and selectivity for AD/MCI vs non-AD

HIGH-LEVEL TIMELINES

INDICATION	ISOTOPE	IND-ENABLING	PHASE 1	PHASE 2	PHASE 3	NOTES
Alzheimer's Disease	^{18}F					*NDA filing expected in 3Q 2025*

1. 18F-flortaucipir(18F-FTP)and18F-MK-6240SUVRimages from 6 subjects representing the range of taupathology observed in our cohort. From left to right:subjectshowingnoevidence of taupathology (NC7); cognitively normal subject showing early Braak stage pathology (NC4); a typical AD subject with taupathology in MTL and evidence of focal uptake in Braak V(AD1); and 3AD subjects showing progression of increasingly severe taupathology culminating in widespread neocortical involvement in AD4.18F-flortaucipirand18F-MK-6240 are shown on common scale (SUVR, 0.5–4.0). 18F-FTP images are repeated (row3) on compressed scale (SUVR,0.5–2.75) so that subtle differences may be more appreciated. AWOC5 abnormal without complaint; GBL5 global; MMSE5 mini-mental state examination. Gogola et al., 2022; 2. Kreisl et al., 2018; 3. Tabeshmehr, P., & Eftekharpour, E., 2023.

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Medial Temporal Lobe (MTL) Functional Anatomy: The Gateway to Memory[1]

The MTL includes:

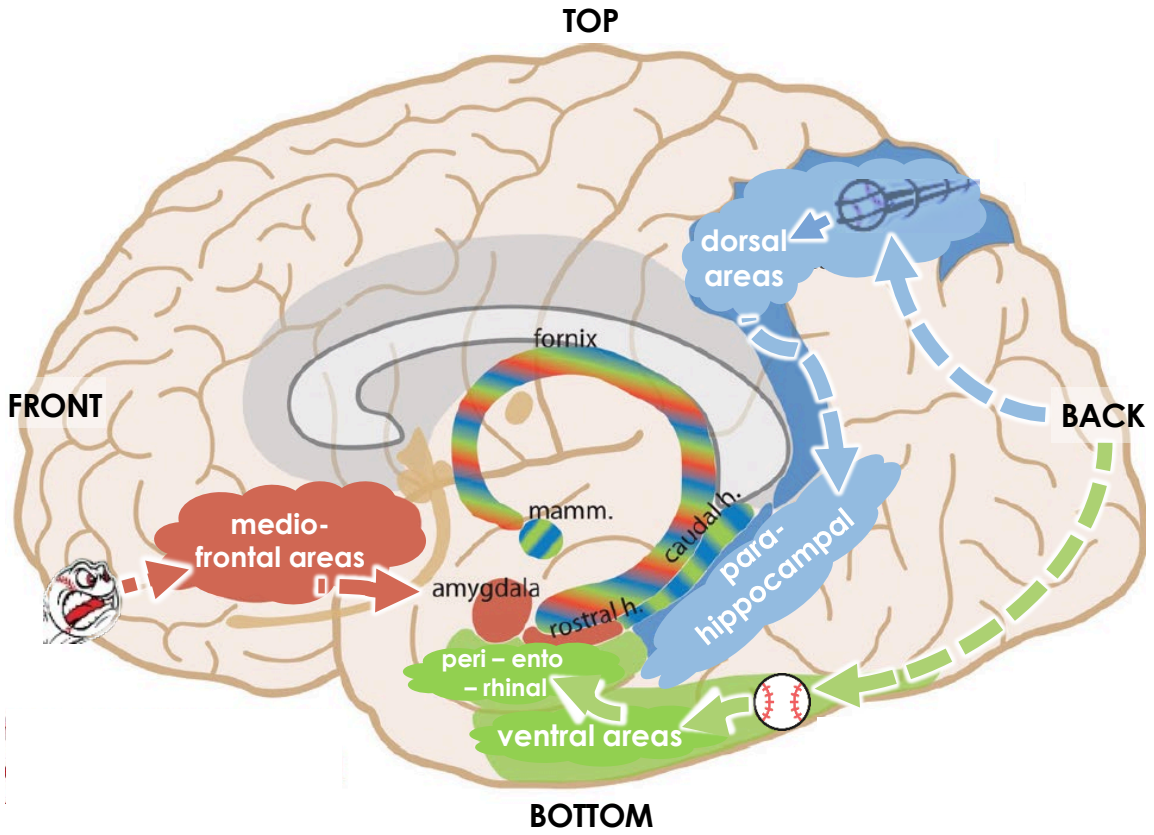
- Hippocampus
- Para-hippocampal cortex
- Peri- & ento-rhinal cortex
- Amygdala

Brain Area Functions

- Process objects' **location & speed**
- Perform objects' **recognition**
- Orchestrate **emotional reactions** to objects

Diverse "flows" of info → **Converge in the hippocampus**

Internal (medial) view of the brain, illustrating the MTL (right hemisphere)



AD=Alzheimer's disease; mamm=mammillary body
rostral h. / caudal h. = rostral / caudal hippocampus

The MTL is critical in forming auto-biographical episodic memories (a type of memory)

- **Initially, AD patients have auto-biographical episodic memory problems due to MTL damage**
- The first area to accrue TAU in AD is the ento-rhinal cortex
- As AD progresses, larger parts of MTL are involved
- Finally, TAU extends beyond the MTL causing more severe cognitive decline

1. Memory Part 2: The Role of the Medial Temporal Lobe F.D. Raslau, I.T. Mark, A.P. Klein, J.L. Ulmer, V. Mathews and L.P. Mark American Journal of Neuroradiology May 2015, 36 (5) 846-849; DOI: https://doi.org/10.3174/ajnr.A4169

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MK-6240: Widespread Use as a Diagnostic Research Tool

15 Pharmaceutical companies in partnership

Bristol Myers Squibb™ · Roche · NOVARTIS · gsk · Eisai · MERCK · Janssen · Biogen

39 Research institutions in collaboration

109 Studies

WISCONSIN UNIVERSITY OF WISCONSIN–MADISON

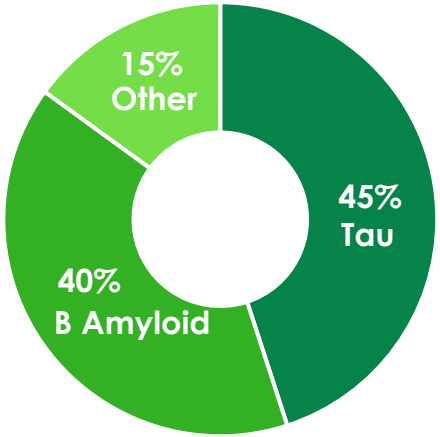
Academia/Research Institution that has more than one clinical trials

USPOINTER Alzheimer's Association · DIAN · DIAN TU Alzheimer Network Trials Unit · ACTC ALZHEIMER'S CLINICAL TRIALS CONSORTIUM

Phase 1	Phase 1/2	Phase 2	Phase 3
Janssen REGISTRY ALZ0001	Eisai E2814	Alector/AL002-02 & LTE	Eisai/Clarity AD
Novartis CNIO752B12201	Lexeo LX1001-02	AbbVie M22-721	Eisai(AHEAD)
Voyager		Biogen/CELIA	Roche
		BMS/CN008-0003	Biogen EMARK
		Janssen/Tau Active	AgeneBio
		GSK Progress-AD 219867	
		Janssen/ALZ2002	
		Acumen	
		Merck	

Completed/Not Active

MK-6240 STUDY BREAKDOWN



Protein Specificity	Treatment Modality	# of Studies	Totals
Tau	Small Molecule	1	9
	Antibody	6	
	ASO	2	
β Amyloid	Small Molecule	1	8
	Antibody	5	
	AAV or siRNA	2	
Other	Biomarker/Obs	1	3
	Antibody	2	

The HEAD Study: MK-6240 Had Higher Uptake

Multicenter Longitudinal Head-to-head Comparison of Tau-PET Tracers[1]

FIGURE 1: ENROLLMENT AND MEASURE COLLECTION IN HEAD

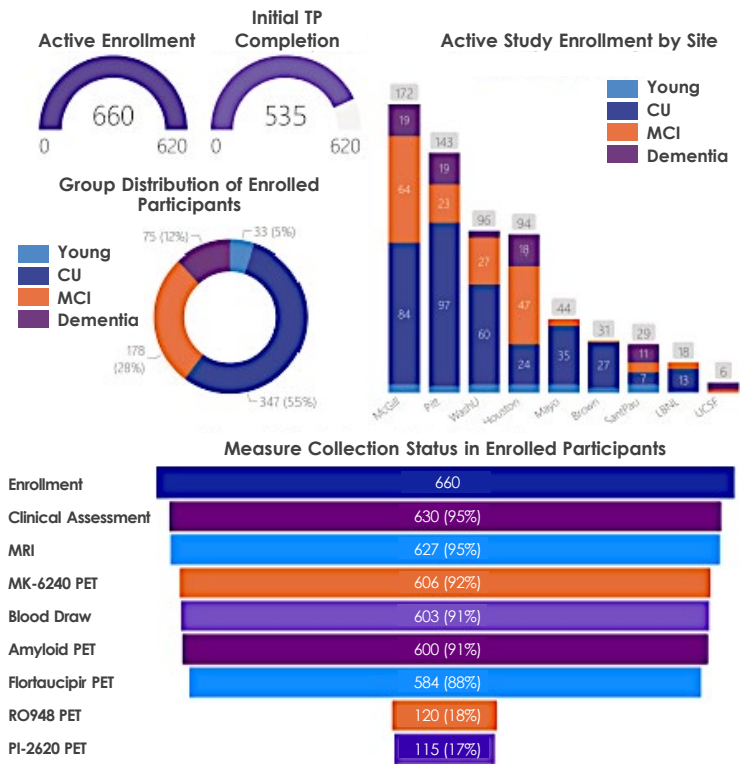
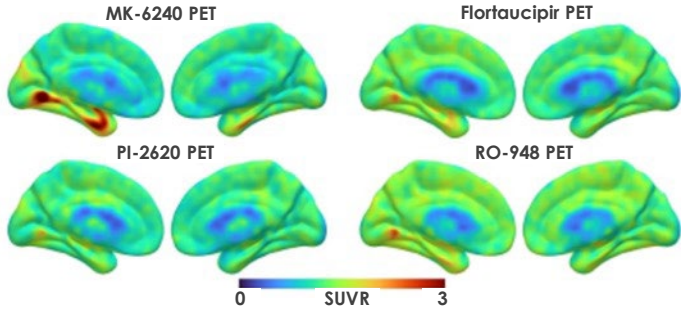
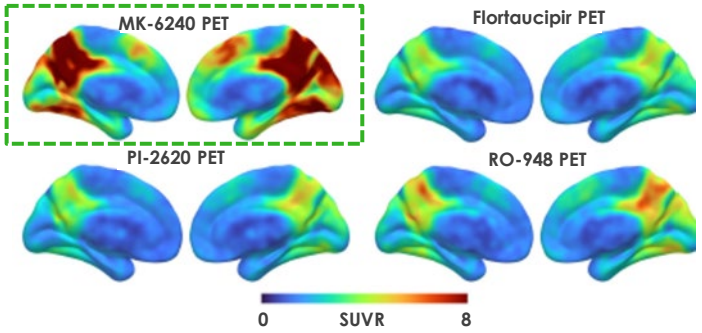


FIGURE 2: REPRESENTATIVE CASES WITH 4 HEAD-TO-HEAD TAU-PET

Case 1 Female, 70 y.o., White, CU Aβ+, tau-PET acquired within 28 days



Case 2 Female, 53 y.o., White, CI Aβ+, tau-PET acquired within 76 days



Case 2

- Female
- 53 y.o.
- White
- CI Aβ+
- tau-PET acquired within 76 days

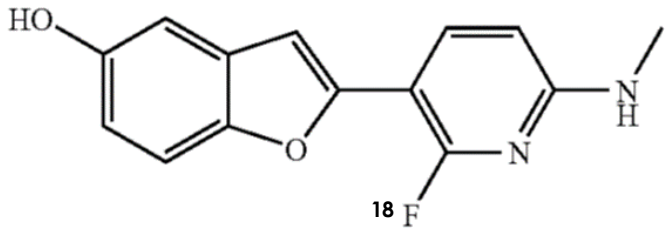
MK-6240 is more sensitive and has higher uptake due to its larger dynamic range[2]

Funding: NIA 5 R01 AG073267
ClinicalTrials.gov ID: NCT05361382

1. Lussier FZ. et al. Longitudinal multicenter head-to-head harmonization of tau-PET tracers: an overview of the HEAD study. Human Amyloid Imaging Conference, 2025; 2. Gogola A, et al. Journal of Nuclear Medicine January 2022, 63 (1) 108-116; DOI: https://doi.org/10.2967/jnumed.120.254961

NAV-4694 (flutafuranol): ß Amyloid

PRODUCT DESCRIPTION



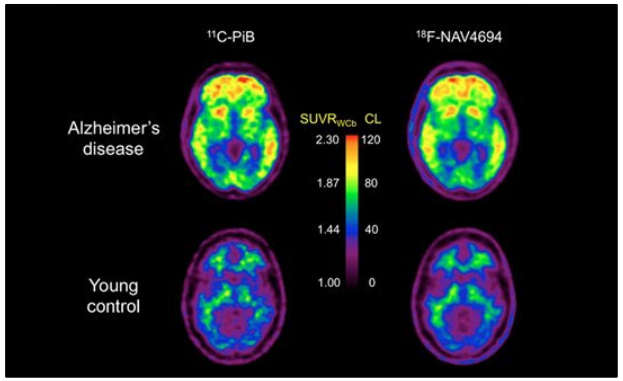
^{18}F-NAV-4694 - flutaforanol

NAV-4694 is a potential best-in-class ^{18}F-radiolabeled ß amyloid investigational PET imaging agent for AD diagnosis and patient selection for therapy

DIFFERENTIATING FEATURES ANTICIPATED[1,2,4]

Highest conformance to the gold standard, Pittsburgh Compound B, among ^{18}F β-amyloid imaging agents

Detected lower levels of cortical β-amyloid in earlier stages of AD, via lower non-specific white matter binding, improved dynamic range, and improved signal-to-noise ratio vs. first generation tracers



EVIDENCE FOR TARGET VALIDATION[1,3]

ß amyloid is an extensively researched protein and is commonly assumed to be a central biological feature of AD, making it a promising target for treatment

It is strongly believed that the accumulation of toxic ß amyloid in the central nervous system is the main cause of AD

DIFFERENTIATED VALUE PROPOSITION ANTICIPATED

- Synergetic offering with MK-6240 as the AD-modifying therapeutic market expands
- Recent approvals of disease-modifying therapies requiring β-amyloid for patient selection and the removal of CMS' restriction on reimbursement are expected to significantly increase demand
- Offers the potential for earlier diagnosis of AD, increasing the ability to identify patients earlier for therapy

HIGH-LEVEL TIMELINES

INDICATION	ISOTOPE	IND-ENABLING	PHASE 1	PHASE 2	PHASE 3	NOTES
Alzheimer's Disease	^{18}F					*NDA filing expected in 2026*

1. Data on file; 2. Rowe et all., 2016; 3. Ma et al., 2022; 4. Krishnadas et al., 2021

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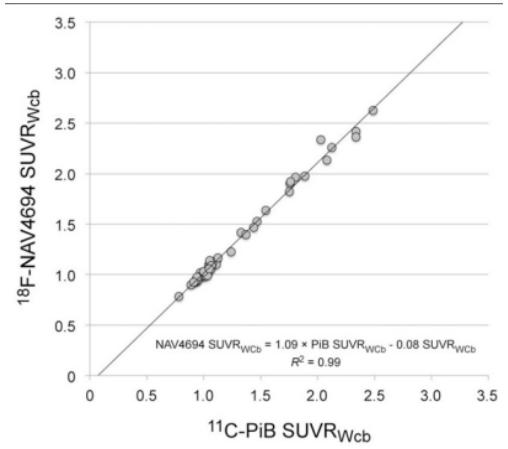
NAV-4694 (flutafuranol): ß Amyloid

Performance characteristics

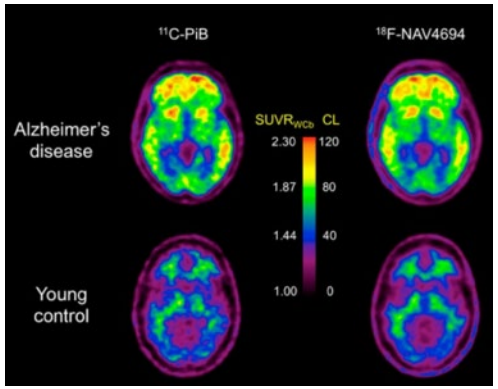
HIGHEST CONFORMANCE TO THE GOLD STANDARD[1,3]



NAV-4694 demonstrated the greatest conformance to C11 PIB among F18 ß amyloid imaging agents with the least variance across the spectrum of patients from young controls to extensive disease

NAV-4694 showed notably lower variance compared to Amyvid, Vizamyl and Neuraceq (table 1)

NAV-4694 closely aligns to C11 PIB across the scale



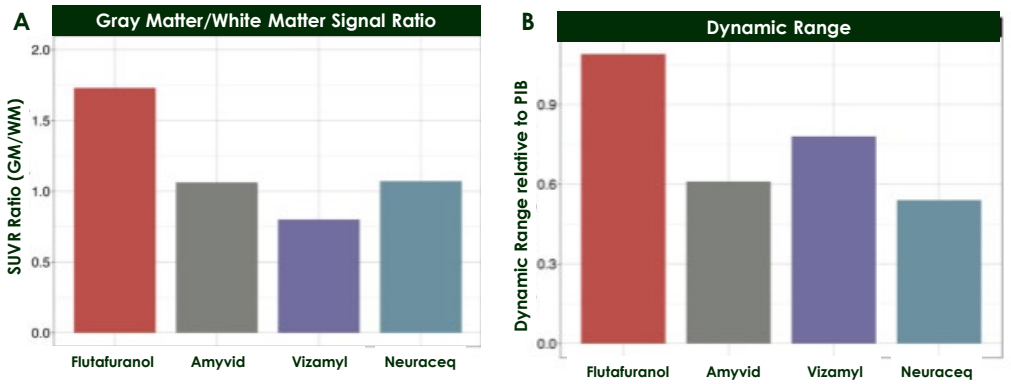
Pittsburgh Compound B (C11 PIB) is the index compound for centiloid scaling, the tool used to enable comparison of β amyloid imaging across tracers

The centiloid scale anchors at 0 to normal expression of β amyloid at the low end and extends to characterize high amyloid burden at 100

TABLE 1
CENTILOID CONVERSION EQUATIONS FOR COMMONLY-USED F18 ß AMYLOID TRACERS[2]

Tracer	Variance (CL SD) Young Controls	Variance Ratio (Tracer SD/PIB SD)	Slope (Tracer SUVR to PIB SUVR)	Intercept	R^2	CL equation CL =...
^{18}F-Florbetapir	12	4.6	0.54	0.5	0.89	$175.4*SUVR_{fbp} - 182.3$
^{18}F-Flutemetamol	5.4	1.54	0.78	0.2	0.95	$121.4*SUVR_{flute} - 121.2$
^{18}F-Florbetaben	6.8	1.96	0.61	0.4	0.96	$153.4*SUVR_{fbb} - 154.9$
^{18}F-NAV4694	3.7	1.00	1.09	0.1	0.99	$85.3*SUVR_{nav} - 88$
^{11}C-PiB	3.5	n/a	n/a	n/a	n/a	$93.7*SUVR_{pib} - 94.6$

SUPERIOR GREY MATTER/ WHITE MATTER SIGNAL RATIO AND DYNAMIC RANGE[4]



Due to these properties, **NAV-4694 generates high contrast images** that are easy to interpret by visual read and the ability to **detect low levels** of β-amyloid pathology **with high accuracy**

1. Rowe CC, et al. *J Nucl Med*. 2016;57(8):1233-1237; 2. Krishnadas et al. Seminars in Nuclear Medicine, Volume 51, Issue 3, 2021,Pages 241-252; 3. Klunk WE, Koeppe RA, Price JC, et al. The Centiloid Project: standardizing quantitative amyloid plaque estimation by PET. *Alzheimers Dement*. Jan 2015;11(1):1-15 e1-4. doi:10.1016/j.jalz.2014.07.00; 4. Navitsky M, Joshi AD, Kennedy I, et al. Standardization of amyloid quantitation with florbetapir standardized uptake value ratios to the Centiloid scale. *Alzheimers Dement*. Dec 2018;14(12):1565-1571. doi:10.1016/j.jalz.2018.06.1353; 5. Battle MR, Pillay LC, Lowe VJ, et al. Centiloid scaling for quantification of brain amyloid with [(18)F]flutemetamol using multiple processing methods. EJNMMI Res. Dec 5 2018;8(1):107. doi:10.1186/s13550-018-0456-

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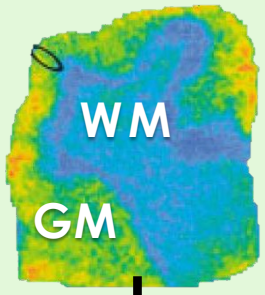
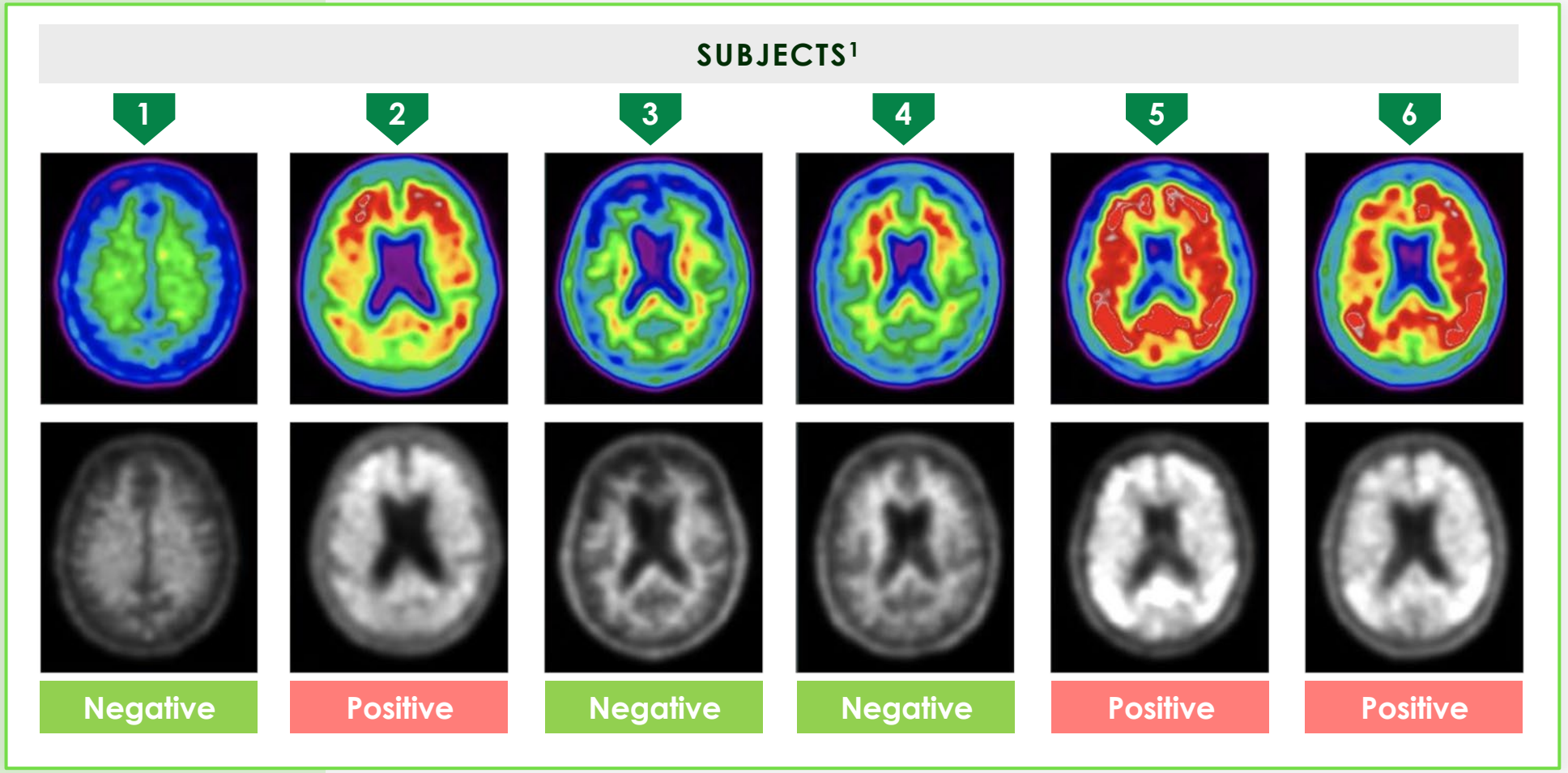
NAV-4694 (Flutafuranol): Potential Easy Visual Reading in Clinical Practice because of Low Off-target Binding



> contrast
GM to WM

Low Off-target Binding



1. Images courtesy of Dr. Tharick Pascoal, used with permission.

Potential Advantages of NAV-4694 (Flutafuranol)

Second generation imaging agent

		Sens	Spec	GM/WM Visual Read	F18
PiB	Gold Standard	✓	✓	✓	✗
Florbetapir	First Generation	✓	✓	✗	✓
Florbetaben	First Generation	✓	✓	✗	✓
Flutemetamol	First Generation	✓	✓	✗	✓
Flutafuranol	Second Generation	✓	✓	✓	✓

NAV-4694 (Flutafuranol) may be most suitable to clinical visual readings

1. Not based on head-to-head comparisons in all instances; patient populations and baseline characteristics may differ between studies from which data is driven. Potential advantages are derived from published data based on anticipated advantages for our investigational tracer NAV-4694.

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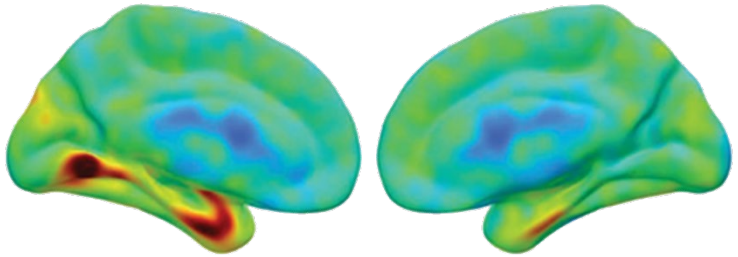
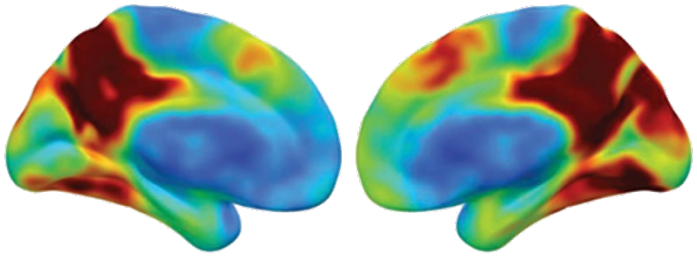
Blood-based & PET biomarkers are companions not competitors

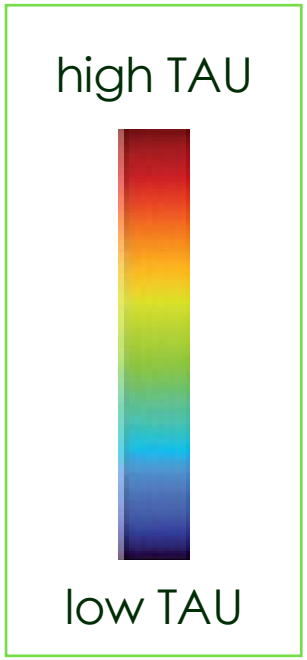
MK-6240 PET



asymptomatic[1]



symptomatic[2]



Images provide by Pascoal et al, HEAD study; All colorful brain pics represent quantitative analyses.

Blood-based & PET Biomarkers Considerations:

Blood-based & PET biomarkers are *companions* not *competitors*

THIS IS BECAUSE:
Blood-based biomarkers & PET evaluate different disease aspects & diverse pathology phases

Blood-based[3]

- **Measure SOLUBLE protein fragments**
  - soluble protein fragments tend to appear earlier in the disease course
- **Cannot assess spatial distribution of pathology**

PET[3]

- **Assesses INSOLUBLE protein aggregates**
  - insoluble protein aggregates represent later pathological changes
- **Can localize insoluble aggregates**
  - this allows pathology-symptoms mapping

1. 70-yr-old female, amyloid+, asymptomatic; 2. 53-yr-old female, amyloid+, symptomatic; 3. Paczynski MM, Day GS. Alzheimer Disease Biomarkers in Clinical Practice: A Blood-Based Diagnostic Revolution. *Journal of Primary Care & Community Health*. 2022;13. doi:10.1177/21501319221141178

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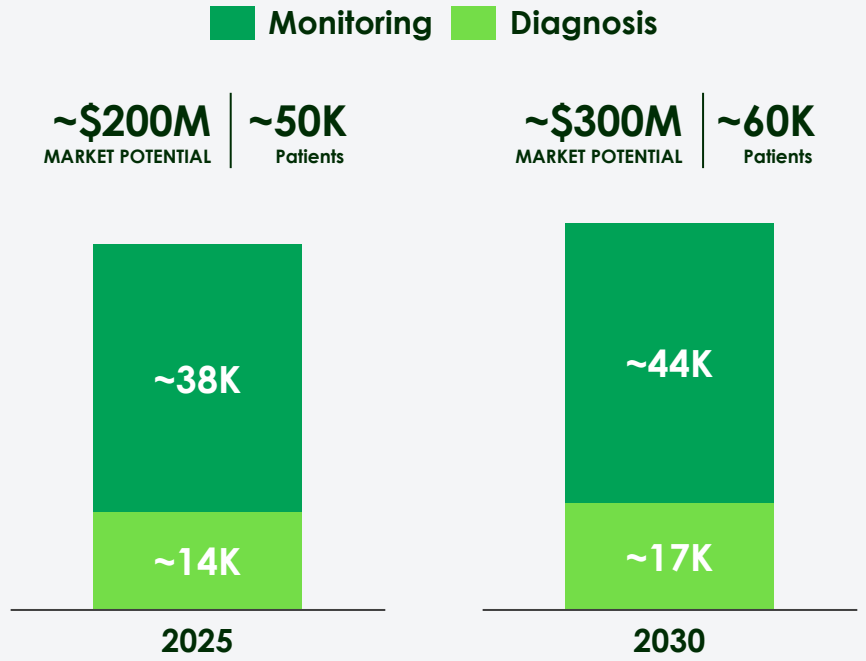
OCTEVY (LNTH-2501): Neuroendocrine Tumor (NET) Targeted Radiodiagnostic

Potential radiodiagnositc agent **for use with positron emission tomography (PET) for localization of somatostatin receptor positive (SSTR+) NETs in adult and pediatric patients.**

- Registrational-stage **PET radiodiagnostic**[1]
- Could deliver a **theranostic-like pair with radioequivalent candidate PNT2003**[2]

POTENTIAL LAUNCH IN 2026[1]

U.S. NET RADIODIAGNOSTIC MARKET ANNUAL MARKET POTENTIAL[3]



1. Subject to FDA approval. 2. Subject to FDA approval and positive resolution of an ongoing Hatch-Waxman litigation. 3. Factors Influencing Market Potential: Overall increase in epi population, expanding guidelines, and increased utilization of RLT within relevant patient populations. Source: Komodo claims data analysis.

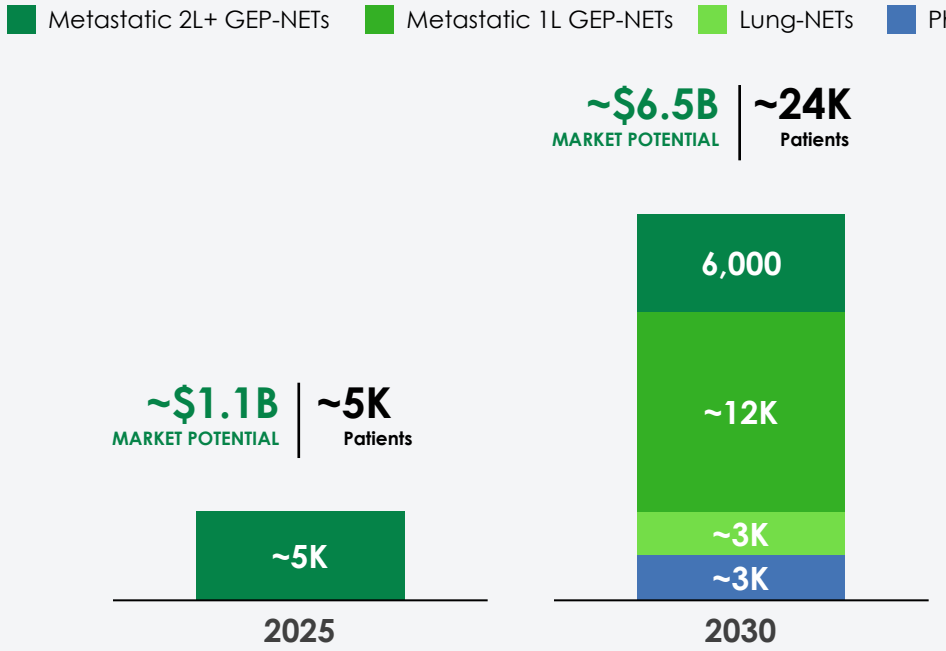
PNT2003: Somatostatin Receptor (SSTR)–Targeted Radiotherapeutic

Potential therapeutic agent for the treatment of **SSTR-positive gastroenteropancreatic neuroendocrine tumors (GEP-NETs), including foregut, midgut and hindgut neuroendocrine tumors in adults**

- FDA accepted Abbreviated New Drug Application (ANDA) – **first to file**[1]
- Anticipated to be a radioequivalent to **LUTATHERA®** (Lutetium Lu 177 Dotatate)

Potential launch in 2026[2]

U.S. GEP-NET Radiotherapeutic Market Annual Market Potential[3]



1. Based on the most recent update to the FDA's online paragraph IV database listings. 2. Subject to FDA approval and positive resolution of an ongoing Hatch-Waxman litigation. 3. Factors Influencing Market Potential: Overall increase in epi population, expanding guidelines, and increased utilization of RLT within relevant patient populations. 4. Pheochromocytoma (Pheo) and Paraganglioma (Para)

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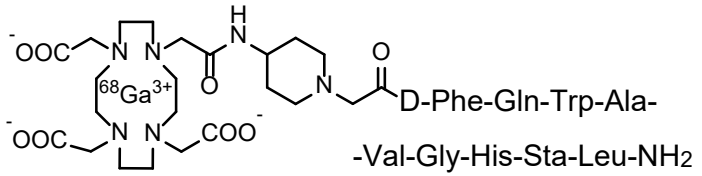
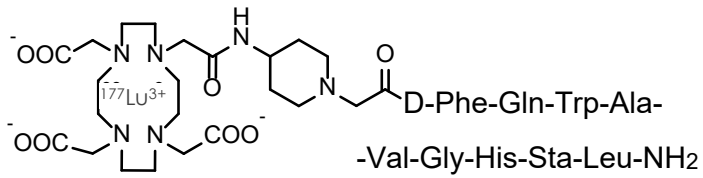
LNTH-2401/2402: Gastrin-Releasing Peptide Receptor (GRPR) Theranostic Pair

PRODUCT DESCRIPTION & MECHANISM OF ACTION

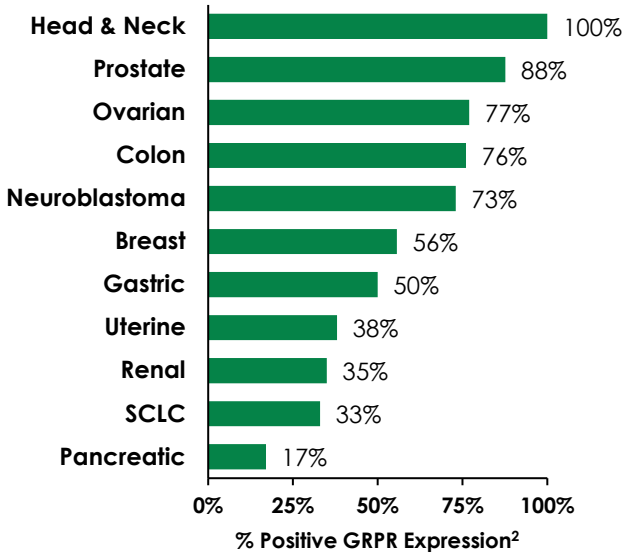




^{68}Ga / ^{177}Lu-LNTH-2401

LNTH-2401 / LNTH-2402 RM2 is an investigational gastrin-releasing peptide receptor (GRPR) targeted-peptide

SUMMARY OF GRPR EXPRESSION IN CANCER



EVIDENCE FOR TARGET VALIDATION[2,3,4,6]

GRPR / BBN expression characterized as ranging from 63% - 100% in primary prostate cancer, but minimally expressed in normal tissue; patients may express PSMA and GRPR heterogeneously

Potential to target Prostate Cancer patients whose tumor(s) do not express PSMA or are ineligible for PSMA-targeted RLT

~15% - 25% of mCRPC patients have low to no PSMA expression

DIFFERENTIATED VALUE PROPOSITION ANTICIPATED

- Complementary to portfolio and offers potential commercial synergies
- Unlike PSMA-targeted RLT, where the kidneys are the limiting organ, the pancreas takes more absorption but can tolerate higher radiation doses
- High density expression in a broad range of other cancers[2]

HIGH-LEVEL TIMELINE

INDICATION	ISOTOPE	IND-ENABLING	PHASE 1	PHASE 2	NOTES
mCRPC	^{68}Ga	LNTH-2401			
	^{177}Lu	LNTH-2402			*IND filing expected 4Q 2025; Phase 1 initiation planned 2026*

1. Data on file; 2. Cornelio et al., 2007; Percentages include % positive binding and immunohistochemistry (IHC) scores; 3. Rinne, S.S., Abouzayed, A., Gagnon, K. et al. 66Ga-PET-imaging of GRPR-expression in prostate cancer: production and characterization of [66Ga]Ga-NOTA-PEG2-RM26. Sci Rep 11, 3631 (2021); 4. Ananias, Hildo JK, et al. "Expression of the gastrin-releasing peptide receptor, the prostate stem cell antigen and the prostate-specific membrane antigen in lymph node and bone metastases of prostate cancer." The Prostate 69.10 (2009): 1101-1108; 5. Baun et al. 2024, Seminars in Nuclear Medicine Volume 54, Issue 2, March 2024, Pages 256-269; 6. Verhoeven et al., PMC10502172.

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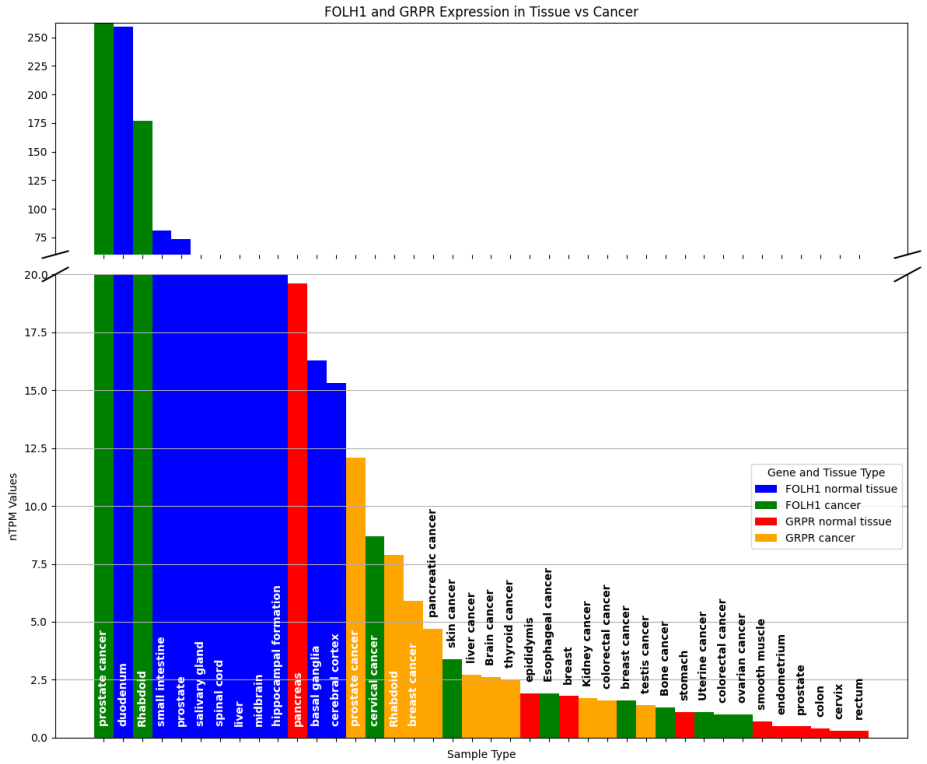
PSMA & GRPR: Clinically Relevant Targets Across Various Tumor Types, but are Expressed at Different Frequencies

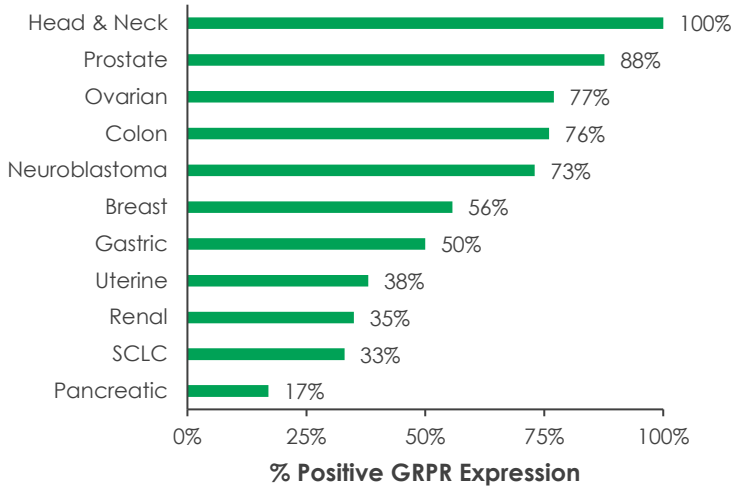
PSMA vs. GRPR Expression Across Normal & Cancerous Tissues[1]



Key Considerations

- Between PSMA and GRPR, there is expression across both normal and cancerous tissues; however, GRPR expression is more common across a larger number of tumor types compared to PSMA
- GRPR and PSMA are best validated within prostate cancer, but may have clinical relevance in numerous other tumor types
- Outside of prostate cancer, GRPR demonstrates high-density expression in a broad range of other cancers (e.g. breast, lung, colon, glioma, GIST, and ovarian), offering broader tumor-targeting potential and disease relevance compared to PSMA

GRPR EXPRESSION IN CANCER[2,3]



- Despite high uptake in GRPR-expressing pancreas tissues demonstrated in studies, it is not suggested to be a dose-limiting organ for GRPR-targeting therapies, likely as a result of rapid washout from the pancreas
- This poses a potential safety advantage of GRPR-targeting RLT over PSMA-targeting RLT, where xerostomia, due to high PSMA expression on salivary glands, is a commonly reported adverse event

1. Human Protein Atlas; 2. Cornelio et al., 2007; Percentages include % positive binding and immunohistochemistry (IHC) scores; 3. Canaccord Genuity Equity Research

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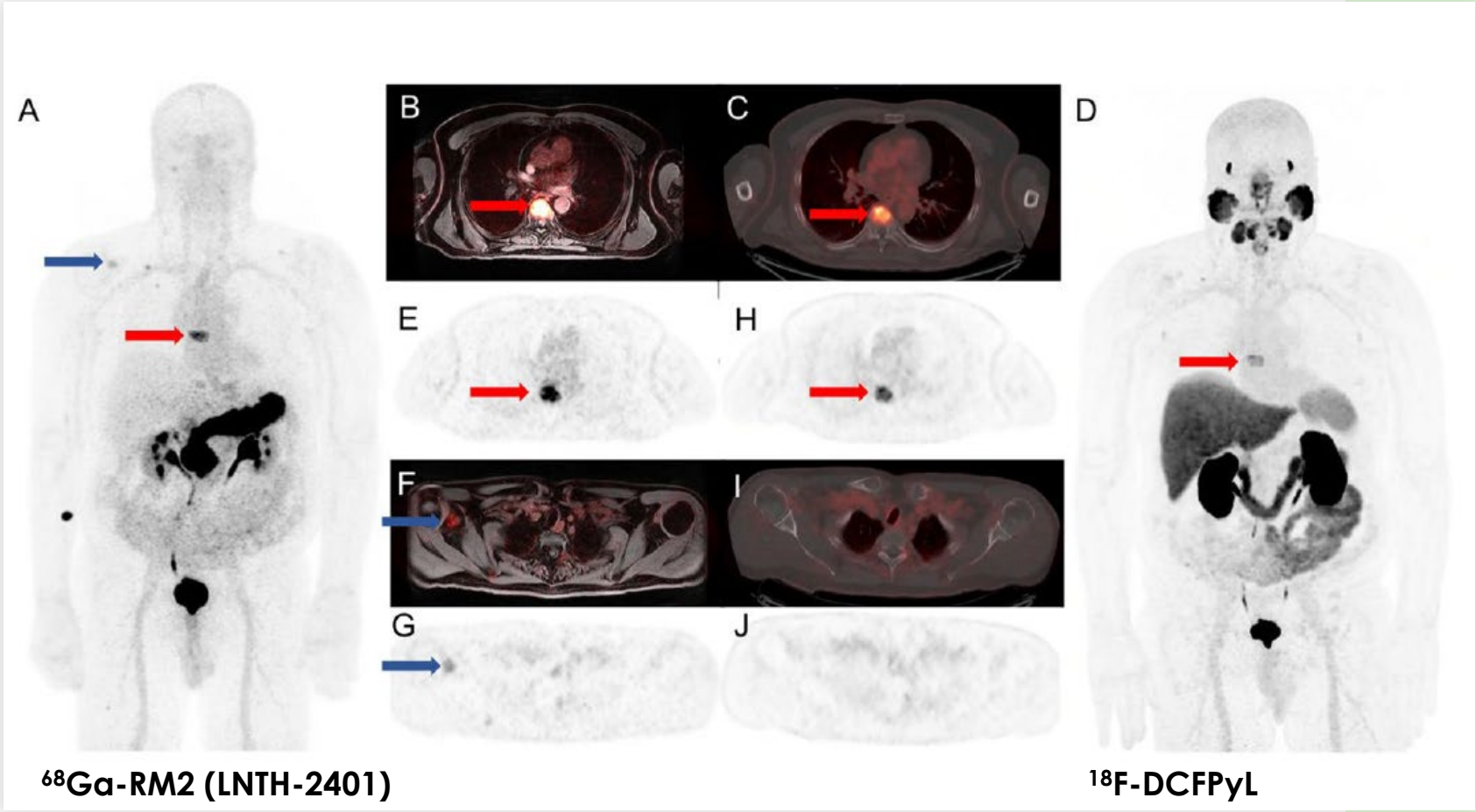
LNTH-2401 Showing Heterogeneity of Expression of GRPR and PSMA

Example of Imaging in BCR Prostate Cancer



76-year-old man previously treated with radical prostatectomy, followed by salvage RT+ADT, presenting with BCR prostate cancer (PSA 4.2 ng/mL and PSA velocity 5.8 ng/mL/year)

MIP of ^{68}Ga-RM2 (A) and ^{18}F-DCFPyL (D), axial PET of ^{68}Ga-RM2 (E, G) and ^{18}F-DCFPyL (H, J), fused axial PET/MRI of ^{68}Ga-RM2 (B, F) and fused axial ^{18}F-DCFPyL PET/CT (C, I)

Red arrows (→) mark a lesion in the T7 vertebra with more intense uptake on ^{68}Ga-RM2 then on ^{18}F-DCFPyL PET

Blue arrows (→) mark a lesion in the glenoid process of the right scapula on ^{68}Ga-RM2, but not on ^{18}F-DCFPyL PET

Courtesy Pr A. Iagaru, Stanford U.

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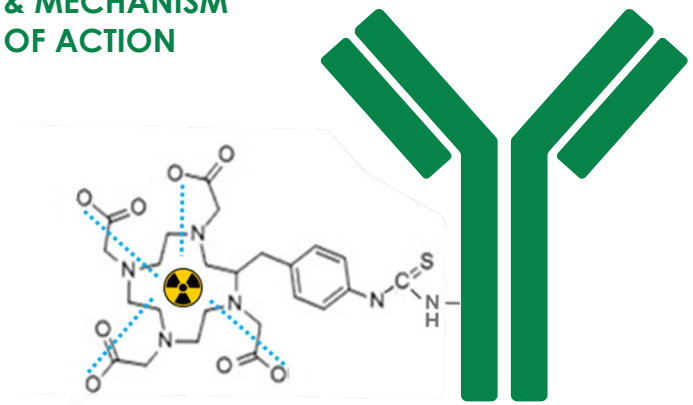
LNTH-2403: Potential First-in-Class Therapy for a Range of Solid Tumor Types Expressing LRRC15

PRODUCT DESCRIPTION & MECHANISM OF ACTION



^{177}Lu-LNTH-2403

DUNP19 is an investigational Leucin Rich Repeat Containing 15 (LRRC15)-targeted, fully humanized, mAb

LNTH-2403 is DUNP19 conjugated to radioisotope 177-Lutetium via a DOTA chelator

Received Orphan Drug and Rare Pediatric Disease Designations
from U.S. FDA for the treatment of osteosarcoma

EVIDENCE FOR TARGET VALIDATION[1]

LRRC15 is highly expressed on cancer-associated fibroblasts (CAFs) within the tumor stroma of a wide range of malignancies, and on cancer cells from a subset of mesenchymal tumors with low expression in normal tissues

Expression of LRRC15 is associated with TGF beta driven aggressive malignant disease

Studies carried out in various tumor models with LRRC15+ cancer cells and LRRC15+ CAFs have demonstrated that DUNP19 selectively accumulated in LRRC15+ cells after systemic injection and co-localizes with LRRC15

HIGH-LEVEL TIMELINE

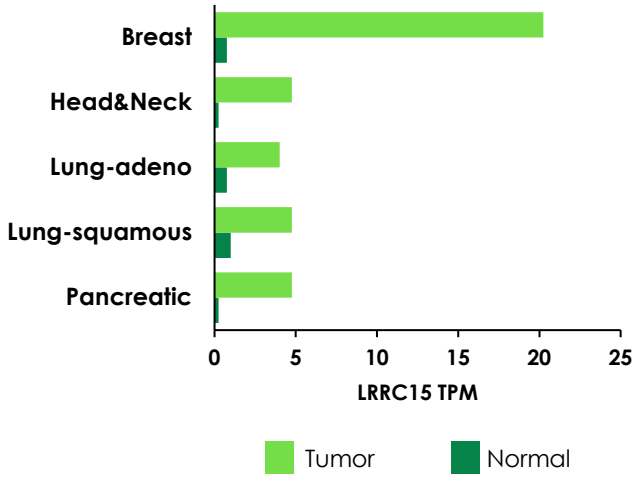
INDICATION	IND-ENABLING	NOTE
Osteosarcoma	LNTH-2403	*IND filing expected 4Q 2025*

A basket study is currently being planned in additional indications, including 3 different types of cancer.

DIFFERENTIATED VALUE PROPOSITION ANTICIPATED

- DUNP19 has unique "dual action," targeting ability, targeting both tumor cells and the surrounding environment (stroma)
- LRRC15 is widely expressed across a range of tumors, opening a pan-tumor opportunity for treatment of various cancers

EXPRESSION IN HEALTHY & MALIGNANT TISSUES



TPM, transcripts per million; IHC, immunohistochemistry.
Source: Human Protein Atlas.
1. Storey et al., 2024.

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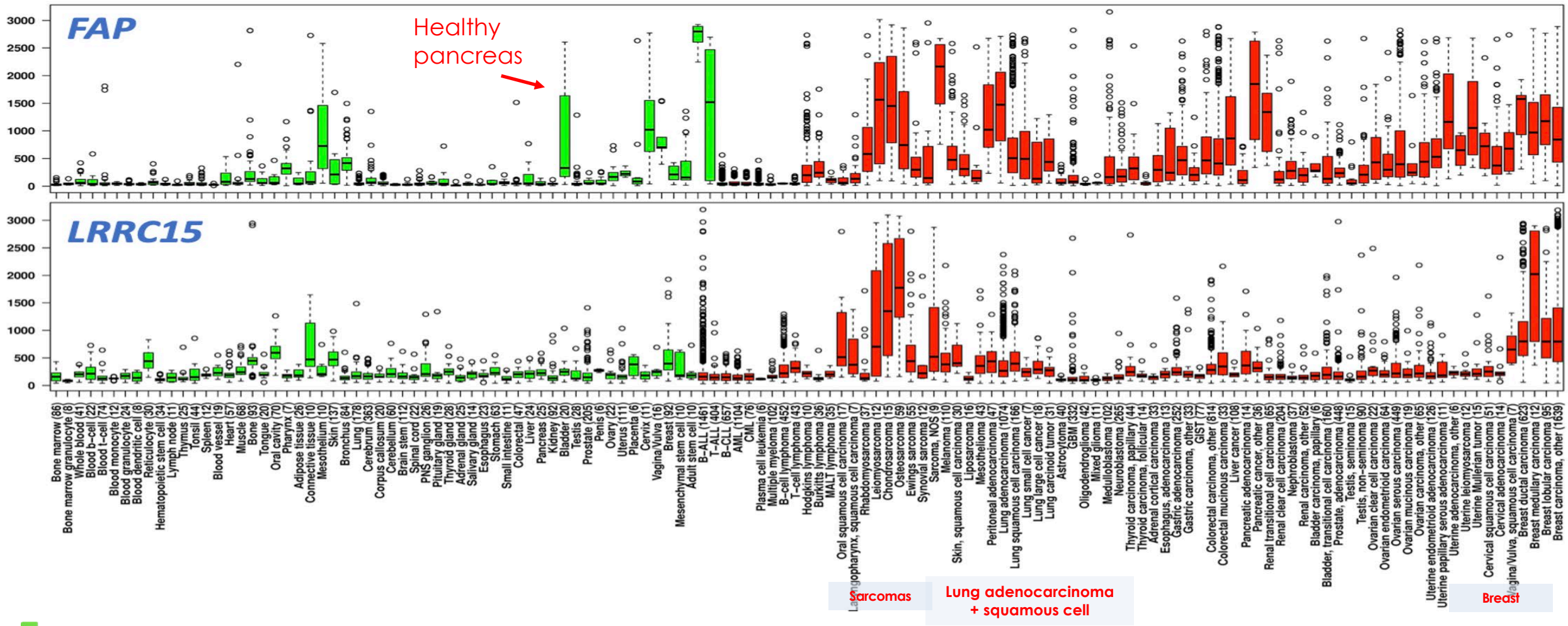
LRRC15 and FAP Expression in Healthy and Malignant Tissues

LRRC15 is similar to FAP (Fibroblast Activation Protein) in its mesenchymal cell origin and its expression on the surface of fibroblasts, however, unlike FAP expression in any inflammation process, LRRC15 is more specific to aggressive cancer[1]



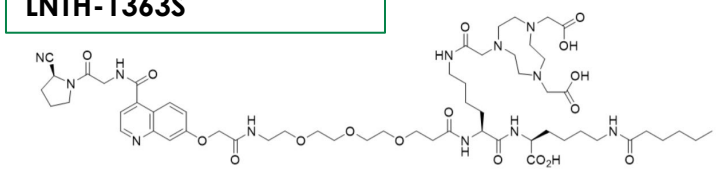
1. In silico transcriptomics database from http://ist.medisapiens.com/

LNTH-1363S – Targeting Fibroblast Activation Protein (FAP)

Potential to replace ^{18}F-FDG particularly in brain, liver, gastro-intestinal cancers

PRODUCT DESCRIPTION & MECHANISM OF ACTION

LNTH-1363S

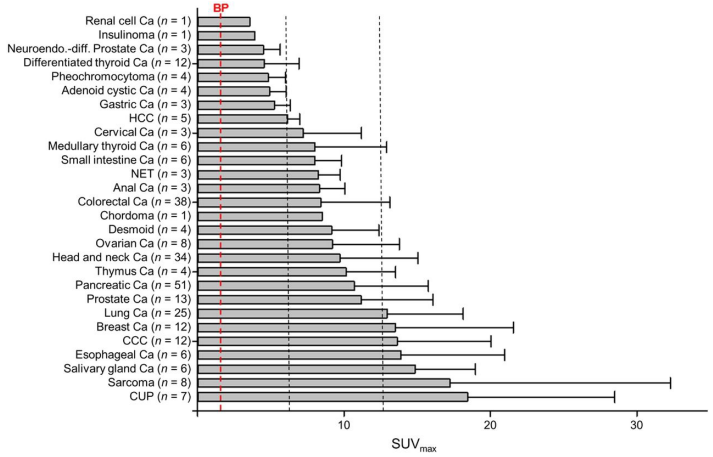


- LNTH-1363S is a novel FAP-targeted Trillium compound, a small molecule scaffold comprised of a FAP binding domain, an albumin-binding domain for PK modulation and a chelator to contain a radionuclide
- LNTH-1363S can be labeled with Cu-64, Ga-68 or F-18 radioisotopes for PET imaging use

EVIDENCE FOR TARGET VALIDATION[1]

- In cancer, Fibroblast Activation Protein (FAP) is:
  - Present in the tumor microenvironment (TME), is a selective marker for cancer-associated fibroblasts (CAFs), the dominant stroma cells in the TME.
  - Highly expressed and has been detected in both primary and metastatic tissues, independently of grade or tumor stage
- Outside cancer, fibroblasts expressing FAP, play a central role in remodeling and fibrosis. Persistent activation of these fibroblasts leads to organ fibrosis in conditions like pulmonary fibrosis, cardiac fibrosis, and liver cirrhosis

INTENSITY OF FAP EXPRESSION IN CANCER[2]



DIFFERENTIATED VALUE PROPOSITION[1]

- ✓ PET FAP imaging holds the potential to replace ^{18}F-FDG, particularly where this latter has limitations (e.g. brain, liver, gastro-intestinal cancers, etc.). No fasting required
- ✓ By targeting CAFs and extracellular fibrosis which may represent up to 90% of tumor mass, FAP imaging may detect smaller tumors compared to FDG that identifies the metabolic activity of cancer cells only
- ✓ LNTH-1363S expressed across a range of tumors, opening a pan-tumor opportunity for the diagnostic and treatment monitoring of various cancers
- ✓ Manufacturing/distribution advantage of ^{64}Cu over ^{68}Ga

HIGH-LEVEL TIMELINE

INDICATION	ISOTOPE	IND-ENABLING	PHASE 1	PHASE 2/3	NOTES
Solid Tumors	^{64}Cu	LNTH-1363S			^{64}Cu-LNTH1363S Phase I/II initiated in 4Q 202424
	^{68}Ga/^{18}F	LNTH-1363S			

Oncology: development for imaging of sarcomas and gastro-intestinal cancers, and as diagnostic for osteosarcoma

Pulmonary & liver fibrosis, non-alcoholic steato-hepatitis (NASH): development as diagnostic through pharma collaborations

1. Data on file; 2. Kratochwill C. Et al. *J Nucl Med*. 2019; 60:801–805.

LANTHEUS

Financial Overview

Continued Strong Financial Performance[1]

The Updated Interim Corporate Financial Guidance[2] for the Full Year 2025 is as follows (updated May 7, 2025):

FY 2025	Prior Revenue	$1.545B – $1.610B
	Current Revenue	**$1.550B – $1.585B**
	Prior Adjusted Fully Diluted EPS	$7.00 – $7.20
	Current Adjusted Fully Diluted EPS[3]	**$6.60 – $6.70**

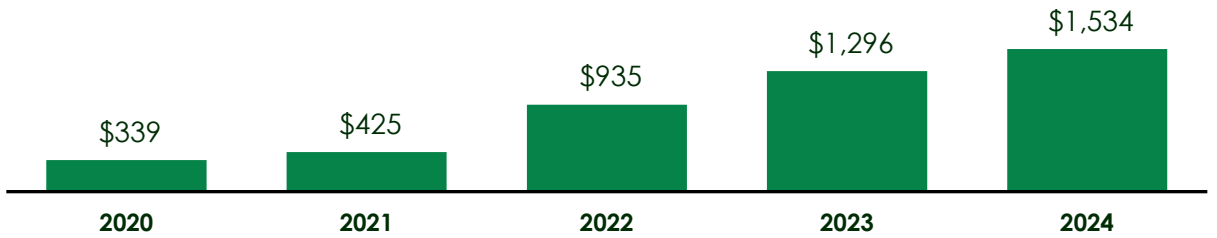
Narrows FY Revenue and Adjusts EPS for Evergreen Acquisition

As of March 31, 2025

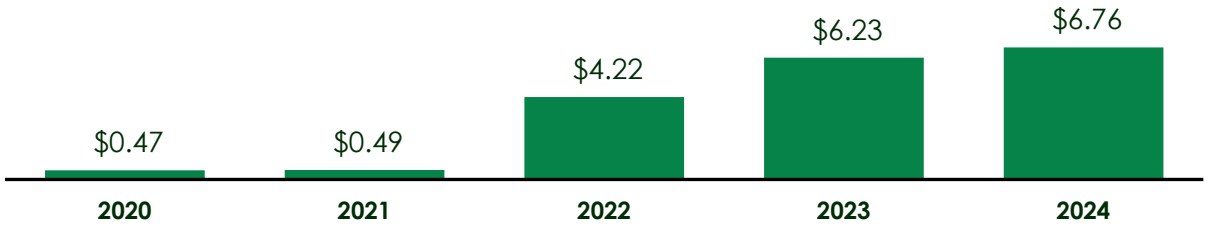
$938.5M
Cash on Hand[4]

$750M
Available Revolving Credit

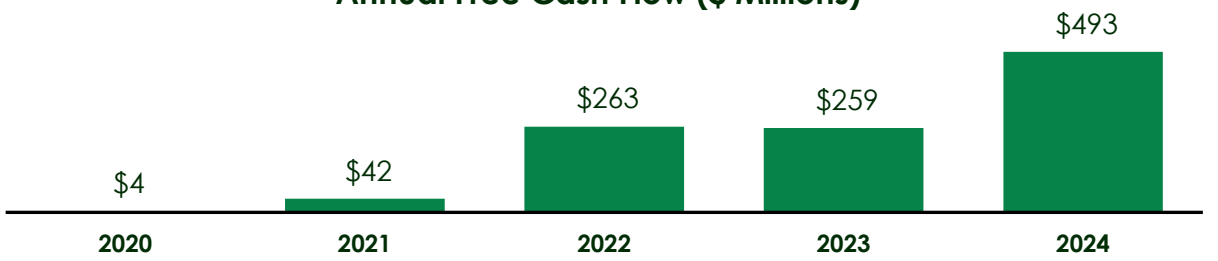
Annual Revenue ($ Millions)



Annual Adj. EPS



Annual Free Cash Flow ($ Millions)



1. See slides 46 and 47 for a reconciliation of GAAP to non-GAAP financials; certain amounts may be subject to rounding. 2. Guidance provided on May 7, 2025. On a forward-looking basis, the Company does not provide GAAP income per common share guidance or net cash provided by operating activities guidance or a reconciliation of GAAP income per common share to adjusted fully diluted EPS or net cash provided by operating activities to free cash flow 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, or the net effect of non-cash items. 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 and free cash flow on a forward-looking basis is not available without unreasonable effort.3. FY 2025 guidance assumes fully diluted, weighted avg. shares outstanding of approximately 71.5M YTD, and depreciation and amortization of ~$56M. 4. Cash, cash equivalents and restricted cash at the end of the period was $940.2 M.

Setting the Stage for Sustained, Double-Digit Revenue Growth

Key Drivers

1. PYLARIFY® Piflufolastat F 18 Injection; DEFINITY® VIAL FOR (Perflutren Lipid Microsphere) INJECTABLE SUSPENSION; NeuraCeq®* florbetaben F18 injection

2. **2026-2027 Anticipated Product Launches**

MK-6240	F18 tau-targeted PET radiodiagnostic
NAV-4694	F18 β amyloid-targeted PET radiodiagnostic
LNTH-2501	G68 NET PET radiodiagnostic
PNT2003	SSTR+ GEP-NET radioequivalent therapeutic

3. **Pipeline**

LNTH-1363S	Cu64 FAP-targeted radiodiagnostic
LNTH-2401	RM2, GRPR-targeted radiodiagnostic
LNTH-2402	RM2, GRPR-targeted radiotherapeutic
LNTH-2403	LRRC15-targeted radiotherapeutic
LNTH-2404	TROP2-targeted radiotherapeutic

*The acquisition is subject to the approval by the South African Reserve Bank, which is anticipated 2Q 2025.

KEY 2025 MILESTONES

PROSTATE CANCER
- Non-Prostate PYLARIFY Study Initiated (2Q 2025)
- MIRROR Study Enrollment Completion (4Q 2025)
- LNTH-2402 (RM2) IND Submission (4Q 2025)

NETs
- PNT2003 Tentative ANDA Approval (2025)
- LNTH-2501 Approval (2026)

OTHER SOLID TUMORS
- LNTH-1363S First Patient Dosed (2025)
- LNTH-2403 (LRRC15) IND Submission (4Q 2025)

ALZHEIMER'S DISEASE
- MK-6240 NDA Submission (3Q 2025)
- NAV-4694 NDA Submission (2026)

EVERGREEN THERAGNOSTIC Acquisition **CLOSED**

LIFE MOLECULAR IMAGING CLOSE* **2Q 2025**

LANTHEUS

Deliver on Long-term Growth and Sustainable Value Creation

Powering the Future of Radiopharmaceuticals

Industry Leadership

Strengthen position as a radiopharmaceutical leader with enhanced end-to-end expertise and capabilities

- Ability to scale production of radiopharmaceuticals
- Positioned to accelerate development and lifecycle management through end-to-end supply chain

Portfolio Diversification/ New Growth Drivers

Further diversify our diagnostic and therapeutic portfolio with high-potential, complementary assets

- Upon close of LMI acquisition, growth profile expanded with Neuraceq, globally-approved PET imaging agent for AD
- Efficient advancement of catalyst-rich pipeline driven by R&D expertise

Sharpened Strategic Focus

Augment our resources in innovative radiopharmaceuticals

- Long-term and diversified revenue generation enables capital flexibility to invest in pipeline assets
- Drive scientific and commercial excellence across oncology, neurology and cardiology

Driven by a Purpose to Improve Patient Outcomes

LANTHEUS

LANTHEUS

Lantheus is the **leading radiopharmaceutical-focused company** and is committed to enabling clinicians to **Find, Fight and Follow** disease to deliver better patient outcomes.

FIND. FIGHT. FOLLOW.®

Appendix

Lantheus

Corporate and Financial Overview

Radiopharmaceutical Leader Ready to Strengthen Capabilities at Forefront of Innovation and Patient Care

Powered by our **industry expertise**, **growing pipeline**, and **proven manufacturing and commercial platform**, we are launching **Lantheus' next phase of growth**

Pioneer with history spanning **nearly 70 years of leadership** in radiopharmaceuticals to positioning **Lantheus to champion the future** of this increasingly Important scientific field

Proven success of flagship diagnostic agents with **PYLARIFY – the #1 utilized PSMA PET imaging agent** that reached blockbuster status in 2024 with $1B+ in sales and **DEFINITY – #1 ultrasound enhancing agent** used in U.S. for 20+ years

Purpose-built market-leading operations, including **advanced research**, clinical and commercial **manufacturing capabilities**, position **Lantheus** as the **premier, one-stop-shop** to address the complex demands of **radiopharmaceutical discovery**, **development and production**

Advanced R&D engine positioned to generate steady pipeline of **diagnostics and therapeutics** that provide meaningful clinical outcomes

Geographically diverse with multi-channel PMF network, supporting **sustained supply**, **reliability and treatment logistics** for real-time delivery, and strong **international infrastructure**, commercial footprint able to **enable growth** in attractive global markets

Subject to closing of recently announced transactions

Lantheus' Journey has Driven Growth and Success **Nearly 70 Years**

CORPORATE GROWTH

1956 Founded

1981 DuPont purchases NEN

1991 DuPont forms venture with Merck called DuPont Merck

1998 DuPont buys Merck's interest, becomes DuPont Pharmaceuticals

2001 Bristol Myers Squibb Co. purchases DuPont Pharmaceuticals

2008 BMS sells BMS Medical Imaging to Avista Capital Partners, Lantheus Medical Imaging launched

2015 IPO on Nasdaq

2020 Lantheus Holdings closes merger with Progenics Pharmaceuticals

LANTHEUS

2022 In-licenses PNT2002 and PNT2003 – two late-stage radiotherapeutic product candidates

2023 Acquires Cerveau Technologies – including MK-6240, novel PET imaging agent for Alzheimer's Disease

2024 Expands pipeline with three strategic transactions

Strategic investments in

2025 Acquires Evergreen Theragnostics

Announces plans to acquire Life Molecular Imaging

Announces sale of SPECT Business

FDA APPROVAL & CLEARANCE

1974 FDA Approval — Xenon Xe 133 Gas

1976 FDA Approval — TechneLite

1990 FDA Approval — Cardiolite

1994 FDA Approval — NEUROLITE

2001 FDA Approval — DEFINITY

2021 FDA Approval — PYLARIFY

FDA Clearance — PYLARIFY AI

2023 EMA Approval — PYLCLARI

Out licensed to Curium

2024 FDA Approval — FLYRCADO

Out licensed to GE Healthcare

Recent Business Development Enhance Capabilities Across Radiopharmaceutical Value Chain and Unlock Value

	EVERGREEN THERAGNOSTICS	Life Molecular Imaging	SPECT
	Solidifies Capabilities as a Fully Integrated Radiopharmaceutical Company	**Accelerates Innovation for Patients in the Growing Alzheimer's Disease Radiodiagnostic Market**	**Optimizes Operating Model and Increases Focus on Growing Commercial Portfolio and Pipeline**
	ACQUISITION	**ACQUISITION**	**DIVESTMENT**
STATUS	• Closed in April of 2025	• Anticipated to close in the 2Q 2025[1]	• Anticipated to close by YE 2025[1] • Sale of single photon emission computed tomography (SPECT) business to SHINE Technologies, LLC
STRATEGIC BENEFITS	✓ Added scalable manufacturing platform to support development, clinical trials & commercialization efforts, accelerating development, LCM and expand IP portfolio ✓ Enhanced growth profile with OCTEVY, registrational-stage PET diagnostic agent with potential as a complementary theranostic pair with PNT2003 ✓ Augmented proven early-stage development capabilities to create novel radiotherapeutics & efficiently advance combined pipeline ✓ Expanded oncology radiopharmaceutical pipeline with multiple clinical and pre-clinical theragnostic pairs	✓ Establishes commercial franchise and accelerates entry into sizeable Alzheimer's Disease/Dementia radiodiagnostic market[2] ✓ Expands growth profile with NEURACEQ®, a globally approved F-18 PET imaging agent for Alzheimer's Disease diagnostics ✓ Enhances R&D and clinical infrastructure and capabilities to accelerate advancement of combined portfolio ✓ Strengthens innovative radiodiagnostic pipeline with complementary clinical assets	✓ Divestiture aligns with Lantheus' strategy to position itself as the leading radiopharmaceutical company, and streamline its portfolio with a focus on higher-margin, growth-oriented segments including PET imaging, theranostic pairs, radiotherapeutics and microbubbles ✓ Secures compelling premium value while maintaining a stake in SHINE, aligning interests through earn-outs and equity participation ✓ Ensures priority access to suite of first-in-class, domestically produced isotopes, including Lu-177 with potential to rapidly expand access to new, strategic isotopes
FINANCIAL BENEFITS	Expected to: • Drive near-term revenue with addition of OCTEVY, enhancing Lantheus' presence in NETs and CDMO operations • Be accretive to Lantheus' Adjusted Earnings Per Shares (EPS) within 18 months post close • Accelerate & derisk critical pathways by internalizing scalable manufacturing infrastructure that would otherwise have to be outsourced	Expected to: • Drive an increase in consolidated, organic annual revenue growth by approximately 200 to 300 basis points over the next three years • Be accretive to Lantheus' Adjusted EPS within 12 months post close • Support Lantheus' near-term sales growth with the addition of NEURACEQ, while also expanding international footprint	• Proceeds expected to further strengthen financial flexibility and strong cash position, as well as unlock consolidated revenue growth and gross margin expansion • Lantheus expects to redeploy resources to support the integration of Evergreen Theragnostics and Life Molecular Imaging acquisitions and advance pipeline of innovative assets

1. 1. Subject to customary closing conditions; 2. Data on file

LANTHEUS

Management Team
Led by Proven Pharmaceutical Industry Veterans

Driven by a **purpose to improve patient outcomes**, Lantheus' experienced leadership team **brings decades of expertise** in advancing innovative radiopharmaceuticals and driving scientific and commercial excellence in everything we do

Previous Experience

Brian Markison
CEO

- fougera PHARMACEUTICALS INC.
- King Pharmaceuticals
- Bristol Myers Squibb

Paul Blanchfield
President

- Takeda
- Shire
- McKinsey & Company

Bob Marshall
CFO and Treasurer

- ZIMMER BIOMET

Amanda Morgan
Chief Commercial Officer

- ACADIA
- Baxter

Daniel Niedzwiecki
Chief Administrative Officer

- Weil
- Edwards Angell Palmer & Dodge

Jean-Claude Provost, MD
Chief Science Officer

- Theranostics Consulting
- GE HealthCare
- Pfizer

Jamie Spaeth
Chief People Officer

- Corium
- Sage Therapeutics
- Shire

Strategy Guided by Experienced, Engaged Board of Directors

Board of seasoned leaders with extensive expertise across healthcare, finance, and business management, supporting Lantheus' ability to shape the future in delivering innovative diagnostic and therapeutic solutions

Mary Anne Heino
Chairperson of the Board

Brian Markison
Director

Minnie Baylor-Henry
Director

Dr. Gérard Ber
Director

Julie Eastland
Director

Samuel Leno
Director

Heinz Mäusli
Director

Julie McHugh
Lead Independent Director

Dr. Phuong Khanh (P.K.) Morrow
Director

Gary J. Pruden
Director

James H. Thrall
Director

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

	Three Months Ended March 31,	
	2025	2024
Net income	$ 72,945	$ 131,066
Stock and incentive plan compensation	21,198	15,384
Amortization of acquired intangible assets	8,016	9,932
Campus consolidation costs	60	19
Non-recurring fees	2,478	-
Gain on sale of assets	-	(6,254)
Strategic collaboration and license costs	5,413	28,000
Investment in equity securities - unrealized loss (gain)	14,862	(60,704)
Acquisition-related costs	4,751	788
Other	(4,452)	789
Income tax effect of non-GAAP adjustments[(a)]	(15,796)	(701)
Adjusted net income	$ 109,475	$ 118,319
Adjusted net income, as a percentage of revenues	29.4%	32.0%

	Three Months Ended March 31,	
	2025	2024
Net income per share - diluted	$ 1.02	$ 1.87
Stock and incentive plan compensation	0.30	0.22
Amortization of acquired intangible assets	0.11	0.14
Campus consolidation costs	-	-
Non-recurring fees	0.03	-
Gain on sale of assets	-	(0.09)
Strategic collaboration and license costs	0.07	0.40
Investment in equity securities - unrealized loss (gain)	0.21	(0.86)
Acquisition-related costs	0.07	0.01
Other	(0.06)	0.01
Income tax effect of non-GAAP adjustments[(a)]	(0.22)	(0.01)
Adjusted net income per share - diluted	$ 1.53	$ 1.69
Weighted-average common shares outstanding - diluted	71,461	70,095

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

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Reconciliation of Free Cash Flow
(in thousands – unaudited)

	Three Months Ended March 31,	
	2025	2024
Net cash provided by operating activities	$ 107,563	$ 127,238
Capital expenditures	(8,718)	(8,273)
Free cash flow	$ 98,845	$ 118,965
Net cash used in investing activities	$ (63,718)	$ (106,529)
Net cash used in financing activities	$ (18,219)	$ (16,845)

PYLARIFY

Supplemental Information

PYLARIFY Offers Clear Clinical Value to Patients and Healthcare Providers

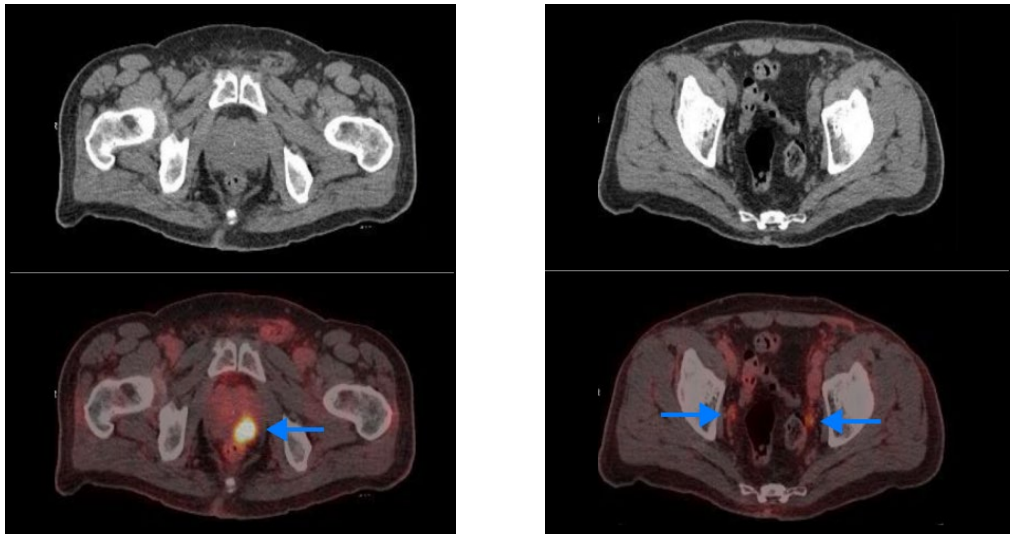
Change in Intended Patient Management[1-3]

In PYLARIFY's Phase 3 pivotal study, nearly two out of three patients in the study with BCR who received PYLARIFY after negative or uninformative conventional imaging had a change in intended prostate cancer treatment

Note: It is not known if changes in intended patient management lead to improved outcomes for patients

99%

PYLARIFY's change in intended patient management is based on 99% of enrolled patients in our CONDOR study



Courtesy (with permission) from Gary Ulaner, MD, PhD, FACNM, Hoag Family Cancer Institute

Study Design

CONDOR was a multicenter, phase 3 trial of 208 patients with suspected recurrent or metastatic prostate cancer with negative or equivocal results using standard imaging. The primary endpoint was CLR; the key secondary endpoint was the percentage of patients with a change in intended PC treatment plan. CLR is a measure of positive predictive value enhanced with precise anatomic location of the site of disease. CLR is based on anatomic lesion matching, or co-localization, of lesions identified by PYLARIFY® (piflufolastat F 18) injection and lesions identified by the standard of truth.[3]*

*Change in intended prostate cancer treatment plan was a secondary endpoint in CONDOR. Future studies ll be necessary to demonstrate whether PYLARIFY® PET/CT-directed changed in intended patient management lead to improved outcomes for patients with prostate cancer.[1]

1. Data on file, Lantheus. 2. PYLARIFY® [package insert]. North Billerica, MA: Progenics Pharmaceuticals, Inc., a Lantheus company. 3. Morris MJ, Rowe SP, Gorin MA, et al. Diagnostic performance of ^{18}F-DCFPyL-PET/CT in men with biochemically recurrent prostate cancer: results from the CONDOR phase III, multicenter study. *Clin Cancer Res.* 2021 July 01;27(13):3674-3682. doi:10.1158/1078-0432.CCR-20-4573.

PYLARIFY® Piflufolastat F 18 Injection

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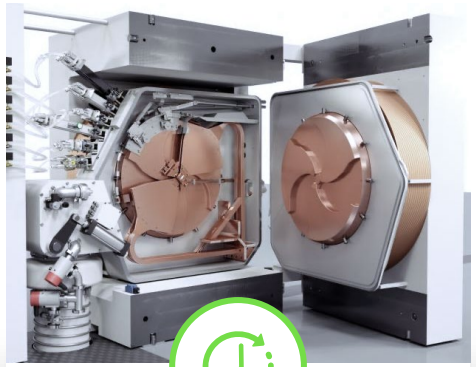
Patient Treatment Logistics Require Real-Time Delivery of Doses

PYLARIFY Synthesis, Distribution and Utilization



F18 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

PYLARIFY Batch Manufacturing Process Can Produce Ample Supply to Meet the Needs of this Sizeable Patient Population

PYLARIFY MIRROR Study

Phase 4 Study in Favorable Intermediate Risk (FIR) Prostate Cancer

Study Objective: Determine whether PYLARIFY PSMA PET imaging can detect the presence or absence of additional prostate cancer lesions in patients with FIR prostate cancer, as well as how it may change the patient's intended management (NCT06074510)

Primary Endpoint

Detection rate of intraprostatic ISUP grade ≥3 lesion(s) as confirmed by pathology; or the presence of extra-prostatic extension, seminal vesicle invasion, regional lymph node involvement, distant metastases as assessed by central readers

Secondary Endpoints

- Change in intended clinical management
- True detection rate
- Correct localization rate
- Sensitivity
- Specificity
- Positive Predictive Value
- Negative Predictive Value
- Safety

Day -30 to Day 1

Screening and baseline procedures

→ **Pre-PYLARIFY Intended Clin Management questionnaire**

Day 1

Dosing of PYLARIFY at 9mCi
t=0

Whole body PET/CT PET or MRI scan
t=1-2 hours

AE assessment

By Day 30

→ **Post-PYLARIFY Intended Clin Management questionnaire**

By Day 90

→ **Subjects scheduled for R/P with PLND:**
- Local histology +/–
- Confirmatory imaging

Subjects NOT scheduled for R/P with ≥1 lesion(s) on PYLARIFY PET:
- Verification of suspected lesion(s): confirmatory imaging and/or biopsy

Patient follow-up for 12 months post-PYLARIFY dosing

→ **All subjects:**
- PSA monitoring
- Post-PYLARIFY medical management questionnaire at 6 and 12 months
- Collect standard of care imaging and/or local histopathology as clinically indicated

Phase 4
n = 274

Population:
Newly diagnosed Favorable Intermediate Risk Prostate Cancer confirmed by standard of care

See appendix for definition of abbreviated terms.

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PYLARIFY® Piflufolastat F 18 Injection

Early detection of recurrent prostate cancer using ^{18}F-DCFPyL PET/CT in patients with minimal PSA levels

Ida Sonni[1,2], Nicholas G. Nickols[3,4], Derace Schaffer[5], Karl Sjöstrand[5], Louis Montagut[5], Aseem Anand[5], Gholam R. Berenji[1,2], Matthew B. Rettig[6,7,8]

1. Department of Radiological Sciences, University of California, Los Angeles, CA, USA; 2. Department of Nuclear Medicine, VA Greater Los Angeles Healthcare System, Los Angeles, CA, USA; 3. Department of Radiation Oncology, University of California-Los Angeles, Los Angeles, CA, USA; 4. Department of Radiation Oncology, VA Greater Los Angeles Healthcare System, Los Angeles, CA, USA; 5. Lantheus, Bedford, MA, USA; 6. Department of Hematology-Oncology, VA Greater Los Angeles Healthcare System, Los Angeles, CA, USA; 7. Department of Medicine, University of California-Los Angeles, Los Angeles, CA, USA; 7. Department of Urology, University of California-Los Angeles, Los Angeles, CA, USA

Background / Aim

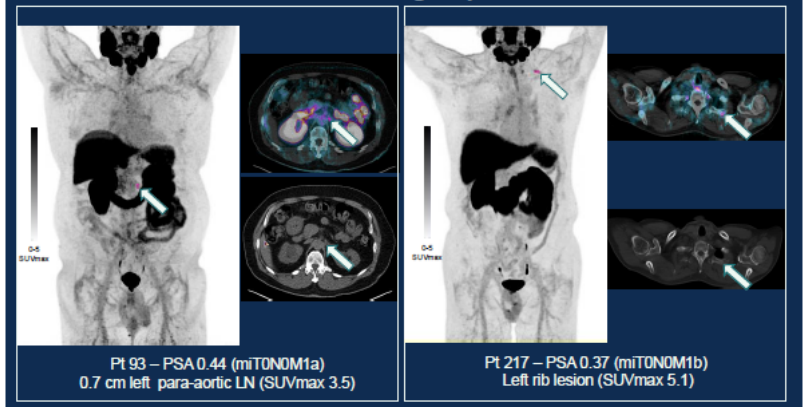
- PSMA PET imaging has shown to be highly sensitive and specific for detecting prostate cancer (PCa) in the setting of **biochemical recurrence** (**BCR**).
- Following definitive treatment, **conventional imaging** (e.g. CT and bone scans) have limited ability to localize recurrent disease in patients with minimally detectable serum PSA levels, potentially delaying diagnosis and initiation of curative treatments.
- There is growing interest in using **PSMA PET/CT** for **detecting and localizing BCR** in patients with **low PSA levels** (<0.5 ng/ml).
- There is limited literature on the detection rates of different PSMA PET radiotracers in this setting.

➢ **THE AIM** of this study was to investigate the ***detection rates of 18F-DCFPyL in patients with BCR from PCa showing minimally detectable serum PSA levels.***

Methods

- This is a pooled retrospective analysis including patients from investigator-initiated trials at West Los Angeles Veterans Affairs and the phase III CONDOR clinical trial with serum PSA levels ≤ 0.5 ng/ml.
- Patients who underwent ***18F-DCFPyL PET/CT*** for rising PSA levels after definitive treatment (BCR) were included in this analysis and categorized in two groups, based on the serum PSA levels: *low PSA* (0.2≤0.5 ng/ml) and *ultra-low PSA* (0<0.2 ng/ml).
- 18F-DCFPyL PET/CT reads were assisted by automated deep learning enabled *Prostate Cancer Molecular Imaging Standardized Evaluation* (***aPROMISE***) platform, and results were verified by an experienced and independent nuclear medicine physician.
- **Detection rate** was calculated and defined as the number of patients with positive PSMA lesions relative to total number of patients.

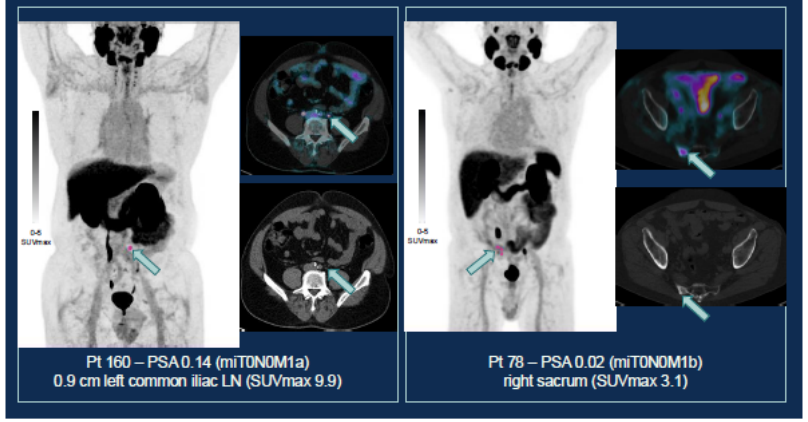
Low PSA group



Pt 93 – PSA 0.44 (miT0N0M1a)
0.7 cm left para-aortic LN (SUVmax 3.5)

Pt 217 – PSA 0.37 (miT0N0M1b)
Left rib lesion (SUVmax 5.1)

Ultra-low PSA group



Pt 160 – PSA 0.14 (miT0N0M1a)
0.9 cm left common iliac LN (SUVmax 9.9)

Pt 78 – PSA 0.02 (miT0N0M1b)
right sacrum (SUVmax 3.1)

Results

A total of 129 patients were identified and included in the analysis.
- The **low PSA group** (0.2 ≤ 0.5 ng/ml) included 93 patients.
- The **ultra-low PSA group** (0 < 0.2 ng/ml) included 36 patients.

Detection rate for the low-PSA group was 51% and for the ultra-low PSA group and was 36%.

	Ultra-low PSA: 0 < 0.2 ng/ml (n=36)	Low PSA: 0.2≤0.5 ng/ml (n=93)
Total Detection Rate	**36% (n=13/36)**	**51% (n=47/93)**
Prostate Bed	8% (3)	4% (4)
Lymph Node Only	14% (5)	31% (29)
Lymph Node and Bone	33% (12)	42% (39)
Bone Only	22% (8)	15% (14)
Visceral (Lung or Liver)	3% (1)	11% (10)
Total SUVmean	3.8	4.2
Total SUVmax	10.9	12.4
Total disease volume (mean)	4.9 ml	1.9 ml

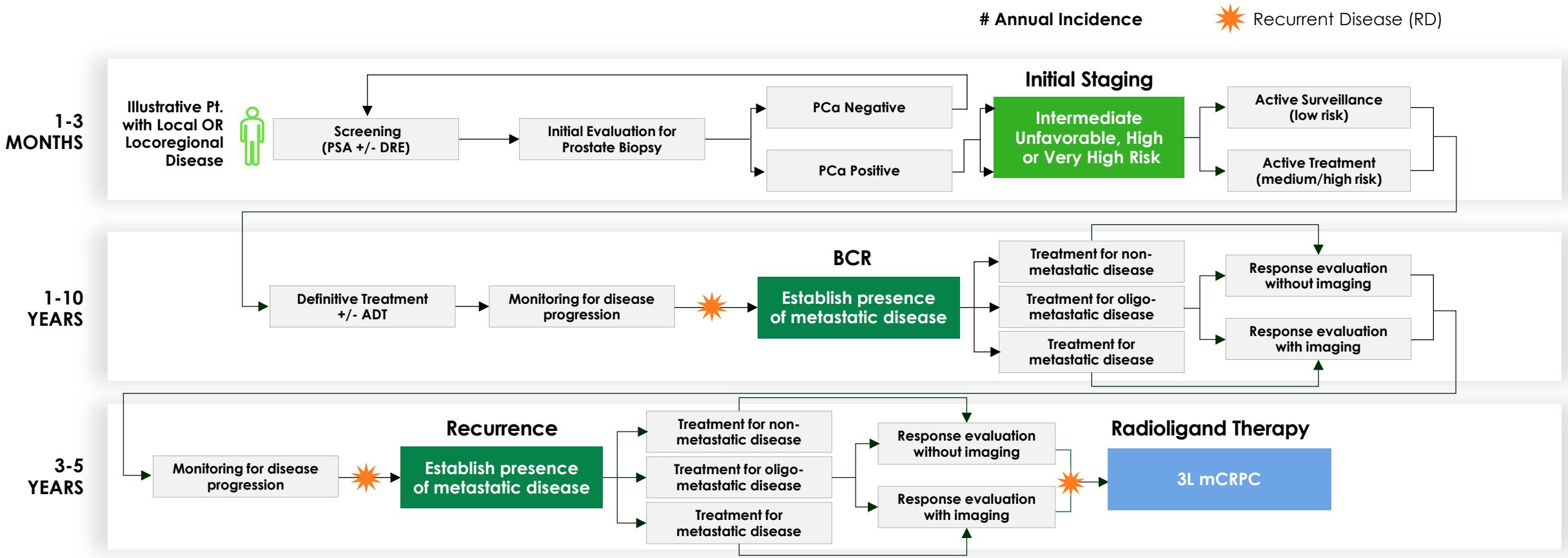
Conclusions

- **18F-DCFPyL PET/CT** demonstrates a **significant detection rate** for **recurrent prostate cancer** in patients with **minimally detectable PSA levels.**
- Our findings highlight the potential of 18F-DCFPyL PET/CT in the **early identification of metastatic disease**.
- Current thresholds for initiating PSMA PET/CT imaging in patients with BCR may need reconsideration.
- Further studies are necessary to refine guidelines and assess the cost-effectiveness of incorporating PSMA imaging at very low PSA levels.

Presented at ASCO GU 2025 in San Francisco, February 2025.

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

PSMA PET Imaging Current Addressable U.S. Market is ~525K Annual Scans or $2.5B+



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

*Market research interviews, survey, and analysis, Wenzel 2021 Prostate, Nezolosky 2018 *J. Clin. Oncol.,* Agrawal 2020 JAMA; 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 one10: e0139440. Based on: CDC.gov, SEER Database, NCCN.org and Axiom Primary and Secondary Market Research and Analysis, validated by Bohm Epidemiology 2020; Global Data 3rd line treatment for metastatic castration-resistant prostate cancer ("mCRPC"), Lantheus primary market research informing imaging procedures performed during radioligand treatment.

1. Lantheus market research and analysis with ordering physicians, NCCN, ACS, UpToDate, SEER.

LANTHEUS

PYLARIFY® Piflufolastat F 18 Injection

Geographically Diverse, Multi-Channel PMF Network Provides Sustained Supply and Reliability

PYLARIFY DELIVERS

Best-in-Class Patient & Customer Experience

- **Continue to expand our manufacturing capacity to ensure PSMA PET with PYLARIFY is *the imaging agent of choice in prostate cancer***
  Working with our manufacturing partners to expand delivery windows
- **Additional PMFs provide geographic breadth, out-the-door time flexibility and added optionality to our existing network**
  PMF partners include both commercial and academic partners
- **Operational enhancements, such as adding additional synthesis boxes, enable us to serve customers "on-time-in-full" at a rate of 98%+**
  Demonstrates our operational excellence that we strive to deliver to all our customers

PYLARIFY Manufacturing Supported by Sizeable U.S. PMF Network –
U.S. cyclotron network already supports 2+ million FDG doses on an annual basis

Significant Capacity per PMF

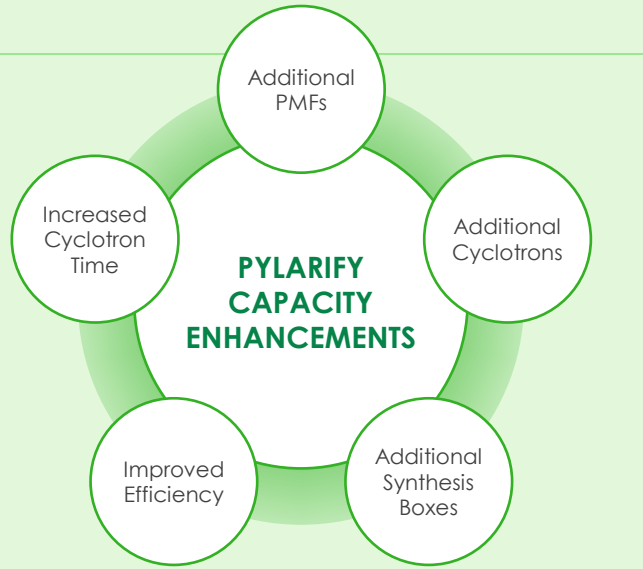
PMFs have already demonstrated the ability to produce:

40+ PYLARIFY doses per batch

Some PMFs producing:
3 batches per day; 5 days per week

90%+ of covered lives have access to PYLARIFY[2]

Contracted with 100% of our targeted academic centers[2]



PMF, PET manufacturing facility.
1. IMV 2022 PET Imaging Market Summary Report; 2. Data on file.

LANTHEUS

PYLARIFY® Piflufolastat F 18 Injection

DEFINITY

Supplemental Information

DEFINITY® is the #1 Utilized Ultrasound Enhancing Agent in the U.S.[1]

DEFINITY® is a trusted UEA with more than 20 years in the market

IN THE U.S.

4 **OUT OF** 5

contrast-enhanced echoes are performed with DEFINITY®

DEFINITY® HAS BEEN INCLUDED IN MORE THAN

3200

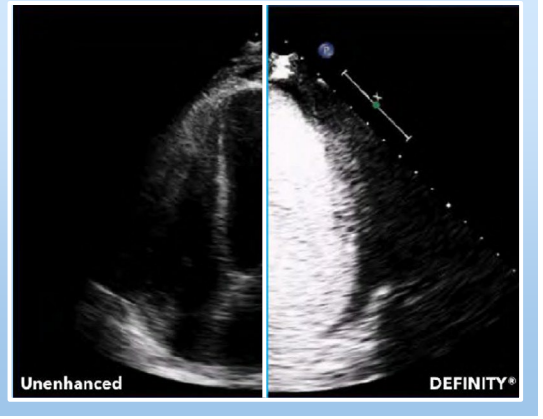
peer-reviewed publications

MORE THAN

21 million

studies performed

DEFINITY® (Perflutren Lipid Microsphere) is a diagnostic ultrasound enhancing contrast agent used to opacify the left ventricular chamber and to improves the delineation of the left ventricular endocardial border in adult and pediatric patients with suboptimal echocardiograms[2]



1. Data on file, Lantheus. 2. DEFINITY® [package insert]. N. Billerica, MA: Lantheus, Inc.

LANTHEUS

DEFINITY® VIAL FOR (Perflutren Lipid Microsphere) INJECTABLE SUSPENSION

DEFINITY® Reduced the Need for Additional Cardiac Imaging and Decreased the Length of a Hospital Stay[1]

90%

DEFINITY® converted 90% of suboptimal echocardiograms to adequate studies

33%

33% of patients avoided additional diagnostic procedures

36%

36% of patients experienced a significant change in medical-management avoiding additional, procedures or both

1. Kurt M, Shaikh KA, Peterson L, et al. Impact of contrast echocardiography on evaluation of ventricular function and clinical management in a large prospective cohort. *J Am Coll Cardiol.* 2009;53(9):802-810.

LANTHEUS

DEFINITY® VIAL FOR (Perflutren Lipid Microsphere) INJECTABLE SUSPENSION

Development Pipeline

Supplemental Information

Life Molecular Imaging*

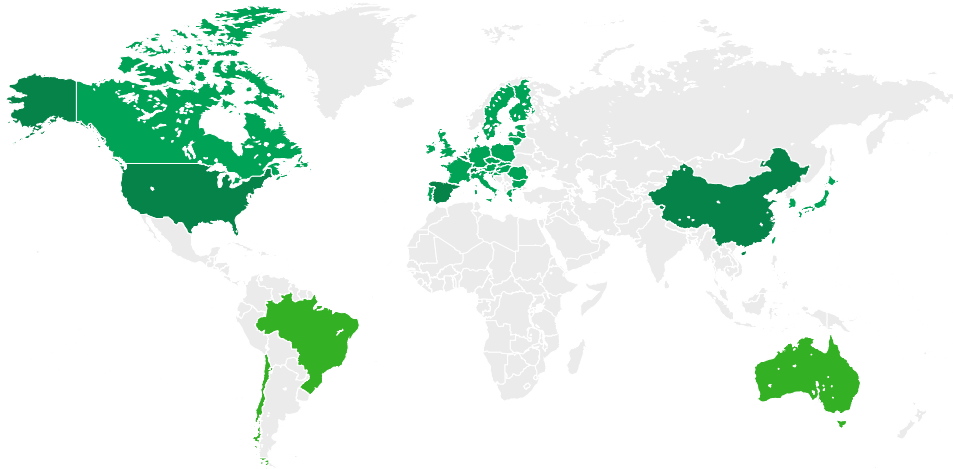
International, commercial-stage radiopharmaceutical company, with globally-approved product (Neuraceq), commercial infrastructure, and promising pipeline/R&D expertise

- **Pipeline of radiodiagnostics**
- **US AD commercial presence**
- **Advanced, complementary manufacturing processes**
- **Established clinical infrastructure in Europe**
- **Talented R&D and commercial team**

2012	2014	2018	2024	2025
Spin-out from Bayer, becomes Piramal Enterprises Ltd	NEURACEQ® approved (US & EU)	LMI acquired by Life Healthcare	June 2024: LMI out-licenses global RM2 rights to Lantheus	January 2025: Lantheus announced plans to acquire LMI

NeuraCeq® florbetaben F18 injection | **A Global Brand[1]**

A cornerstone for growth and market leadership in neuroimaging with favorable relationships with manufacturers, hospitals, imaging centers, and neurologists across key markets

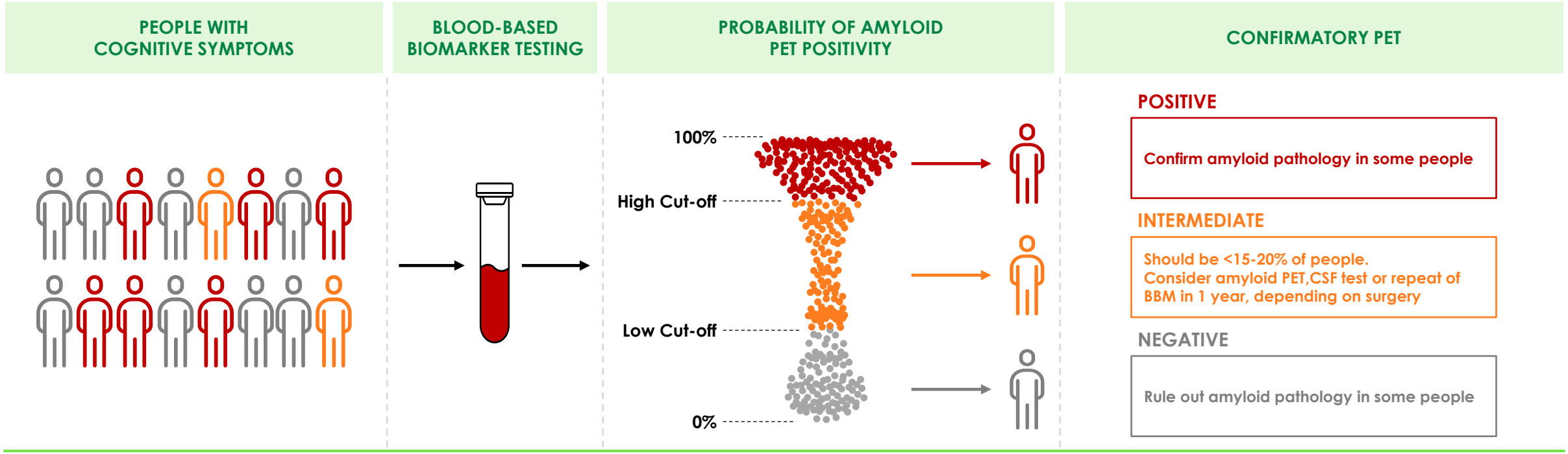


*Acquisition subject to customary closing conditions and anticipated to close in 2025.

1. Neuraceq® is commercially approved in the United States, Canada, Europe, the UK, Switzerland, China, Japan, South Korea and Taiwan. Neuraceq is supplied to Australia on a named patient basis; Chile according to local legislation and Brazil by simplified notification scheme.

LANTHEUS

A Two Cut-off Approach for Blood Tests of Amyloid Pathology



2 cut-off approach for blood biomarker tests of amyloid pathology in people with cognitive symptoms

This approach leads to three categories of results: Positive, Intermediate, and Negative

Expect **15–20%** of people are classified as having **intermediate results**

Interpretation of positive & negative results also **depends on the clinical suspicion of Alzheimer disease**

CSF=cerebro-spinal fluid

Schindler, et al. Nat Rev Neurol 20, 426–439 (2024).

LANTHEUS

2024 New Criteria for Diagnosis and Staging of Alzheimer's Disease

Amyloid plaque Imaging and NAV-4694

Categorization of fluid analyte and imaging biomarkers[1]

BIOMARKER CATEGORY	CSF OR PLASMA ANALYTES	IMAGING
Core Biomarkers		
Core 1		
A (Aβ proteinopathy)	Aβ 42	Amyloid PET
T_1 (phosphorylated and secreted AD tau)	p-tau217, p-tau181, p-tau231	
Core 2		
T_2 (AD tau proteinopathy)	MTBR-tau243, other phosphorylated tau forms (e.g., p-tau205), non-phosphorylated mid-region tau fragments[a]	Tau PET
Biomarkers of non-specific processes involved in AD pathophysiology		
N (injury, dysfunction, or degeneration of neuropil)	NfL	Anatomic MRI, FDG PET
I (inflammation) Astrocytic activation	GFAP	
Biomarkers of non-AD copathology		
V vascular brain injury		Infarction on MRI or CT, WMH
S α-synuclein	αSyn-SAA	

Biological staging[1]

	INITIAL-STAGE BIOMARKERS (A)	EARLY-STAGE BIOMARKERS (B)	INTERMEDIATE-STAGE BIOMARKERS (C)	ADVANCED-STAGE BIOMARKERS (D)
PET	Amyloid PET $A+T_{2-}$	Tau PET medial temporal region $A+T_{2MTL+}$	Tau PET moderate neocortical uptake $A+T_{2MOD+}$	Tau PET high neocortical uptake $A+T_{2HIGH+}$
Core 1 fluid	CSF Aβ42/40, p-tau181/Aβ42, t-tau/Aβ42, and accurate Core 1 plasma assays can establish that an individual is in biological stage A or higher but cannot discriminate between PET stages A–D at present.			

Biomarker-driven framework classifies individuals in an unbiased symptom-agnostic fashion based on key AD-pathophysiological changes successfully facilitated AD drug development and approval[2]

- New criteria recommends that AD is defined by positivity of amyloid pathology in the brain revealed with core 1 biomarkers
- Amyloid PET not only serve screening for patient selection in AD clinical trials, but also for the eligibility to receive the FDA approved AD therapeutics

1. Olsen, L, Singh, A, Rees, D, et al.(2024). *Transforming Alzheimer's disease drug development with biomarkers and digital health technologies: The path to 2025 and beyond*. Alzheimer's & Dementia. https://doi.org/10.1002/alz.13859. 2. Jack et al., 2024, A&D.

LANTHEUS

Longitudinal multicenter head-to-head harmonization of tau-PET tracers: an overview of the HEAD study

Firoza Z. Lussier[1], Guilherme Povala[1], Guilherme Bauer-Negrini[1], Livia Silva do Amaral[1], Pamela Lukasewicz Ferreira[1], Bruna Bellaver[1], Juli Cehula[1], Joseph Masdeu[2], Dana L. Tudorascu[1], David Soleimani-Meigooni[3], Juan Fortea[4], Val Lowe[5], Hwamee Oh[6], Belen Pascual[2], Brian A. Gordon[7], Pedro Rosa-Neto[8], Suzanne Baker[9], Tharick A. Pascoal[1]

[1]University of Pittsburgh, Pittsburgh, PA, USA; [2]Houston Methodist Research Institute, Houston, TX, USA; [3]University of California San Francisco, Memory and Aging Center, San Francisco, CA, USA; [4]Hospital de la Santa Creu i Sant Pau, Sant Pau Memory Unit, Barcelona, Spain; [5]Mayo Clinic, Rochester, MN, USA; [6]Brown University, Providence, RI, USA; [7]Washington University in St. Louis, St. Louis, MO, USA; [8]Translational Neuroimaging Laboratory, McGill University Research Centre for Studies in Aging, Douglas Research Institute, Montréal, QC, Canada; [9]Lawrence Berkeley National Laboratory, Berkeley, CA, USA.

Background & Aims

Standardizing tau pathology quantification in vivo is challenged by differences in binding characteristics between tau-PET tracers. The HEAD study aims to generate a **leading, longitudinal head-to-head dataset of MK-6240, Flortaucipir, RO948, and PI-2620 tau-PET**. This dataset will be used to compare tau-PET tracers' cross-sectional and longitudinal performance in tracking tau accumulation and conduct head-to-head comparison of associations of plasma biomarker assays with multiple tau-PET tracer estimates. The principal aim of the HEAD study is to develop a **standardized tau-PET harmonization scale** to improve the interpretation and integration of findings from research studies and drug trials utilizing these tracers, and develop tools to increase accessibility of our harmonization scale. Here, we provide an **overview of the HEAD study design** and an **update on the progress of the HEAD study**, including a description of the clinical characteristics of the cohort and currently available data.

Study Design & Methods

The HEAD study is a **multicentric** study – **9 performance sites** in the US, Canada, and Spain are actively involved, with the **University of Pittsburgh** being the coordinating site. Across all sites, the HEAD study set out to recruit **620 individuals** between 18-28 or 50-90 years of age (study groups: **Young, CU, MCI, AD**). The HEAD study protocol involves clinical & neuropsychological testing harmonized to ADRCs (**NACC Uniform Data Set**), blood collection for the banking of plasma, serum, buffy coat, and whole blood following **NCRAD** protocols, and **MRI** acquisition based on **ADNI4** acquisition protocols. All participants undergo **Amyloid-PET** with **PiB, NAV4694, Florbetaben,** or **Fluternetamol** and **head-to-head tau-PET** with at least two tau-PET, including **MK-6240** (90-110 mins), **Flortaucipir** (80-100 mins), **PI-2620** (45-75 mins), and **RO948** (70-90 mins). A subset of participants will undergo tau-PET with all 4 tracers head-to-head. PET data is reconstructed to maximize cross-scanner harmonization and is processed uniformly similarly to ADNI4 PET. The Laboratory of Neuroimaging (**LONI**) provides a centralized database for imaging and neuropsychological data. The National Centralized Repository for ADRD (**NCRAD**) provides a biorepository for all blood samples. All study procedures are **repeated at 18-month follow-up** to generate longitudinal data. Study progress and data collection is monitored by the University of Pittsburgh study team.

The HEAD Study Cohort

Over the past **26 months** (November 2022 – January 2025), **N=660** study participants are actively enrolled into the HEAD across all 9 sites, exceeding our aim at **106% of our proposed enrollment target**. Mean age of older adults is **72.1 years**, female distribution is **54%**, and **24%** of individuals come from underrepresented groups (race/ethnicity/rurality). Group distribution of enrolled participants is shown in *Fig.1* – **40%** of participants are **cognitively impaired** (MCI, AD). Measure collection is summarized below, with **over 88%** of enrolled participants having completed all imaging procedures at baseline, and **N=535 (86%)** of participants having completed the initial timepoint (TP). Thus far, **1,441 total head-to-head tau-PET scans have been acquired** in the HEAD study, using MK-6240, Flortaucipir, PI-2620, and RO948 (mean acquisition window=31.6 days). A growing subset currently composed of **101** individuals have undergone **four head-to-head tau-PET**. Two representative cases (CU, AD) of head-to-head tau-PET with 4 tracers are shown in *Fig.2*. Clinical characteristics of the HEAD cohort including APOEε4 carriership, plasma biomarkers distribution (Aβ42/40 ratio/NfL/GFAP/PTau217), consensus visual rating of amyloid-PET, and Braak stage classification are summarized in *Fig.3*.

Figure 1: Enrollment and Measure Collection in HEAD

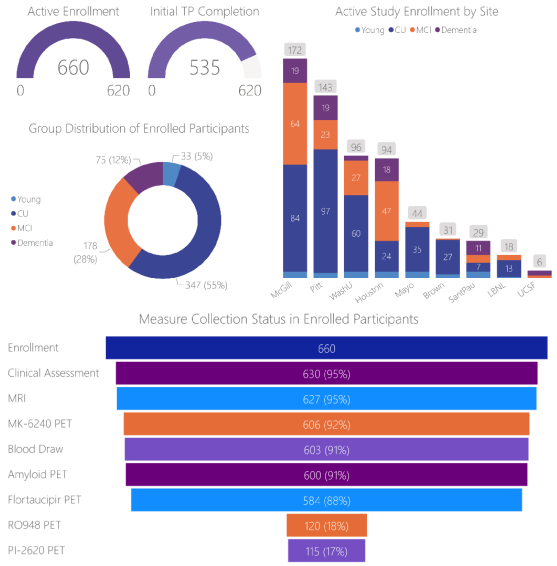
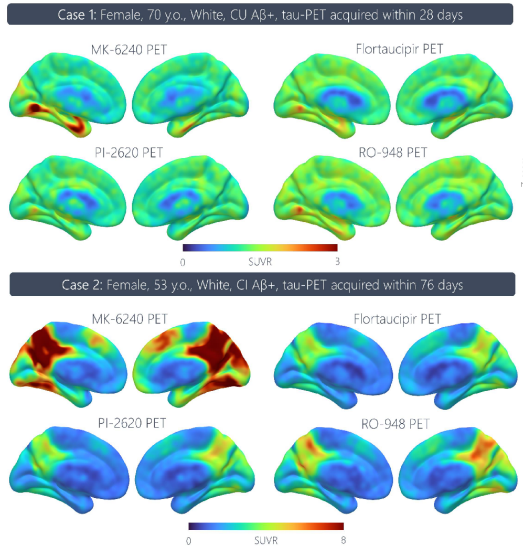


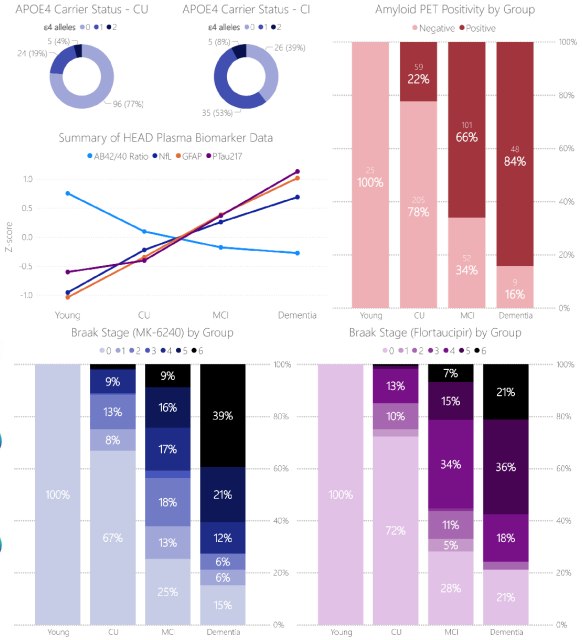
Figure 2: Representative Cases with 4 Head-to-Head Tau-PET



Study Outcomes

The HEAD study is **actively ongoing** at all performance sites. Principal outcomes of the HEAD study is the **Unit tau-PET harmonization scale and Unit Ecosystem Tool,** which are actively being disseminated to the scientific community. Plasma **biomarker analysis** in the HEAD study is ongoing, and **longitudinal (18-month follow-up)** data collection has been initiated and is expected to be completed by **mid-2026**. The HEAD study cohort represents the largest head-to-head tau-PET dataset to date and represents a continued effort in the optimization of AD imaging markers.

Figure 3: Clinical Characteristics of the HEAD Study Cohort



Results and findings being generated from HEAD study data will provide novel and crucial guidance on the use of tau-PET tracers in research, clinical trials, and prospectively in clinical practice.

Acknowledgement:
The HEAD cohort would not have been possible without the time and commitment provided by our research participants and their partners. We would also like to thank every performance site's investigators and dedicated study members for all their contributions in the implementation, data collection, and findings in the HEAD study.

HEAD STUDY
head-study.info

Funding: NIA 5 R01 AG073267
National Institute on Aging
ClinicalTrials.gov ID: NCT05361382

Participating Sites: UCSF Memory and Aging Center; Berkeley Lab; Institut de Recerca Sant Pau; Mayo Clinic; McGill University; Washington University in St. Louis; Houston Methodist; Brown

Biorepository & Databasing: NCRAD; LONI

Partners: Avid Radiopharmaceuticals; Roche; Lantheus; Life Molecular Imaging

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Lussier FZ, Povala G, Bauer-Negrini G, et al. Longitudinal multicenter head-to-head harmonization of tau-PET tracers: an overview of the HEAD study cohort. *Alzheimers Dement*. 2025;20(Suppl 9):e094013. Published 2025 Jan 9. doi:10.1002/alz.094013.

Head-to-head trajectories of tau PET and plasma p-tau217 as a function of Aβ

Bruna Bellaver[1*], Guilherme Povala[1*], Pamela C.L. Ferreira[1], Guilherme Bauer-Negrini[1], Firoza Z. Lussier[1], Livia Amaral[1], Carolina Soares[1], Andreia Rocha[1], Joseph Masdeu[2], Dana Tudorascu[1], David Soleimani-Meigooni[3], Juan Fortea[4], Val Lowe[5], Hwamee Oh[6], Belen Pascual[2], Brian Gordon[7], Pedro Rosa-Neto[8], Suzanne Baker[9], Tharick A. Pascoal[1,10].

[1]Department of Psychiatry, University of Pittsburgh School of Medicine. [2]Houston Methodist Research Institute, Department of Neurology. [3]Mayo Clinic, Department of Radiology. [4]Hospital de la Santa Creu i Sant Pau, Sant Pau Memory Unit, Department of Neurology, Barcelona, Spain. [5]University of California San Francisco, Memory and Aging Center. [6]Brown University, Department of Psychiatry and Human Behavior. [7]Washington University in St. Louis, Department of Radiology. [8]Translational Neuroimaging Laboratory, McGill University Research Centre for Studies in Aging, Douglas Research Institute. [9]Lawrence Berkeley National Laboratory, Berkeley. [10]Department of Neurology, University of Pittsburgh School of Medicine. *Authors contributed equally to this work.

Introduction

→ Tau PET tracers present distinct binding characteristics that might influence their trajectories and relationship with other biomarkers along the AD continuum.

In a head-to-head study, we investigated the relationship between the emergence of PET tracers MK6240 and Flortaucipir, and plasma p-tau217 abnormalities as a function of Aβ PET deposition. We further assessed the concordance between tau PET and plasma p-tau217 positivity.

Methods

353 individuals from the HEAD cohort:

19 cognitively unimpaired young (<25 years old)

186 cognitively unimpaired elderly

148 cognitively impaired

- Aβ PET
- Tau PET { [^{18}F]MK6240, [^{18}F]Flortaucipir

- P-tau217 (AlzPath)

- Tau PET and plasma p-tau217 trajectories were modeled as functions of Aβ burden (Centiloid scale) using the Lowess method.
- Biomarkers were z-scored using young individuals as anchors.
- Tau PET (Braak I region) and plasma p-tau217 were considered positive/abnormal when surpassing 2.5 z-score.

Results

Trajectories of tau PET tracers and plasma p-tau217 as a function of Aβ

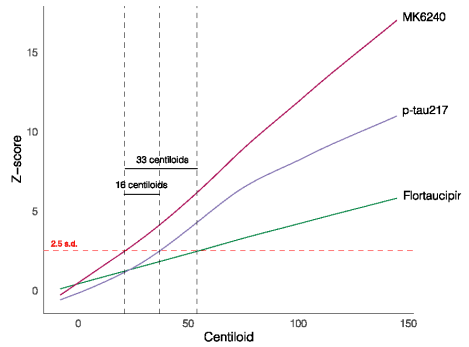

Figure 1. Robust linear regressions show MK6240 (Braak I region), Flortaucipir (Braak 1 region) and plasma p-tau217 increase as a function of Aβ burden (n = 353). Young individuals (n = 19, < 25 years old) were used as anchors to z-scores.

Agreement between plasma p-tau217 and tau PET positivity

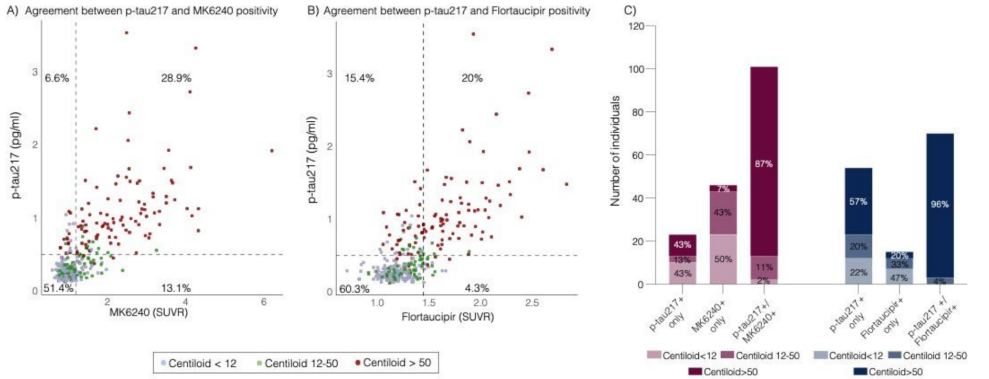

Figure 2. Agreement between plasma p-tau217 and (A) MK6240 or (B) Flortaucipir positivity. The dotted lines represent the cutoff for plasma p-tau217 and tau PET (in Braak 1 region) defined as 2.5 s.d. higher than the mean of young individuals. (C) Number of individuals according to their plasma p-tau217, MK6240 and Flortaucipir status and Centiloid distribution.

Discordant cases of plasma p-tau217 and tau PET positivity

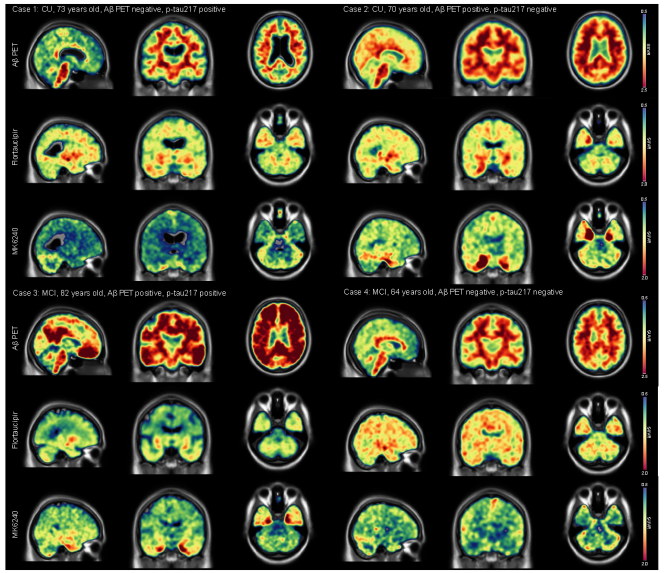

Figure 3. Case 1: cognitively unimpaired (CU), 73 years old plasma p-tau217 positive individual with negative scan for Aβ PET (PIB), Flortaucipir and MK6240. Case 2: CU 70 years old individual plasma p-tau217 negative (0.28 pg/ml measured in duplicate; threshold for positivity = 0.504 pg/ml) with positive Aβ PET (AZD4694), Flortaucipir and MK6240. Case 3: MCI, 82 years old positive for plasma p-tau217, Aβ PET (PIB) and MK6240 but negative for Flortaucipir. Case 4: MCI, 64 years old negative for plasma p-tau217, Aβ PET (AZD4694) and MK6240 but positive for Flortaucipir.

Conclusion

MK6240 becomes abnormal at lower levels of Aβ burden compared to plasma p-tau217 and Flortaucipir. The relatively high prevalence of discordant tau PET positive or plasma p-tau217 positive suggests that some individuals may show tau PET positivity first, while others may exhibit plasma p-tau217 positivity first.

Acknowledgments:

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brb253@pitt.edu
@BellaverBruna

Presented at the 2025 Human Amyloid meeting in Puerto Rico, January 2025.

Expanding Role of F18-NAV-4694 (Flutafuranol F18)

Usage Today[1]

AS A SCREENING TOOL
to detect β-amyloid

Detect the presence of Amyloid pathology

- **13 studies**
- **259 subjects screened for amyloid** as a diagnostic or study inclusion market

Preclinical population

- **1,400 are being screened** in AHEAD study

AS A BIOMARKER
to detect levels of β-amyloid in longitudinal setting and after therapeutic intervention

- **11 studies**
- **2,278 subjects (including AHEAD, ADNI)** where NAV-4694 is used as a biomarker to assess amyloid reduction

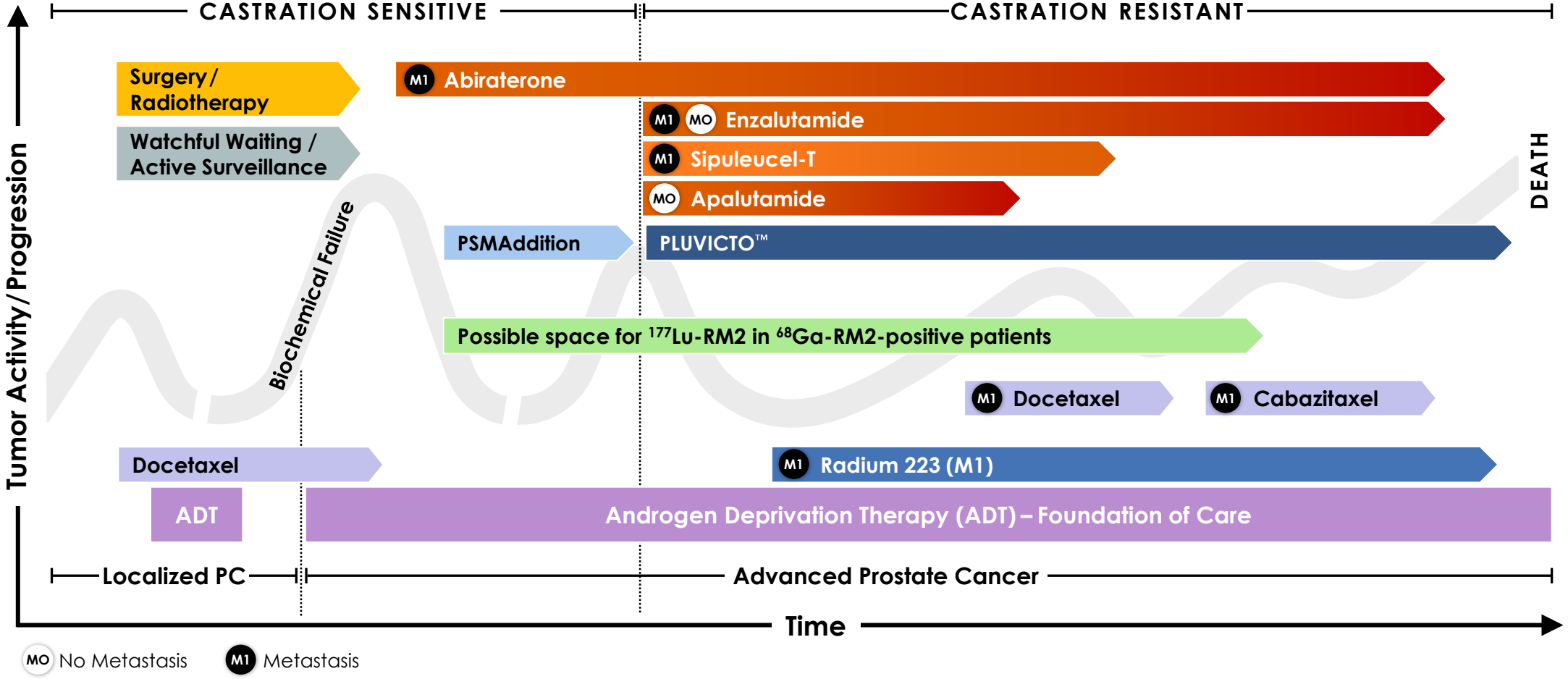
TOTAL NUMBERS RECEIVED
NAV4694

- **6,369 Cumulative Exposures**
- **11 Studies** where NAV-4694 is used together with MK-6240

1. Data on file

LANTHEUS

LNTH-2402: Opportunity to Make an Impact in Prostate Cancer as Therapy



Adapted from Figg WD et al., 2010, *Drug Management of Prostate Cancer*

PLUVICTO™ is currently indicated for the treatment of adult patients with prostate-specific membrane antigen (PSMA)-positive metastatic castration-resistant prostate cancer (mCRPC) who have been treated with androgen receptor (AR) pathway inhibition and taxane-based chemotherapy. On-going developments in CRPC pre-taxane (PSMAFore study) and in mHSPC (PSMAddition study).

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Glossary of Terms

AAV: Adeno-associated virus	**AD:** Alzheimer's Disease	**AE:** adverse event	**ANDA:** Abbreviated New Drug Application
BCR: biochemical recurrence	**CCK2R:** cholecystokinin-2 receptor	**CLR:** correct location rate	**EPS:** earnings per share
FAP: Fibroblast activation protein	**FDA:** Food and Drug Administration	**GEP-NET:** Gastroenteropancreatic neuroendocrine tumors	**GPIB-IIIA:** Glycoprotein IIb/IIIa
GRPR: Gastrin-releasing peptide receptor	**ISUP:** International Society of Urological Pathology	**LRRC15:** Leucine-Rich Repeat-Containing Protein 15	**MAO-B:** Monoamine oxidase B
mHSPC: metastatic hormone-sensitive prostate cancer	**MCI:** mild cognitive impairment	**mCRPC:** metastatic castration-resistant prostrate cancer	**MUC16:** mucin 16
NLGN3: Neuroligin 3	**NPV:** negative predictive value	**OXTR:** oxytocin receptor	**PC:** prostate cancer
PET: positron emission tomography	**PLND:** pelvic lymph node dissection	**PMF:** PET Manufacturing Facility	**PPV:** positive predictive value
PSMA: Prostate specific membrane antigen	**R/P:** radical prostatectomy	**siRNA:** Small interfering Ribonucleic acid	**SSTR:** Somatostatin receptor
SUVR: Standardized Uptake Value Ratio	**TAM:** total addressable market	**TROP2:** Trophoblast cell surface antigen-2	**UEA:** ultrasound enhancing agent

NASDAQ: LNTH

LANTHEUS™

Lantheus Investor Presentation

BUILDING ON OUR FOUNDATION TO
POWER THE FUTURE OF RADIOPHARMACEUTICALS

2025 Truist Securities MedTech Conference

June 17, 2025

FIND. FIGHT. FOLLOW.™