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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2022

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission File Number 001-36569

LANTHEUS HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**35-2318913**
(State or other jurisdiction of incorporation or organization)	**(IRS Employer Identification No.)**
331 Treble Cove Road North Billerica, MA	**01862**
(Address of principal executive offices)	**(Zip Code)**

(978) 671-8001

(Registrant's telephone number, including area code)

Not Applicable

(Former name, former address and former fiscal year, if changed since last report

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value $0.01 per share	LNTH	The Nasdaq Global Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☑	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging Growth Company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined by Rule 12b-2 of the Act) Yes ☐ No ☑

The registrant had 68,634,063 shares of common stock, $0.01 par value, outstanding as of April 22, 2022.

LANTHEUS HOLDINGS, INC.
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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

Lantheus Holdings, Inc.
Condensed Consolidated Balance Sheets
(Unaudited)
(in thousands, except par value)

	March 31, 2022	December 31, 2021
Assets		
Current assets		
Cash and cash equivalents	$ 105,355	$ 98,508
Accounts receivable, net	172,283	89,336
Inventory	34,249	35,129
Other current assets	12,860	12,818
Total current assets	324,747	235,791
Property, plant and equipment, net	116,959	116,772
Intangibles, net	340,204	348,510
Goodwill	61,189	61,189
Deferred tax assets, net	47,868	62,764
Other long-term assets	42,199	38,758
Total assets	$ 933,166	$ 863,784
Liabilities and stockholders' equity		
Current liabilities		
Current portion of long-term debt and other borrowings	$ 12,878	$ 11,642
Accounts payable	22,383	20,787
Accrued expenses and other liabilities	142,396	58,068
Total current liabilities	177,657	90,497
Asset retirement obligations	21,514	20,833
Long-term debt, net and other borrowings	159,369	163,121
Other long-term liabilities	58,776	124,894
Total liabilities	417,316	399,345
Commitments and contingencies (See Note 19)		
Stockholders' equity		
Preferred stock ($0.01 par value, 25,000 shares authorized; no shares issued and outstanding)	—	—
Common stock ($0.01 par value, 250,000 shares authorized; 68,570 and 67,739 shares issued and outstanding, respectively)	686	677
Additional paid-in capital	691,516	685,472
Accumulated deficit	(178,263)	(221,225)
Accumulated other comprehensive income (loss)	1,911	(485)
Total stockholders' equity	515,850	464,439
Total liabilities and stockholders' equity	$ 933,166	$ 863,784

The accompanying notes are an integral part of these condensed consolidated financial statements.

Lantheus Holdings, Inc.
Condensed Consolidated Statements of Operations
(Unaudited)
(in thousands, except per share data)

	Three Months Ended March 31,	
	2022	**2021**
Revenues	$ 208,880	$ 92,509
Cost of goods sold	79,810	51,479
Gross profit	129,070	41,030
Operating expenses		
Sales and marketing	20,354	14,173
General and administrative	37,588	16,138
Research and development	12,203	10,360
Total operating expenses	70,145	40,671
Gain on sale of assets	—	15,263
Operating income	58,925	15,622
Interest expense	1,509	2,718
Gain on extinguishment of debt	—	(889)
Other income	(485)	(549)
Income before income taxes	57,901	14,342
Income tax expense	14,939	5,334
Net income	$ 42,962	$ 9,008
Net income per common share:		
Basic	$ 0.63	$ 0.13
Diluted	$ 0.61	$ 0.13
Weighted-average common shares outstanding:		
Basic	68,008	67,094
Diluted	70,051	67,714

The accompanying notes are an integral part of these condensed consolidated financial statements.

Lantheus Holdings, Inc.
Condensed Consolidated Statements of Comprehensive Income
(Unaudited)
(in thousands)

	Three Months Ended March 31,	
	2022	**2021**
Net income	$ 42,962	$ 9,008
Other comprehensive income:		
Foreign currency translation	140	102
Unrealized gain on cash flow hedges, net of tax	2,256	706
Total other comprehensive income	2,396	808
Comprehensive income	$ 45,358	$ 9,816

The accompanying notes are an integral part of these condensed consolidated financial statements.

Lantheus Holdings, Inc.
Condensed Consolidated Statements of Changes in Stockholders' Equity
(Unaudited)
(in thousands)

	Three Months Ended March 31, 2022					
	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders' Equity
	Shares	Amount				
Balance, January 1, 2022	67,739	$ 677	$ 685,472	$ (221,225)	$ (485)	$ 464,439
Net income	—	—	—	42,962	—	42,962
Other comprehensive income	—	—	—	—	2,396	2,396
Stock option exercises and employee stock plan purchases	296	3	5,931	—	—	5,934
Vesting of restricted stock awards and units	645	7	(7)	—	—	—
Shares withheld to cover taxes	(110)	(1)	(5,503)	—	—	(5,504)
Stock-based compensation	—	—	5,623	—	—	5,623
Balance, March 31, 2022	68,570	$ 686	$ 691,516	$ (178,263)	$ 1,911	$ 515,850

	Three Months Ended March 31, 2021					
	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
Balance, January 1, 2021	66,875	$ 669	$ 665,530	$ (149,946)	$ (2,048)	$ 514,205
Net income	—	—	—	9,008	—	9,008
Other comprehensive income	—	—	—	—	808	808
Stock option exercises and employee stock plan purchases	155	1	2,379	—	—	2,380
Vesting of restricted stock awards and units	489	5	(5)	—	—	—
Shares withheld to cover taxes	(85)	(1)	(1,598)	—	—	(1,599)
Stock-based compensation	—	—	3,317	—	—	3,317
Balance, March 31, 2021	67,434	$ 674	$ 669,623	$ (140,938)	$ (1,240)	$ 528,119

The accompanying notes are an integral part of these condensed consolidated financial statements.

Lantheus Holdings, Inc.
Condensed Consolidated Statements of Cash Flows
(Unaudited)
(in thousands)

	Three Months Ended March 31,	
	2022	**2021**
Operating activities		
Net income	$ 42,962	$ 9,008
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation, amortization and accretion	11,786	8,123
ARO acceleration	293	—
Amortization of debt related costs	246	(61)
Changes in fair value of contingent assets and liabilities	18,400	300
Gain on extinguishment of debt	—	(889)
Provision for excess and obsolete inventory	2,519	1,395
Stock-based compensation	5,623	3,317
Gain on sale of assets	—	(15,263)
Deferred taxes	14,180	4,581
Long-term income tax receivable	(396)	(573)
Long-term income tax payable and other long-term liabilities	779	728
Other	829	655
(Decreases) increases in cash from operating assets and liabilities:		
Accounts receivable	(85,155)	(2,346)
Inventory	(1,634)	3,889
Other current assets	(104)	(536)
Other long-term assets	(533)	—
Accounts payable	1,506	4,110
Accrued expenses and other liabilities	(1,037)	(6,620)
Net cash provided by operating activities	10,264	9,818
Investing activities		
Capital expenditures	(3,190)	(2,520)
Proceeds from sale of assets, net	1,800	15,823
Net cash (used in) provided by investing activities	(1,390)	13,303
Financing activities		
Payments on long-term debt and other borrowings	(2,609)	(35,572)
Proceeds from stock option exercises	5,357	2,043
Proceeds from issuance of common stock	577	337
Payments for minimum statutory tax withholding related to net share settlement of equity awards	(5,504)	(1,599)
Net cash used in financing activities	(2,179)	(34,791)
Effect of foreign exchange rates on cash, cash equivalents and restricted cash	151	(21)
Net increase (decrease) in cash, cash equivalents and restricted cash	6,846	(11,691)
Cash, cash equivalents and restricted cash, beginning of period	100,651	82,694
Cash, cash equivalents and restricted cash, end of period	$ 107,497	$ 71,003

Lantheus Holdings, Inc.
Condensed Consolidated Statements of Cash Flows (Continued)
(Unaudited)
(in thousands)

	Three Months Ended March 31,	
	2022	**2021**
Reconciliation to amounts within the condensed consolidated balance sheets		
Cash and cash equivalents	$ 105,355	$ 68,861
Restricted cash included in other long-term assets	2,142	2,142
Cash, cash equivalents and restricted cash at end of period	$ 107,497	$ 71,003

The accompanying notes are an integral part of these condensed consolidated financial statements.

Lantheus Holdings, Inc.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

Note Regarding Company References and Trademarks

Unless the context otherwise requires, references to the "Company" and "Lantheus" refer to Lantheus Holdings, Inc. and its direct and indirect wholly-owned subsidiaries, references to "Holdings" refer to Lantheus Holdings, Inc. and not to any of its subsidiaries, references to "LMI" refer to Lantheus Medical Imaging, Inc., the direct subsidiary of Holdings, references to "Progenics" refer to Progenics Pharmaceuticals, Inc., a wholly-owned subsidiary of LMI, and references to "EXINI" refer to EXINI Diagnostics AB, a wholly-owned subsidiary of Progenics. Solely for convenience, the Company refers to trademarks, service marks and trade names without the TM, SM and ® symbols. Those references are not intended to indicate, in any way, that the Company will not assert, to the fullest extent permitted under applicable law, its rights to its trademarks, service marks and trade names.

1. Basis of Presentation

The accompanying unaudited condensed consolidated financial statements include the accounts of Holdings and its direct and indirect wholly-owned subsidiaries, including Progenics (as of the Closing Date, as defined below), and have been prepared in accordance with generally accepted accounting principles for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, these condensed consolidated financial statements do not include all of the information and notes required by generally accepted accounting principles in the United States of America ("U.S. GAAP") for complete financial statements. In the opinion of management, all adjustments (consisting of normal and recurring adjustments) considered necessary for a fair statement have been included. The results of operations for the three months ended March 31, 2022 are not necessarily indicative of the results that may be expected for the year ended December 31, 2022 or any future period.

The condensed consolidated balance sheet at December 31, 2021 has been derived from the audited consolidated financial statements at that date but does not include all the information and notes required by U.S. GAAP for complete financial statements. These condensed consolidated financial statements and accompanying notes should be read in conjunction with the consolidated financial statements and notes thereto included in Item 8 of the Company's most recent Annual Report on Form 10-K for the year ended December 31, 2021 filed with the Securities Exchange Commission ("SEC") on February 24, 2022.

Progenics Acquisition

On June 19, 2020 (the "Closing Date"), pursuant to the Amended and Restated Agreement and Plan of Merger, dated as of February 20, 2020 (the "Merger Agreement"), by and among Holdings, Plato Merger Sub, Inc., a wholly-owned subsidiary of Holdings ("Merger Sub"), and Progenics, Holdings completed the acquisition of Progenics by means of a merger of Merger Sub with and into Progenics, with Progenics surviving such merger as a wholly-owned subsidiary of Holdings (the "Progenics Acquisition"). Subsequently, on June 22, 2020, Holdings contributed all of the capital stock of Progenics to LMI, thereby making Progenics an indirect subsidiary of Holdings.

In accordance with the Merger Agreement, at the effective time of the Progenics Acquisition (the "Effective Time"), each share of Progenics common stock, par value $0.0013 per share, issued and outstanding immediately prior to the Effective Time (other than shares of Progenics common stock owned by Holdings, Progenics or any of their wholly-owned subsidiaries) was automatically cancelled and converted into the right to receive (i) 0.31 (the "Exchange Ratio") of a share of Holdings common stock, par value $0.01 per share, and (ii) one contingent value right (a "CVR") tied to the financial performance of PyL (18F-DCFPyL), Progenics' prostate-specific membrane antigen ("PSMA") targeted imaging agent designed to visualize prostate cancer. This agent was approved by the U.S. Food and Drug Administration ("FDA") on May 26, 2021 under the name PYLARIFY (piflufolastat F 18), and the commercial launch of this agent began in June 2021. Each CVR entitles its holder to receive a pro rata share of aggregate cash payments equal to 40% of U.S. net sales generated by PYLARIFY in 2022 and 2023 in excess of $100.0 million and $150.0 million, respectively. In no event will the Company's aggregate payments in respect of the CVRs, together with any other non-stock consideration treated as paid in connection with the Progenics Acquisition, exceed 19.9% of the total consideration the Company pays in the Progenics Acquisition (which the Company currently estimates could be approximately $100.0 million). The Company expects to issue any applicable cash payments related to the CVRs as early as the first quarter of 2023 and the first quarter of 2024. No fractional shares of Holdings common stock were issued in the Progenics Acquisition, and Progenics' former stockholders have received cash in lieu of any fractional shares of Holdings common stock. In addition, in accordance with the Merger Agreement, at the Effective Time, each Progenics stock option with a per share exercise price less than or equal to $4.42 (an "in-the-money Progenics stock option") received in exchange for each such in-the money Progenics stock option: (i) an option to purchase Holdings common stock (each, a "Replacement Stock Option") converted based on the Exchange Ratio, and (ii) a vested or unvested CVR depending on whether the underlying in-the-money Progenics stock option was vested or unvested at the Effective Time. Each Progenics stock option with a per share exercise price greater than $4.42 (an "out-of-the-money Progenics stock option") received in exchange for such out-of-the-money Progenics stock options a Replacement Stock Option converted at an exchange ratio determined based on the average of the

volume weighted average price per share of common stock of Progenics and Lantheus Holdings prior to the Effective Time, which exchange ratio was 0.31, the same as the Exchange Ratio. As a result of the acquisition, Holdings issued 26,844,877 shares of Holdings common stock and 86,630,633 CVRs to former Progenics stockholders and option holders.

2. Summary of Significant Accounting Policies

Recent Accounting Pronouncements

The Company has not adopted any new accounting standards during the three months ended March 31, 2022.

3. Revenue from Contracts with Customers

The following table summarizes revenue by revenue source as follows:

	Three Months Ended March 31,	
Major Products/Service Lines (in thousands)	**2022**	**2021**
Product revenue, net[1]	$ 180,009	$ 87,319
License and royalty revenues[2]	28,871	5,190
Total revenues	$ 208,880	$ 92,509

(1) The Company's principal products include PYLARIFY, DEFINITY and TechneLite and are categorized within product revenue, net. The Company applies the same revenue recognition policies and judgments for all its principal products.

(2) The Company recognized $24.0 million license revenue in the first quarter of 2022 related to an agreement with Novartis Pharma AG. Please refer to Note 19, "Commitments and Contingencies" for further details on the license agreement.

The Company classifies its revenues into three product categories: precision diagnostics, radiopharmaceutical oncology, and strategic partnerships and other revenue. Precision diagnostics includes DEFINITY, TechneLite and other imaging diagnostic products. Radiopharmaceutical oncology consists primarily of PYLARIFY and AZEDRA. Strategic partnerships and other revenue includes strategic partnerships and other arrangements related to other products of the Company, such as royalty revenue from our license of RELISTOR.

On January 31, 2022, the Company entered into a global settlement agreement with Novartis Pharma AG ("Novartis"), Advanced Accelerator Applications USA, Inc. ("AAA"), Endocyte, Inc. ("Endocyte") and their affiliates (the "Novartis Agreement") to settle certain disputes between the parties. Under the Novartis Agreement, Novartis agreed to make a lump sum payment to the Company, as well as to reimburse the Company for certain fees and expenses in connection with the German litigation (please refer to Note 19 "Commitments and Contingencies") and the Company agreed to license certain intellectual property to Novartis. In addition, the Company agreed to supply PYLARIFY for clinical purposes at an arms-length value which will be recorded in the future as product is provided. In accordance with the Company's ASC 606, *Revenue from Contracts with Customers*, assessment, Novartis is considered to be a customer. The Company determined that the $24.0 million constituted a single element which was satisfied on the date of the execution of the Novartis Agreement. The Company determined that the license of intellectual property carried a fair value of $24.0 million. As such, the Company assigned the value to the fair value of the license, which constitutes the entire transaction price and does not require further allocation. The Company determined that the $24.0 million represented the point at which the licensee was able to use and benefit from the license and recognized revenue when the license was granted to Novartis upon execution of the Novartis Agreement. The Company recognized the $24.0 million fee as revenue on its consolidated statement of operations for the quarter ended March 31, 2022. The Company received the $24.0 million payment in April 2022.

Revenue by product category on a net basis is as follows:

(in thousands)	Three Months Ended March 31, 2022	2021
DEFINITY	$ 58,328	$ 55,971
TechneLite	22,605	22,800
Other precision diagnostics	5,265	6,984
Total precision diagnostics	86,198	85,755
PYLARIFY	92,777	—
Other radiopharmaceutical oncology	1,327	1,500
Total radiopharmaceutical oncology	94,104	1,500
Strategic partnerships and other revenue	28,578	5,254
Total revenues	$ 208,880	$ 92,509

The Company's performance obligations are typically part of contracts that have an original expected duration of one year or less. As such, the Company is not disclosing the aggregate amount of the transaction price allocated to performance obligations that are unsatisfied (or partially satisfied) as of the end of the reporting period.

4. Fair Value of Financial Instruments

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In order to increase consistency and comparability of fair value measurements, financial instruments are categorized based on a hierarchy that prioritizes observable and unobservable inputs used to measure fair value into three broad levels, which are described below:

- *Level 1* — Inputs are unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.
- *Level 2* — Inputs include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (i.e., interest rates, yield curves, etc.) and inputs that are derived principally from or corroborated by observable market data by correlation or other means (market corroborated inputs).
- *Level 3* — Unobservable inputs that reflect a Company's estimates about the assumptions that market participants would use in pricing the asset or liability. The Company develops these inputs based on the best information available, including its own data.

The Company's financial assets and liabilities measured at fair value on a recurring basis consist of money market funds, interest rate swaps, a contingent receivable and contingent consideration liabilities. The Company invests excess cash from its operating cash accounts in overnight investments and reflects these amounts in cash and cash equivalents in the condensed consolidated balance sheets at fair value using quoted prices in active markets for identical assets. The fair value of the interest rate swaps is determined based on observable market-based inputs, including interest rate curves and reflects the contractual terms of these instruments, including the period to maturity. Please refer to Note 13, "Derivative Instruments", for further details on the interest rate swaps. The Company recorded a contingent receivable and the contingent consideration liabilities resulting from the Progenics Acquisition at fair value based on inputs that are not observable in the market.

The tables below present information about the Company's assets and liabilities measured at fair value on a recurring basis:

	March 31, 2022			
(in thousands)	Total Fair Value	Level 1	Level 2	Level 3
Assets:				
Money market	$ 38,986	$ 38,986	$ —	$ —
Interest rate swaps	3,387	—	3,387	—
Contingent receivable	8,900	—	—	8,900
Total assets	$ 51,273	$ 38,986	$ 3,387	$ 8,900
Liabilities:				
Contingent consideration liabilities	$ 104,200	$ —	$ —	$ 104,200
Total liabilities	$ 104,200	$ —	$ —	$ 104,200

	December 31, 2021			
(in thousands)	Total Fair Value	Level 1	Level 2	Level 3
Assets:				
Money market	$ 40,140	$ 40,140	$ —	$ —
Interest rate swaps	357	—	357	—
Contingent receivable	9,300	—	—	9,300
Total assets	$ 49,797	$ 40,140	$ 357	$ 9,300
Liabilities:				
Contingent consideration liabilities	$ 86,200	$ —	$ —	$ 86,200
Total liabilities	$ 86,200	$ —	$ —	$ 86,200

During the three months ended March 31, 2022, there were no transfers into or out of Level 3.

As part of the Progenics Acquisition, the Company acquired the right to receive certain future milestone and royalty payments due to Progenics from CytoDyn Inc. related to a prior sale of certain intellectual property. The Company has the right to receive $5.0 million upon regulatory approval and a 5% royalty on net sales of approved products. The Company considers the contingent receivable a Level 3 instrument (one with significant unobservable inputs) in the fair value hierarchy. The estimated fair value was determined based on probability adjusted discounted cash flows that included significant estimates and assumptions pertaining to regulatory events and sales targets. The most significant unobservable inputs are the probabilities of achieving regulatory approval of the development projects and subsequent commercial success.

As part of the Progenics Acquisition, the Company issued CVRs and recorded the fair value as part of consideration transferred. Each CVR entitles its holder to receive a pro rata share of aggregate cash payments equal to 40% of U.S. net sales generated by PYLARIFY in 2022 and 2023 in excess of $100.0 million and $150.0 million, respectively, subject to a maximum cap (which the Company currently estimates could be approximately $100.0 million). Refer to Note 1, "Basis of Presentation" for further details on the CVRs. Additionally, the Company assumed contingent consideration liabilities related to a previous acquisition completed by Progenics in 2013 ("2013 Acquisition"). These contingent consideration liabilities include potential payments of up to $70.0 million if the Company attains certain net sales targets primarily for AZEDRA and 1095 and a $5.0 million 1095 commercialization milestone. Additionally, there is a potential payment of up to $10.0 million related to a 1404 commercialization milestone. The Company's total potential payments related to the 2013 Acquisition are approximately $85.0 million. The Company considers the contingent consideration liabilities relating to the CVRs and the 2013 Acquisition, each a Level 3 instrument (one with significant unobservable inputs) in the fair value hierarchy. The estimated fair value of these was determined based on probability adjusted discounted cash flows and Monte Carlo simulation models that included significant estimates and assumptions pertaining to commercialization events and sales targets. The most significant unobservable inputs with respect to 1095 and 1404 are the probabilities of achieving regulatory approval of those development projects and subsequent commercial success.

Significant changes in any of the probabilities of success, the probabilities as to the periods in which sales targets and milestones will be achieved, discount rates or underlying revenue forecasts would result in a significantly higher or lower fair value measurement. The Company records the contingent consideration liability at fair value with changes in estimated fair values recorded in general and administrative expenses in the condensed consolidated statements of operations. The Company can give no assurance that the actual

amounts paid, if any, in connection with the contingent consideration liabilities, including the CVRs, will be consistent with any recurring fair value estimate of such contingent consideration liabilities.

The following tables summarize quantitative information and assumptions pertaining to the fair value measurement of assets and liabilities using Level 3 inputs at March 31, 2022.

	Fair Value at				Assumptions	
(in thousands)	March 31, 2022	December 31, 2021	Valuation Technique	Unobservable Input	March 31, 2022	December 31, 2021
Contingent receivable:						
Regulatory milestone	$ 2,500	$ 2,500	Probability adjusted discounted cash flow model	Period of expected milestone achievement	2022	2022
				Probability of success	70 %	70 %
				Discount rate	18 %	17 %
Royalties	6,400	6,800	Probability adjusted discounted cash flow model			
				Probability of success	10% - 60%	10% - 60%
				Discount rate	18 %	17 %
Total	$ 8,900	$ 9,300				

	Fair Value at				Assumptions	
(in thousands)	March 31, 2022	December 31, 2021	Valuation Technique	Unobservable Input	March 31, 2022	December 31, 2021
Contingent consideration liability:						
Net sales targets - PYLARIFY (CVRs)	$ 91,700	$ 73,200	Monte Carlo simulation	Period of expected milestone achievement and sales targets	2022 - 2023	2022 - 2023
				Discount rate	18 %	17 %
1095 commercialization milestone	1,800	1,900	Probability adjusted discounted cash flow model			
				Period of expected milestone achievement	2026	2026
				Probability of success	40 %	40 %
				Discount rate	2.1 %	1.3 %
Net sales targets - AZEDRA and 1095	10,700	11,100	Monte Carlo simulation			
				Probability of success and sales targets	40% - 100%	40% - 100%
				Discount rate	17% - 18%	16% - 17%
Total	$ 104,200	$ 86,200				

For those financial instruments with significant Level 3 inputs, the following table summarizes the activities for the periods indicated:

(in thousands)	Financial Assets Three Months Ended March 31,		Financial Liabilities Three Months Ended March 31,	
	2022	2021	2022	2021
Fair value, beginning of period	$ 9,300	$ 11,300	$ 86,200	$ 15,800
Changes in fair value included in net income	(400)	900	18,000	1,200
Fair value, end of period	$ 8,900	$ 12,200	$ 104,200	$ 17,000

The change in fair value of the contingent financial asset and contingent financial liabilities, including the CVRs, resulted in an expense of $18.4 million for the three months ended March 31, 2022 and was primarily due to changes in revenue forecasts, changes in market conditions, an increase in discount rates and the passage of time. The Company expects to issue any applicable cash payments related to the CVRs as early as the first quarter of 2023 and the first quarter of 2024. As of March 31, 2022, the Company has $83.3 million in current liabilities and $8.4 million in long term liabilities to account for the expected payments related to the CVRs.

5. Income Taxes

The Company calculates income taxes at the end of each reporting period based on the estimated effective tax rate for the full year, adjusted for any discrete events which are recorded in the period they occur. Cumulative adjustments to the tax provision are recorded in the reporting period in which a change in the estimated annual effective tax rate is determined. The Company's income tax expense is presented below:

(in thousands)	Three Months Ended March 31,	
	2022	2021
Income tax expense	$ 14,939	$ 5,334

The Company regularly assesses its ability to realize its deferred tax assets. Assessing the realizability of deferred tax assets requires significant management judgment. In determining whether its deferred tax assets are more-likely-than-not realizable, the Company evaluated all available positive and negative evidence, and weighed the objective evidence and expected impact. The Company assessed the need for a valuation allowance against certain state tax credit carryforwards added through the Progenics Acquisition. The Company continues to retain other valuation allowances of $1.2 million against the net deferred tax assets of its U.K. subsidiary, and $2.0 million against the net deferred tax assets of its Sweden subsidiary.

In connection with the Company's acquisition of the medical imaging business from Bristol-Myers Squibb ("BMS") in 2008, the Company recorded a liability for uncertain tax positions related to the acquired business and simultaneously entered into a tax indemnification agreement with BMS under which BMS agreed to indemnify the Company for any payments made to settle those uncertain tax positions with the state taxing authorities. Accordingly, a long-term receivable is recorded to account for the expected value to the Company of future indemnification payments to be paid on behalf of the Company by BMS, net of actual tax benefits received by the Company. The tax indemnification receivable is recorded within other long-term assets.

In accordance with the Company's accounting policy, the change in the tax liabilities, penalties and interest associated with these obligations (net of any offsetting federal or state benefit) is recognized within income tax expense. As these reserves change adjustments are included in income tax expense while the offsetting adjustment is included in other income. Assuming that the remaining receivable from BMS continues to be considered recoverable by the Company, there will be no effect on net income and no net cash outflows related to these liabilities.

The Company finalized the accounting for the Progenics Acquisition for income taxes in the first quarter of 2021 resulting in a reduction of deferred tax assets, primarily related to state research credit carryforwards and an increase to goodwill of $2.6 million.

6. Inventory

Inventory consisted of the following:

(in thousands)	March 31, 2022	December 31, 2021
Raw materials	$ 13,861	$ 15,505
Work in process	13,071	13,042
Finished goods	7,317	6,582
Total inventory	$ 34,249	$ 35,129

Inventory costs associated with products that have not yet received regulatory approval are capitalized if the Company believes there is probable future commercial use of the product and future economic benefit of the asset. If future commercial use of the product is not probable, then inventory costs associated with such product are expensed during the period the costs are incurred. As of December 31, 2021, the Company had $6.1 million of such product costs included in inventories related to DEFINITY that had been manufactured through the Company's in-house manufacturing capabilities. The Company received regulatory approval for the manufacture of DEFINITY at its new in-house manufacturing facility during the first quarter of 2022 and has no inventory pending regulatory approval as of March 31, 2022.

7. Property, Plant and Equipment, Net

Property, plant and equipment, net, consisted of the following:

(in thousands)	March 31, 2022	December 31, 2021
Land	$ 13,450	$ 13,450
Buildings	73,560	73,559
Machinery, equipment and fixtures	84,983	83,608
Computer software	24,766	24,384
Construction in progress	12,186	10,686
	208,945	205,687
Less: accumulated depreciation and amortization	(91,986)	(88,915)
Total property, plant and equipment, net	$ 116,959	$ 116,772

Depreciation and amortization expense related to property, plant and equipment, net, was $3.1 million and $3.0 million for the three months ended March 31, 2022 and 2021, respectively.

8. Accrued Expenses and Other Liabilities and Other Long-Term Liabilities

Accrued expenses and other liabilities and other long-term liabilities are comprised of the following:

(in thousands)	March 31, 2022	December 31, 2021
Compensation and benefits	$ 10,629	$ 22,730
Freight, distribution and operations	26,581	16,157
Accrued rebates, discounts and chargebacks	10,793	10,977
Accrued professional fees	3,596	2,850
Short-term contingent liability (Note 4)	83,300	—
Other	7,497	5,354
Total accrued expenses and other liabilities	$ 142,396	$ 58,068
Operating lease liabilities (Note 16)	$ 16,207	$ 16,546
Long-term contingent liability (Note 4)	20,900	86,200
Other long-term liabilities	21,669	22,148
Total other long-term liabilities	$ 58,776	$ 124,894

9. Sale of Puerto Rico Subsidiary

During the fourth quarter of 2020, the Company entered into a stock purchase agreement (the "SPA") with one of its existing radiopharmacy customers to sell all the stock of its Puerto Rico radiopharmacy subsidiary. The assets were classified as held for sale

and the Company determined that the fair value of the net assets being sold significantly exceeded the carrying value as of December 31, 2020. The transaction was consummated on January 29, 2021.

The purchase price for the stock sale was $18.0 million in cash, including a holdback amount of $1.8 million which the Company received during the first quarter of 2022; the purchase price also included a working capital adjustment. The SPA contains customary representations, warranties and covenants by each of the parties. Subject to certain limitations, the buyer will be indemnified for damages resulting from breaches or inaccuracies of the Company's representations, warranties and covenants in the SPA.

The Company determined that this sale of certain net assets did not constitute a strategic shift that had a major effect on the Company's operations or financial results. As a result, this transaction was not classified as discontinued operations in the Company's accompanying condensed consolidated financial statements.

The following table summarizes the major classes of assets and liabilities sold as of January 29, 2021 (date of sale):

(in thousands)	**January 29, 2021**
Current Assets:	
Cash and cash equivalents	$ 540
Accounts receivable, net	1,959
Inventory	530
Other current assets	65
Total current assets	3,094
Non-Current Assets:	
Property, plant & equipment, net	780
Intangibles, net	96
Other long-term assets	774
Total assets held for sale	$ 4,744
Current Liabilities:	
Accounts payable	$ 185
Accrued expense and other liabilities	369
Total current liabilities	554
Non-Current Liabilities:	
Asset retirement obligations	306
Other long-term liabilities	588
Total liabilities held for sale	$ 1,448

The sale resulted in a pre-tax book gain of $15.3 million, which was recorded within operating income in the condensed consolidated statements of operations for the three months ended March 31, 2021.

10. Asset Retirement Obligations

The Company considers its legal obligation to remediate its facilities upon a decommissioning of its radioactive-related operations as an asset retirement obligation. The Company has production facilities which manufacture and process radioactive materials at its North Billerica, Massachusetts and Somerset, New Jersey sites. As of March 31, 2022, the liability is measured at the present value of the obligation expected to be incurred, of approximately $26.4 million.

The following table provides a summary of the changes in the Company's asset retirement obligations:

(in thousands)	Amount
Balance at January 1, 2022	$ 20,833
Accretion expense	388
Accelerated Costs	293
Balance at March 31, 2022	$ 21,514

In December 2021, the Company evaluated the accretion timeline of an asset group due to a revision in the planned period of use at the North Billerica site. As a result of the accelerated timeline, the Company determined the asset group's present value exceeded the current value recorded as of December 31, 2021. Accordingly, the Company recorded a non-cash adjustment of $5.3 million to anticipate a revision in the end of useful life by the end of 2022.

The Company is required to provide the Massachusetts Department of Public Health and New Jersey Department of Environmental Protection financial assurance demonstrating the Company's ability to fund the decommissioning of its North Billerica, Massachusetts and Somerset, New Jersey production facilities upon closure, although the Company has no current plans to close the facilities. The Company has provided this financial assurance in the form of a $28.2 million surety bond.

11. Intangibles, Net

Intangibles, net, consisted of the following:

			March 31, 2022		
(in thousands)	Useful Lives (in years)	Amortization Method	Cost	Accumulated Amortization	Net
Trademarks	15 - 25	Straight-Line	$ 13,540	$ (11,648)	$ 1,892
Customer relationships	15 - 25	Accelerated	96,962	(94,856)	2,106
Currently marketed products	9 - 15	Straight-Line	275,700	(29,416)	246,284
Licenses	11 - 16	Straight-Line	85,800	(13,441)	72,359
Developed technology	9	Straight-Line	2,400	(477)	1,923
IPR&D	N/A	N/A	15,640	—	15,640
Total			$ 490,042	$ (149,838)	$ 340,204

			December 31, 2021		
(in thousands)	Useful Lives (in years)	Amortization Method	Cost	Accumulated Amortization	Net
Trademarks	15 - 25	Straight-Line	$ 13,540	$ (11,510)	$ 2,030
Customer relationships	15 - 25	Accelerated	96,880	(94,630)	2,250
Currently marketed product	9 - 15	Straight-Line	275,700	(23,345)	252,355
Licenses	11 - 16	Straight-Line	85,800	(11,555)	74,245
Developed technology	9	Straight-Line	2,400	(410)	1,990
IPR&D	N/A	N/A	15,640	—	15,640
Total			$ 489,960	$ (141,450)	$ 348,510

The Company recorded amortization expense for its intangible assets of $8.3 million and $4.7 million for the three months ended March 31, 2022 and 2021, respectively.

In May 2021, PyL (18F-DCFPyL) was approved by the FDA under the name PYLARIFY. Accordingly, the Company reclassified the associated asset of $132.8 million from IPR&D to currently marketed products and commenced amortization of the asset.

The below table summarizes the estimated aggregate amortization expense expected to be recognized on the above intangible assets:

(in thousands)	Amount
Remainder of 2022	$ 24,923
2023	32,634
2024	32,563
2025	32,508
2026	32,497
2027 and thereafter	169,439
Total	$ 324,564

12. Long-Term Debt, Net, and Other Borrowings

As of March 31, 2022, the Company's maturities of principal obligations under its long-term debt and other borrowings are as follows:

(in thousands)	Amount
Remainder of 2022	$ 8,750
2023	15,000
2024	148,750
Total principal outstanding	172,500
Unamortized debt discount	(448)
Unamortized debt issuance costs	(387)
Finance lease liabilities	582
Total	172,247
Less: current portion	(12,878)
Total long-term debt, net and other borrowings	$ 159,369

At March 31, 2022, the Company's interest rate under the five-year secured term loan facility, which matures on June 30, 2024 (the "2019 Term Facility" and the loans thereunder, the "2019 Term Loans") was 2.2%.

On March 31, 2021, the Company voluntarily repaid in full the entire outstanding principal on the original $50.0 million loan agreement (the "Royalty-Backed Loan") with a fund managed by HealthCare Royalty Partners III, L.P. in the amount of $30.9 million, which included a prepayment amount of $0.5 million, and terminated the agreement governing the Royalty-Backed Loan. The Company recorded a gain on extinguishment of debt of $0.9 million related to the write-off of an unamortized debt premium offset by the prepayment amount.

13. Derivative Instruments

The Company uses interest rate swaps to reduce the variability in cash flows associated with a portion of the Company's forecasted interest payments on its variable rate debt. In March 2020, the Company entered into interest rate swap contracts to fix the LIBOR rate on a notional amount of $100.0 million through May 31, 2024. The average fixed LIBOR rate on the interest rate swaps is approximately 0.82%. This agreement involves the receipt of floating rate amounts in exchange for fixed rate interest payments over the life of the agreement without an exchange of the underlying principal amount. The interest rate swaps were designated as cash flow hedges. In accordance with hedge accounting, the interest rate swaps are recorded on the Company's condensed consolidated balance sheets at fair value, and changes in the fair value of the swap agreements are recorded to other comprehensive loss and reclassified to interest expense in the period during which the hedged transaction affected earnings or it will become probable that the forecasted transaction would not occur. At March 31, 2022, accumulated other comprehensive income included $1.0 million of pre-tax deferred gains that are expected to be reclassified to earnings during the next 12 months.

The following table presents the location and fair value amounts of derivative instruments reported in the condensed consolidated balance sheets:

(in thousands)		March 31, 2022	December 31, 2021
Derivatives type	**Classification**		
Assets:			
Interest rate swap	Other long-term assets	$ 3,387	$ 357

14. Accumulated Other Comprehensive Income (Loss)

The components of accumulated other comprehensive income (loss), net of tax of $0.9 million and $0.2 million for the three months ended March 31, 2022 and 2021, respectively, consisted of the following:

(in thousands)	Foreign currency translation	Unrealized loss on cash flow hedges	Accumulated other comprehensive loss
Balance at January 1, 2022	$ (754)	$ 269	$ (485)
Other comprehensive income before reclassifications	140	2,086	2,226
Amounts reclassified to earnings	—	170	170
Balance at March 31, 2022	$ (614)	$ 2,525	$ 1,911
Balance at January 1, 2021	$ (630)	$ (1,418)	$ (2,048)
Other comprehensive loss before reclassifications	102	533	635
Amounts reclassified to earnings	—	173	173
Balance at March 31, 2021	$ (528)	$ (712)	$ (1,240)

15. Stock-Based Compensation

The following table presents stock-based compensation expense recognized in the Company's accompanying condensed consolidated statements of operations:

	Three Months Ended March 31,	
(in thousands)	2022	2021
Cost of goods sold	$ 912	$ 622
Sales and marketing	1,013	350
General and administrative	3,002	1,920
Research and development	696	425
Total stock-based compensation expense	$ 5,623	$ 3,317

16. Leases

Operating and finance lease assets and liabilities are as follows:

(in thousands)	Classification	March 31, 2022	December 31, 2021
Assets			
Operating	Other long-term assets	$ 8,675	$ 8,788
Finance	Property, plant and equipment, net	602	556
Total leased assets		$ 9,277	$ 9,344
Liabilities			
Current			
Operating	Accrued expenses and other liabilities	$ 1,619	$ 1,599
Finance	Current portion of long-term debt and other borrowings	378	392
Noncurrent			
Operating	Other long-term liabilities	16,207	16,546
Finance	Long-term debt, net and other borrowings	204	299
Total leased liabilities		$ 18,408	$ 18,836

17. Net Income Per Common Share

A summary of net income per common share is presented below:

	Three Months Ended March 31,	
(in thousands, except per share amounts)	2022	2021
Net income	$ 42,962	$ 9,008
Basic weighted-average common shares outstanding	68,008	67,094
Effect of dilutive stock options	406	82
Effect of dilutive restricted stock	1,637	538
Diluted weighted-average common shares outstanding	70,051	67,714
Basic income per common share	$ 0.63	$ 0.13
Diluted income per common share	$ 0.61	$ 0.13
Antidilutive securities excluded from diluted net income per common share	377	1,349

18. Other Income

Other income consisted of the following:

	Three Months Ended March 31,	
(in thousands)	2022	2021
Foreign currency (gains) losses	$ (81)	$ 42
Tax indemnification income, net	(396)	(573)
Interest income	(8)	(17)
Other	—	(1)
Total other income	$ (485)	$ (549)

19. Commitments and Contingencies

Legal Proceedings

From time to time, the Company is a party to various legal proceedings arising in the ordinary course of business. In addition, the Company has in the past been, and may in the future be, subject to investigations by governmental and regulatory authorities, which expose it to greater risks associated with litigation, regulatory or other proceedings, as a result of which the Company could be required to pay significant fines or penalties. The costs and outcome of litigation, regulatory or other proceedings cannot be predicted with certainty, and some lawsuits, claims, actions or proceedings may be disposed of unfavorably to the Company and could have a material adverse effect on the Company's results of operations or financial condition. In addition, intellectual property disputes often have a risk of injunctive relief which, if imposed against the Company, could materially and adversely affect its financial condition or results of operations. If a matter is both probable to result in material liability and the amount of loss can be reasonably estimated, the Company estimates and discloses the possible material loss or range of loss. If such loss is not probable or cannot be reasonably estimated, a liability is not recorded in its condensed consolidated financial statements.

As of March 31, 2022, the Company did not have any material ongoing litigation in which the Company was a party. During the first quarter of 2022, the Company was able to resolve certain litigation matters as set forth below:

On January 31, 2022, the Company entered into a global settlement agreement with Novartis, AAA, Endocyte and certain of their affiliates to settle certain disputes between the parties, as further described below:

German PSMA-617 Litigation

On November 8, 2018, Molecular Insight Pharmaceuticals, Inc., a subsidiary of Progenics ("MIP"), filed a complaint against the University of Heidelberg (the "University") in the District Court in Mannheim, Germany (the "German District Court" and, such litigation, the "German Litigation"). In this Complaint, MIP claimed that the discovery and development of PSMA-617 was related to work performed under a research collaboration sponsored by MIP. MIP alleged that the University breached certain contracts with MIP and that MIP is the co-owner of inventions embodied in certain worldwide patent filings related to PSMA-617 that were filed by the University. On February 27, 2019, Endocyte, a wholly owned subsidiary of Novartis, filed a motion to intervene in the German Litigation. Endocyte is the exclusive licensee of the patent rights that are the subject of the German proceedings.

In connection with this dispute, MIP filed a Confirmation of Ownership with the United States Patent and Trademark Office ("USPTO") for certain U.S. patent applications filed by the University to support MIPs claim that it is the co-owner of these pending U.S. patent applications (the "Ownership Claim").

On February 27, 2019, the German District Court set €0.4 million as the amount MIP must deposit with the German District Court as security in the event of an unfavorable final decision on the merits of the dispute. On August 24, 2020, the German District Court issued its decision dismissing MIP's claims, stating that MIP failed to discharge its burden of proof in the matter.

MIP filed a Notice of Appeal of the German District Court's decision on September 24, 2020 and filed its appeal brief on November 26, 2020. The University and Endocyte each filed oppositions to MIP's Notice of Appeal on March 12, 2021 and an oral hearing for the appeal was scheduled for September 28, 2022, at the Higher Regional Court Karlsruhe.

Pursuant to the terms of the Novartis Agreement, the German Litigation was dismissed and the Ownership Claim withdrawn.

Post-Grant Review Proceeding

On February 4, 2021, AAA, a wholly-owned subsidiary of Novartis and parent of Endocyte, filed a petition for post-grant review of U.S. Patent No. 10,640,461 (the "'461 patent") with the Patent Trial and Appeal Board ("PTAB") of the USPTO. The '461 patent is owned by MIP. In the petition, AAA challenged the patentability of certain claims of the '461 patent. The PTAB instituted Post-Grant Review proceedings (the "PGR Proceeding") on July 29, 2021. Pursuant to the terms of the Novartis Agreement, the PGR Proceeding was terminated.

Global Settlement Agreement

In addition to the dismissal of the German Litigation, the withdrawal of the Ownership Claim and the termination of the PGR Proceeding, under the Novartis Agreement, the parties, among other things, cross-licensed certain patent rights to one another, and Novartis made a $24.0 million lump sum payment to the Company and also reimbursed the Company for certain fees and expenses the Company is required to pay to the University in connection with the German Litigation. The Company received the $24.0 million payment in April 2022.

RELISTOR European Opposition Proceedings

In October 2015, Progenics received notices of opposition to three European patents relating to methylnaltrexone: EP1615646, EP2368553 and EP2368554. Notices of opposition were filed separately at the European Patent Office (the "EPO") by each of Actavis Group PTC ehf and Fresenius Kabi Deutschland GmbH. Between May 11, 2017 and July 4, 2017, the Opposition Division of the EPO (the "Opposition Division") provided notice that the three European patents would be revoked. Each of these matters was appealed to the Appeal Board of the EPO. On November 13, 2020, Progenics withdrew the appeal for EP2368553 and EP2368554. Notices of termination of the proceedings with revocation of the patent were issued on November 23, 2020 for both patents.

Progenics continued its appeal on the revocation of the third patent, EP1615646. Oral proceedings for EP1615646 were held at the Appeal Board of the EPO on September 22, 2020. The revocation decision under appeal was set aside and the case was remitted to the Opposition Division for further prosecution. An oral hearing was held before the Opposition Division on September 27, 2021. The Opposition Division issued its final written opinion on November 11, 2021, indicating that the patent will be maintained in amended form. The final written decision of the Opposition Division was appealable to the Appeal Board of the EPO by either party. Progenics appealed this decision on January 20, 2022 to hold open its option to file Grounds for Appeal. Given that neither opponent filed a Notice of Appeal, Progenics withdrew its Notice of Appeal on February 23, 2022. The Opposition Division communicated the Closure of Opposition Proceedings on March 7, 2022. The patent will proceed to issuance, in amended form, with the payment of publication fees and submission of translated claims by June 11, 2022.

20. Segment Information

In the first quarter of fiscal year 2021, the Company completed the evaluation of its operating and reporting structure, including the impact on the Company's business of the acquisition of Progenics described in Note 1, and the sale of the Puerto Rico subsidiary in the first quarter, which resulted in a change in operating and reportable segments. The Company now operates as one business segment: the development, manufacture and sale of innovative imaging diagnostics, targeted therapeutics, and artificial intelligence solutions to Find, Fight and Follow serious medical conditions. This conclusion reflects the Company's focus on the performance of the business on a consolidated worldwide basis. The results of this operating segment are regularly reviewed by the Company's chief operating decision maker, the President and Chief Executive Officer. The Company's chief operating decision maker does not manage any part of the Company separately, and the allocation of resources and assessment of performance are based on the Company's consolidated operating results.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Cautionary Note Regarding Forward-Looking Statements

Some of the statements contained in this Quarterly Report on Form 10-Q are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These forward-looking statements, including, in particular, statements about our plans, strategies, prospects and industry estimates are subject to risks and uncertainties. These statements identify prospective information and can generally be identified by words such as "anticipates," "believes," "can," "could," "estimates," "expects," "hopes," "intends," "launch," "may," "pipeline," "plans," "predicts," "seeks," "should," "target," "will," "would" and similar expressions, or by express or implied discussions regarding potential marketing approvals or new indications for the collaborations, products candidates or approved products described in this Quarterly Report on Form 10-Q, or regarding potential future revenues from such collaborations, product candidates and products. Examples of forward-looking statements include statements we make relating to our outlook and expectations including, without limitation, in connection with: (i) continued market expansion and penetration for our established commercial products, particularly DEFINITY, in the face of segment competition and potential generic competition, including as a result of patent and regulatory exclusivity expirations and challenges; (ii) our ability to continue to grow PYLARIFY as a commercial product, including (A) our ability to obtain FDA approval for additional positron emission tomography ("PET") manufacturing facilities ("PMFs") to manufacture PYLARIFY, (B) the ability of PMFs to manufacture PYLARIFY to meet product demand, (C) our ability to sell PYLARIFY to customers, (D) our ability to obtain and maintain adequate coding, coverage and payment for PYLARIFY, and (E) our ability to establish PYLARIFY as a leading PSMA PET imaging agent in a competitive environment in which other PSMA PET imaging agents have been approved and additional ones are in development; (iii) the global Molybdenum-99 ("Mo-99") supply; (iv) our ability to have third party manufacturers manufacture our products and our ability to use our in-house manufacturing capacity; (v) our ability to successfully launch PYLARIFY AI as a commercial product; (vi) the continuing impact of the global COVID-19 pandemic on our business, financial condition and prospects; (vii) the efforts and timing for clinical development of our product candidates and new clinical applications for our products, in each case, that we may develop, including 1095 and LMI 1195, or that our strategic partners may develop, including flurpiridaz fluorine-18 ("F 18"); (viii) our ability to identify and acquire or in-license additional diagnostic and therapeutic product opportunities in oncology and other strategic areas; and (ix) the potential reclassification by the FDA of certain of our products and product candidates from drugs to devices with the expense, complexity and potentially more limited competitive protection such reclassification could cause. Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, such statements are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. Our actual results may differ materially from those contemplated by the forward-looking statements. These statements are neither statements of historical fact nor guarantees or assurances of future performance. The matters referred to in the forward-looking statements contained in this Quarterly Report on Form 10-Q may not in fact occur. We caution you, therefore, against relying on any of these forward-looking statements. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in Part I, Item 1A, "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2021, and in Part II, Item 1A. "Risk Factors" in this Quarterly Report on Form 10-Q.

Any forward-looking statement made by us in this Quarterly Report on Form 10-Q speaks only as of the date on which it is made. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake 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.

Available Information

Our global Internet site is www.lantheus.com. We routinely make available important information, including copies of our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after those reports are electronically filed with, or furnished to, the SEC, free of charge on our website at investor.lantheus.com. We recognize our website as a key channel of distribution to reach public investors and as a means of disclosing material non-public information to comply with our disclosure obligations under SEC Regulation FD. Information contained on our website shall not be deemed incorporated into, or to be part of this Quarterly Report on Form 10-Q, and any website references are not intended to be made through active hyperlinks.

Our reports filed with, or furnished to, the SEC are also available on the SEC's website at www.sec.gov, and for Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q, in an iXBRL (Inline Extensible Business Reporting Language) format. iXBRL is an electronic coding language used to create interactive financial statement data over the Internet. The information on our website is neither part of nor incorporated by reference into this Quarterly Report on Form 10-Q.

The following discussion and analysis of our financial condition and results of operations should be read together with the condensed consolidated financial statements and the related notes included in Item 1 of this Quarterly Report on Form 10-Q as well as the other factors described in Part I, Item 1A. "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2021, and in Part II, Item 1A. "Risk Factors" in this Quarterly Report on Form 10-Q.

Overview

Our Business

We are an established leader and fully integrated provider committed to innovative imaging diagnostics, targeted therapeutics, and artificial intelligence solutions to Find, Fight and Follow serious medical conditions. We classify our products in three categories: precision diagnostics, radiopharmaceutical oncology, and strategic partnerships and other revenue. Our leading precision diagnostic products assist healthcare professionals ("HCPs") Find and Follow diseases in non-oncologic conditions. Our radiopharmaceutical oncology diagnostics and therapeutics help HCPs Find, Fight and Follow cancer. Our strategic partnerships and other revenue category focuses on facilitating precision medicine through the use of biomarkers, digital solutions and radiotherapeutic platforms, and also includes royalty revenue from our license of RELISTOR.

Our commercial products are used by cardiologists, urologists, oncologists, internal medicine physicians, nuclear medicine physicians, radiologists, sonographers and technologists working in a variety of clinical settings. We believe that our diagnostic products provide improved diagnostic information that enables HCPs to better detect and characterize, or rule out, disease, with the potential to achieve better patient outcomes, reduce patient risk and limit overall costs for payors and throughout the healthcare system.

We produce and market our products throughout the United States (the "U.S."), selling primarily to clinics, group practices, hospitals, integrated delivery networks, and radiopharmacies. We sell our products outside the U.S. through a combination of direct distribution in Canada and third party distribution relationships in Europe, Canada, Australia, Asia-Pacific, Central America and South America.

Our headquarters are located in North Billerica, Massachusetts, with additional offices in Somerset, New Jersey; Montreal, Canada and Lund, Sweden.

In the first quarter of 2021, we completed the evaluation of our operating and reporting structure, including the impact on our business of the acquisition of Progenics and the sale of our Puerto Rico subsidiary, which resulted in a change in our operating segments to one reportable business segment.

Key Factors Affecting Our Results

Our business and financial performance have been, and continue to be, affected by the following:

PYLARIFY Approval, Commercial Launch and Revenue Growth

On May 27, 2021, we announced that the FDA had approved PYLARIFY, an F 18-labeled PET imaging agent targeting prostate-specific membrane antigen ("PSMA"). PYLARIFY is a product in our radiopharmaceutical oncology product category. We commercially launched PYLARIFY in the U.S. in June 2021.

PYLARIFY is a radioactive diagnostic agent indicated for PET imaging of PSMA-positive lesions in men with prostate cancer with suspected metastasis who are candidates for initial definitive therapy and with suspected recurrence based on elevated serum prostate-specific antigen ("PSA") levels. PYLARIFY works by binding to PSMA, a protein that is overexpressed on the surface of more than 90% of primary and metastatic prostate cancer cells. PYLARIFY works with PET/CT technology to produce a combined PET/CT scan that enables the reader of the PET/CT scan to detect and locate the disease.

According to the American Cancer Society, prostate cancer is the second most common cancer in American men -- one in eight American men will be diagnosed with prostate cancer in their lifetimes and over 3.1 million American men are living with prostate cancer today. Based on estimates from third party sources regarding the incidence of prostate cancer in men in the U.S., we believe the market potential for all PSMA PET imaging agents in the U.S. could be up to 250,000 annual scans, comprised of 90,000 scans for patients with intermediate, unfavorable or high/very high risk of suspected metastases of prostate cancer; 130,000 scans for patients with suspected recurrence of prostate cancer; and 30,000 scans for patients with metastatic castration-resistant prostate cancer ("mCRPC") who may be under consideration for PSMA-targeted therapy for the treatment of adult patients with PSMA-positive mCRPC who have already been treated with other anticancer treatments (androgen receptor pathway inhibition and taxane-based chemotherapy). However, because we are still early in the commercialization of PYLARIFY, we can give no assurance as to how clinical practice may evolve or what our ultimate market penetration may be.

In March 2022, we announced a strategic collaboration with Novartis to include PYLARIFY in prostate cancer trials with Pluvicto, Novartis' recently approved PSMA-targeted therapeutic. As part of the agreement with Novartis, we will supply PYLARIFY for the selection of patients with prostate cancer, and Novartis will provide all PYLARIFY-related clinical imaging data to us. In addition, the Society for Nuclear Medicine and Molecular Imaging, or SNMMI, recently updated their appropriate use criteria, noting that PSMA PET imaging agents, including PYLARIFY, can be used for patient selection for PSMA-targeted radioligand therapy.

The approval of PYLARIFY was based on data from two Company-sponsored pivotal studies ("OSPREY" and "CONDOR") designed to establish the safety and diagnostic performance of PYLARIFY across the prostate cancer disease continuum. Results from OSPREY (Cohort A) demonstrated improvement in specificity and positive predictive value of PYLARIFY PET imaging over conventional imaging in men at risk for metastatic prostate cancer prior to initial definitive therapy. CONDOR studied men with biochemical recurrent prostate cancer. In patients with biochemical recurrent prostate cancer and non-informative baseline imaging, PYLARIFY demonstrated high correct localization and detection rates, including in patients with early recurrent disease with low, but rising, PSA blood levels (median PSA 0.8 ng/mL).

Upon commercial launch in June 2021, PYLARIFY was immediately available in select parts of the U.S. Over the course of the remainder of 2021, PYLARIFY availability expanded into additional regions and is now broadly available nationwide. We continue to expand our geographic coverage, customer contracting and market access coverage to serve our customers and the U.S. prostate cancer community.

The commercial launch of PYLARIFY has been complex and expensive. During 2021, we hired additional employees to assist us with the commercialization of PYLARIFY, including in sales, marketing, reimbursement, quality and medical affairs. To manufacture PYLARIFY, we assembled and qualified a nationwide network of PMFs with radioisotope-producing cyclotrons that make F 18, which has a 110-minute half-life, so PYLARIFY is manufactured and distributed rapidly to end-users. After being made on a cyclotron at a PMF, the F 18 is then combined with certain chemical ingredients in specially designed chemistry synthesis boxes to manufacture PYLARIFY. The finished PYLARIFY is then quality control tested and transferred to a radiopharmacist who prepares and dispenses patient-specific doses of the final product. Because each of the PMFs manufacturing these products is deemed by the FDA to be a separate manufacturing site, each has to be separately approved by the FDA. Although PYLARIFY is now broadly available nationwide and we continue to qualify additional PMFs, we can give no assurance that the FDA will continue to approve PMFs in accordance with our planned roll-out schedule. If FDA approval of manufacturing sites is delayed or withdrawn, our future business, results of operations, financial condition and cash flows could be adversely affected.

In addition to the network of PMFs, we have also been working with academic medical centers in the U.S. that have radioisotope-producing cyclotrons and which have expressed an interest in manufacturing PYLARIFY. Under this initiative, we enter into a fee-for-service arrangement under which the academic medical center's PMF manufactures and supplies batches of PYLARIFY, and its radiopharmacy prepares patient-ready unit doses, in each case for and on behalf of us. We then sell those unit doses to the academic medical center's hospitals and clinics, and in some instances, to additional customers in the academic medical center's geographic area, in each case, under separate purchase agreements. The academic medical center's PMF's ability to manufacture and supply batches of PYLARIFY is subject to FDA approval, and we can give no assurance that the FDA will approve such PMFs in accordance with our planned roll-out schedule.

Our commercial launch also required obtaining adequate coding, coverage and payment for PYLARIFY, including not only coverage from Medicare, Medicaid and other government payors, as well as private payors, but also appropriate payment levels, to adequately cover our customers' costs of using PYLARIFY in PSMA PET/CT imaging procedures. We received notification that our Healthcare Procedure Coding System ("HCPCS") code, which enables streamlined billing, went into effect as of January 1, 2022. In addition, effective January 1, 2022, the Centers for Medicare and Medicaid Services ("CMS") granted Transitional Pass-Through Payment Status in the hospital outpatient setting ("TPT Status") for PYLARIFY, enabling traditional Medicare to provide an incremental payment for PET/CT scans performed with PYLARIFY in that setting. TPT Status for PYLARIFY is expected to expire December 31, 2024. After TPT Status expires, under current Medicare rules, PYLARIFY, similar to other diagnostic radiopharmaceuticals, would not be separately reimbursed in the hospital outpatient setting but rather would be included as part of the facility fee a hospital otherwise receives for a PET/CT imaging procedure, and the facility fee does not always adequately cover the total cost of the procedure. We can give no assurance that any CMS reimbursement in the hospital outpatient setting that follows the expiration of TPT Status will be adequate to cover the cost of a PYLARIFY PET/CT imaging procedure.

We actively pursue patents in connection with PYLARIFY, both in the U.S. and internationally. In the U.S. for PYLARIFY, we have four Orange Book-listed patents, including composition of matter patents, which expire in 2030 and 2037. Outside of the U.S., we are currently pursuing additional PYLARIFY patents to obtain similar patent protection as in the U.S.

PYLARIFY AI Clearance and Use

During 2021, we also announced that our subsidiary, EXINI, was granted 510(k) clearance by the FDA in the U.S. and received CE marking in Europe for aPROMISE. We commercially launched aPROMISE under the name PYLARIFY AI in the U.S. in November 2021.

PYLARIFY AI is artificial intelligence medical device software developed to assist with the reading and quantification of PYLARIFY scans. The technology automatically analyzes a PSMA PET/CT image to segment anatomical regions – 51 bones and 12 soft tissue organs. This image segmentation enables automated localization, detection and quantification of potential PSMA-avid lesions in a PSMA PET/CT image, which data is then incorporated into the reporting system used by physicians.

Anticipated Continued Growth of DEFINITY and Expansion of Our Ultrasound Microbubble Franchise

We believe the market opportunity for our ultrasound microbubble enhancing agent, DEFINITY, continues to be significant. Historically, DEFINITY has been our fastest growing and highest margin commercial product. We anticipate DEFINITY sales will continue to grow in the future. As we continue to educate the physician and healthcare provider community about the benefits and risks of DEFINITY, we believe we will be able to continue to grow the appropriate use of DEFINITY in suboptimal echocardiograms. In a U.S. market with three echocardiography ultrasound enhancing agents approved by the FDA, we estimate that DEFINITY had over 80% of the market as of December 31, 2021.

As we continue to pursue expanding our microbubble franchise, our activities include:

- Patents - We continue to actively pursue additional patents in connection with DEFINITY and DEFINITY RT, both in the U.S. and internationally. In the U.S. for DEFINITY, we have five Orange Book-listed method of use patents, one of which expires in 2035 and four of which expire in 2037, as well as additional manufacturing patents that are not Orange Book-listed expiring in 2023 and 2037. In the U.S. for DEFINITY RT, we have six Orange Book-listed patents, including a composition of matter patent which expires in 2035. Outside of the U.S., we are currently pursuing additional DEFINITY and DEFINITY RT patents to obtain similar patent protection as in the U.S. The Orange Book-listed patents include a patent on the use of VIALMIX RFID which expires in 2037; we have submitted additional VIALMIX RFID patent applications in major markets throughout the world.

  Hatch-Waxman Act - Even though our longest duration Orange Book-listed DEFINITY patent extends until March 2037, because our Orange Book-listed composition of matter patent expired in June 2019, we may face generic DEFINITY challengers in the near to intermediate term. Under the Hatch-Waxman Act, the FDA can approve Abbreviated New Drug Applications (“ANDAs”) for generic versions of drugs if the ANDA applicant demonstrates, among other things, that (i) its generic candidate is the same as the innovator product by establishing bioequivalence and providing relevant chemistry, manufacturing and product data, and (ii) either the marketing of that generic candidate does not infringe the Orange Book-listed patent(s) or the Orange Book-listed patent(s) is invalid. Similarly, the FDA can approve a Section 505(b)(2) New Drug Application (“505(b)(2)”) from an applicant that relies on some of the information required for marketing approval to come from studies which the applicant does not own or have a legal right of reference. With respect to the Orange Book-listed patent(s) covering an innovator product, the ANDA applicant or the Section 505(b)(2) applicant (if relying on studies related to the innovator product) (together, the “Applicant”) must give a notice (a “Notice”) to the innovator of its certification that its generic candidate will not infringe the innovator’s Orange Book-listed patent(s) or that the Orange Book-listed patent(s) is invalid. The innovator can then file suit against the Applicant within 45 days of receiving the Notice, and FDA approval to commercialize the generic candidate will be stayed (that is, delayed) for up to 30 months (measured from the date on which a Notice is received) while the patent dispute between the innovator and the Applicant is resolved in court. The 30-month stay could potentially expire sooner if the courts determine that no infringement had occurred or that the challenged Orange Book-listed patent is invalid or if the parties otherwise settle their dispute.

  As of the date of filing of this Quarterly Report on Form 10-Q, we have not received any Notice from an Applicant. If we were to (i) receive any such Notice in the future, (ii) bring a patent infringement suit against the Applicant within 45 days of receiving that Notice, and (iii) successfully obtain the full 30-month stay, then the Applicant would be precluded from commercializing a generic version of DEFINITY prior to the expiration of that 30-month stay period and, potentially, thereafter, depending on how the patent dispute is resolved. Solely by way of example and not based on any knowledge we currently have, if we received a Notice from an Applicant in May 2022 and the full 30-month stay were obtained, then the Applicant would be precluded from commercialization until at least November 2024. If we received a Notice some number of months in the future and the full 30-month stay were obtained, the commercialization date would roll forward in the future by the same number of months. In the event a 505(b)(2) applicant does not rely on studies related to the innovator product, the 30-month stay would not apply, but additional clinical studies may be required.

- *DEFINITY RT* - DEFINITY RT became commercially available in the fourth quarter of 2021. A modified formulation of DEFINITY that allows both storage and shipment at room temperature, DEFINITY RT provides clinicians an additional choice and allows for greater utility of this formulation in broader clinical settings. Given its physical characteristics, we

believe DEFINITY RT is also well-suited for inclusion in kits requiring microbubbles for other indications and applications (including in kits developed by third parties of the type described in the paragraph entitled *Microbubble Franchise* below).

- *VIALMIX RFID* – VIALMIX RFID, our next-generation activation device designed specifically for both DEFINITY and DEFINITY RT, became commercially available in the fourth quarter of 2021. The activation rate and time are controlled by VIALMIX RFID through the use of radio-frequency identification technology ("RFID") to ensure reproducible activation of DEFINITY and DEFINITY RT. The RFID tag, which is affixed to the vial label, enables the DEFINITY or DEFINITY RT vial to be appropriately activated with the VIALMIX RFID activation device.

Global Mo-99 Supply

We currently have Mo-99 supply agreements with Institute for Radioelements ("IRE"), running through December 31, 2022, with auto-renewal provisions that are terminable upon notice of non-renewal, and with NTP Radioisotopes ("NTP"), acting for itself and on behalf of its subcontractor, the Australian Nuclear Science and Technology Organisation ("ANSTO"), running through June 30, 2022, and for which we are currently negotiating an extension.

Although we have a globally diverse Mo-99 supply with IRE in Belgium, NTP in South Africa, and ANSTO in Australia, we still face supplier and logistical challenges in our Mo-99 supply chain. The NTP processing facility had periodic outages in 2017, 2018 and 2019. When NTP was not producing, we relied on Mo-99 supply from both IRE and ANSTO to limit the impact of the NTP outages. In 2019 and 2020, ANSTO experienced multiple facility issues that resulted in ANSTO outages and volume limitations, during which time we relied on IRE and NTP to limit the impact of those outages and limitations. Because of the COVID-19 pandemic, we experienced challenges receiving regularly scheduled orders of Mo-99 from our global suppliers, particularly in the second quarter of 2020. We continue to manage these various supply chain challenges, but depending on reactor and processor schedules and operations, at times we have not been able to fill some or all of the demand for our TechneLite generators on certain manufacturing days. A prolonged disruption of service from one of our three Mo-99 processing sites or one of their main Mo-99-producing reactors could have a substantial negative effect on our business, results of operations, financial condition and cash flows.

To augment our current supply of Mo-99, we have a strategic arrangement with SHINE Medical Technologies LLC ("SHINE") for the future supply of Mo-99. Under the terms of the supply agreement, entered into in November 2014, SHINE will provide Mo-99 produced using its proprietary LEU-solution technology for use in our TechneLite generators once SHINE's facility becomes operational and receives all necessary regulatory approvals, which SHINE now estimates will occur in 2023. The term of this arrangement provides for three years of supply of Mo-99. However, we cannot assure you that SHINE will be able to produce commercial quantities of Mo-99 for our business, or that SHINE, together with our current suppliers, will be able to deliver a sufficient quantity of Mo-99 to meet our needs.

Inventory Supply

We obtain a substantial portion of our imaging agents from a third party supplier. JHS is currently a significant supplier of DEFINITY and our sole source manufacturer of NEUROLITE, Cardiolite and evacuation vials, the latter being an ancillary component for our TechneLite generators. On February 23, 2022, our wholly-owned subsidiary, LMI, entered into a Manufacturing and Supply Agreement (the "MSA") with JHS, effective as of February 23, 2022, pursuant to which JHS will manufacture, and LMI will purchase, our DEFINITY, NEUROLITE, Cardiolite and evacuation vial products. The new MSA supersedes all of the prior agreements of the parties. The initial term of the MSA runs through December 31, 2027 and can be further extended by mutual agreement of the parties. The MSA requires LMI to purchase from JHS specified percentages of its total requirements for DEFINITY, as well as specified quantities of NEUROLITE, Cardiolite and evacuation vial products, each year during the contract term. Either party can terminate the MSA upon the occurrence of certain events, including the material breach or bankruptcy of the other party. In addition to JHS, we rely on Samsung BioLogics as our sole source manufacturer of DEFINITY RT.

In 2021, we completed the construction of a specialized in-house manufacturing facility at our North Billerica campus for purposes of producing DEFINITY and, potentially, other sterile vial products. On February 22, 2022, we received FDA approval of our sNDA, authorizing commercial manufacturing of DEFINITY at our new facility, and inventory that we had previously manufactured at this facility became commercially saleable. We believe this facility will allow us to better manage DEFINITY manufacturing and inventory, reduce our costs in a potentially more price competitive environment, and provide us with supply chain redundancy.

Radiopharmaceuticals are decaying radioisotopes with half-lives ranging from a few hours to several days. These products cannot be kept in inventory because of their limited shelf lives and are subject to just-in-time manufacturing, processing and distribution, which takes place at our facilities in North Billerica, Massachusetts and Somerset, New Jersey.

COVID-19 Pandemic

The global COVID-19 pandemic has had, and may continue to have, a material impact on our business. Towards the end of the first quarter of 2020 we began to experience, and through the date of this filing we are continuing to experience, impacts to our business and operations related to the COVID-19 pandemic, including the impact of hospital staffing challenges, vaccination mandates, employee absences due to illness, and a decline in the volume of certain procedures and treatments using our products.

Although many of the restrictions, including stay-at-home mandates, imposed in response to the COVID-19 pandemic have been lifted in much of the U.S., and there has been a rapid rollout and development of multiple vaccines and boosters, the resurgence of COVID-19 infections continued to impact certain aspects of our business during the first quarter of 2022. For example, we believe sales of DEFINITY were impacted by elevated case counts and hospitalizations but improved over the course of the quarter, even amidst ongoing hospital nursing and sonographer shortages.

The pandemic could still have a future negative impact on our business, particularly if there are additional resurgences as a result of mutations or other variations to the virus that further increase its communicability or its impact on certain populations, geographic regions and the healthcare system, including elective procedures and hospital access.

Research and Development Expenses

To remain a leader in the marketplace, we have historically made and will continue to make substantial investments in new product development and lifecycle management for existing products.

- For PYLARIFY, our development of PYLARIFY resulted in approval by the FDA in May 2021.
- For PYLARIFY AI, our development of PYLARIFY AI resulted in a 510(k) clearance granted by the FDA in July 2021.
- For 1095, we completed an interim analysis of the ARROW Phase 2 study in mCRPC patients in the fourth quarter of 2021 and are continuing that study without modifications. We currently expect to complete enrollment in the ARROW Phase 2 study later in 2022.
- For LMI 1195, we plan to initiate a Phase 3 clinical trial for the use of LMI 1195 for the diagnosis and management of neuroblastoma tumors in pediatric and adult populations. We expect to initiate approximately 20 clinical sites in the U.S. to enroll approximately 100 patients with known or suspected neuroblastoma.
- We are also exploring additional lifecycle management opportunities for some of our current products, including AZEDRA.

Our investments in these additional clinical activities and lifecycle management opportunities will increase our operating expenses and impact our results of operations and cash flow, and we can give no assurances as to whether any of our clinical development candidates or lifecycle management opportunities will be successful.

Strategic Initiatives

We continue to seek ways to further expand our portfolio of products and product candidates and to optimize the value of our current assets, evaluating a number of different opportunities to collaborate with others or to acquire or in-license additional products, product candidates, businesses and technologies to drive our future growth. In particular, we believe that diagnostic and therapeutic product opportunities in oncology and other strategic areas will be critical to our future success, and we are committed to further augmenting our commercial portfolio with revenue opportunities of a similar magnitude as DEFINITY and PYLARIFY, either through strategic transactions or internal development.

Oncology

As we continue to pursue expanding our strategic partnerships, our Pharma Services activities and strategic partnerships in oncology include:

- *Prostate Cancer* - We collaborate with pharmaceutical companies developing therapies and diagnostics in prostate cancer.
    - In March 2022, we announced a collaboration with Novartis to include PYLARIFY in prostate cancer trials with Pluvicto. As part of the agreement with Novartis, the Company will provide PYLARIFY for the selection of patients with prostate cancer, and Novartis will provide all PYLARIFY related clinical imaging data to the Company.
    - In January 2022, we announced a collaboration with the Prostate Cancer Clinical Trial Consortium (“PCCTC”), a premier multicenter clinical research organization that specializes in prostate cancer research. The intent of the strategic collaboration is to integrate our AI platform into PCCTC studies to advance the development and validation of novel AI-enabled biomarkers.
    - In September 2021, we entered into a development and commercialization collaboration with RefleXion Medical, Inc. to evaluate the use of piflufolastat F 18 to enable real-time therapeutic guidance of biology-guided radiotherapy in prostate cancer using the RefleXion X1TM platform.

- Prior to 2021, we also entered into several other separate agreements, including with POINT Biopharma and Regeneron, under which we supply piflufolastat F 18 in connection with their clinical studies, and Curium, under which we licensed exclusive rights to Curium to develop and commercialize piflufolastat F 18 in Europe.

- *Immuno-Oncology* - In May 2019, we entered into a strategic collaboration and license agreement with NanoMab, a privately-held biopharmaceutical company focused on the development of next generation radiopharmaceuticals for cancer precision medicine.
- *Pan-Oncology* - In March 2021, we acquired from Ratio Therapeutics LLC (previously Noria Therapeutics, Inc.) exclusive, worldwide rights to NTI-1309, an innovative imaging biomarker that targets fibroblast activation protein, an emerging target with broad potential imaging applicability and use in oncology. Upon further clinical development, we will assess options to bring NTI-1309 to market as a diagnostic or potentially a therapeutic product.

Microbubble Franchise

In addition, we continue to expand our microbubble franchise. In April 2021, we announced a strategic collaboration with Allegheny Health Network ("AHN"), which will use our microbubbles in combination with AHN's ultrasound-assisted non-viral gene transfer technology for the development of a proposed treatment of xerostomia. Xerostomia is a lack of saliva production leading to dry mouth and has a variety of causes, including radiotherapy and chemotherapy, the chronic use of drugs and rheumatic and dysmetabolic diseases. Prior to 2021, we entered into microbubble collaborations with the following parties: (i) Cerevast Medical, Inc. ("Cerevast"), in which our microbubbles will be used in connection with Cerevast's ocular ultrasound device to improve blood flow in occluded retinal veins in the eye; (ii) CarThera SAS, for the use of our microbubbles in combination with SonoCloud, a proprietary implantable device in development for the treatment of recurrent glioblastoma; and (iii) Insightec Ltd. ("Insightec"), which will use our microbubbles in connection with the development of Insightec's transcranial guided focused ultrasound device for the treatment of glioblastoma as well as other neurodegenerative conditions.

Generally, our costs in connection with the strategic partnerships relate to the supply of drug and other ancillary expenses and the benefits can include possible supply, milestone and royalty payments, additional intellectual property rights and strategic relationships. We can give no assurance as to if or when or if any of these collaborations and other new initiatives will be successful or accretive to earnings.

Results of Operations

The following is a summary of our consolidated results of operations:

	Three Months Ended March 31,			
(in thousands)	**2022**	**2021**	**Change $**	**Change %**
Revenues	$ 208,880	$ 92,509	$ 116,371	125.8 %
Cost of goods sold	79,810	51,479	28,331	55.0 %
Gross profit	129,070	41,030	88,040	214.6 %
Operating expenses				
Sales and marketing	20,354	14,173	6,181	43.6 %
General and administrative	37,588	16,138	21,450	132.9 %
Research and development	12,203	10,360	1,843	17.8 %
Total operating expenses	70,145	40,671	29,474	72.5 %
Gain on sale of assets	—	15,263	(15,263)	N/A
Operating income	58,925	15,622	43,303	277.2 %
Interest expense	1,509	2,718	(1,209)	(44.5)%
Gain on extinguishment of debt	—	(889)	889	N/A
Other income	(485)	(549)	64	(11.7)%
Income before income taxes	57,901	14,342	43,559	303.7 %
Income tax expense	14,939	5,334	9,605	180.1 %
Net income	$ 42,962	$ 9,008	$ 33,954	376.9 %

Comparison of the Periods Ended March 31, 2022 and 2021

Revenues

We classify our revenues into three product categories: precision diagnostics, radiopharmaceutical oncology, and strategic partnerships and other revenue. Precision diagnostics includes DEFINITY, TechneLite and other imaging diagnostic products. Radiopharmaceutical oncology consists primarily of PYLARIFY and AZEDRA. Strategic partnerships and other revenue includes out-licensing arrangements, which includes $24.0 million of revenue recognized pursuant to the Novartis Agreement, partnerships that focus on facilitating precision medicine through the use of biomarkers, digital solutions and radiotherapeutic platforms, and on our other products, such as RELISTOR.

Revenues are summarized by product category on a net basis as follows:

(in thousands)	Three Months Ended March 31, 2022	2021	Change $	Change %
DEFINITY	$ 58,328	$ 55,971	$ 2,357	4.2 %
TechneLite	22,605	22,800	(195)	(0.9)%
Other precision diagnostics	5,265	6,984	(1,719)	(24.6)%
Total precision diagnostics	86,198	85,755	443	0.5 %
PYLARIFY	92,777	—	92,777	N/A
Other radiopharmaceutical oncology	1,327	1,500	(173)	(11.5)%
Total radiopharmaceutical oncology	94,104	1,500	92,604	6,173.6 %
Strategic partnerships and other revenue	28,578	5,254	23,324	443.9 %
Total revenues	$ 208,880	$ 92,509	$ 116,371	125.8 %

The increase in revenues for the three months ended March 31, 2022, as compared to the prior year period, is primarily driven by the commercial launch of PYLARIFY and $24.0 million of revenue recognized pursuant to the Novartis Agreement, and an increase in DEFINITY sales volume period over period due to improving conditions relative to the COVID-19 pandemic in the prior year. The increase is offset, in part, by lower sales volumes from other precision diagnostic products.

Rebates and Allowances

Estimates for rebates and allowances represent our estimated obligations under contractual arrangements with third parties. Rebate accruals and allowances are recorded in the same period the related revenue is recognized, resulting in a reduction to revenue and the establishment of a liability which is included in accrued expenses. These rebates and allowances result from performance-based offers that are primarily based on attaining contractually specified sales volumes and growth, Medicaid rebate programs for our products, administrative fees of group purchasing organizations and certain distributor related commissions. The calculation of the accrual for these rebates and allowances is based on an estimate of the third-party's expected purchases and the resulting applicable contractual rebate to be earned over a contractual period.

An analysis of the amount of, and change in, reserves is summarized as follows:

(in thousands)	Rebates and Allowances
Balance, January 1, 2022	$ 10,977
Provision related to current period revenues	6,411
Adjustments relating to prior period revenues	62
Payments or credits made during the period	(6,657)
Balance, March 31, 2022	$ 10,793

Gross Profit

The increase in gross profit for the three months ended March 31, 2022, as compared to the prior year period, is primarily due to PYLARIFY post commercial launch sales volume and the $24.0 million pursuant to the Novartis Agreement, which are partially offset by amortization expense of acquired intangible assets in the Progenics Acquisition.

Sales and Marketing

Sales and marketing expenses consist primarily of salaries and other related costs for personnel in field sales, marketing and customer service functions. Other costs in sales and marketing expenses include the development and printing of advertising and promotional material, professional services, market research and sales meetings.

Sales and marketing expenses increased $6.2 million for the three months ended March 31, 2022 as compared to the prior year period. This was primarily driven by the commercialization activities for the launch of PYLARIFY and increased employee-related costs (including the hiring of new employees during 2021 in connection with the commercialization activities for PYLARIFY), as well as the reduced level of marketing promotional programs and travel during the prior year due to the impact of the COVID-19 pandemic.

General and Administrative

General and administrative expenses consist of salaries and other related costs for personnel in executive, finance, legal, information technology and human resource functions. Other costs included in general and administrative expenses are professional fees for information technology services, external legal fees, consulting and accounting services as well as bad debt expense, certain facility and insurance costs, including director and officer liability insurance.

General and administrative expenses increased $21.5 million for the three months ended March 31, 2022 compared to the prior period. This was primarily driven by the $18.4 million net expense for the fair value adjustments to the contingent asset and liabilities in the first quarter of 2022 (an increase of $18.1 million from the prior year period) (refer to Note 4, “Fair Value of Financial Instruments”, for further details on contingent consideration liabilities, including CVRs) and increased employee-related costs, offset by acquisition-related costs associated with the Progenics Acquisition in the prior year.

Research and Development

Research and development expenses relate primarily to the development of new products to add to our portfolio and costs related to our medical affairs, medical information and regulatory functions.

Research and development expenses increased $1.8 million for the three months ended March 31, 2022 as compared to the prior year period. This was primarily driven by the level of activity of the ARROW Phase 2 study of 1095, investment in medical affairs related to PYLARIFY and higher overall headcount related costs, offset by the expenses related to filing fees for the PYLARIFY New Drug Application and preparation activities for the launch of PYLARIFY during the prior year period.

Interest Expense

Interest expense decreased by approximately $1.2 million for the three months ended March 31, 2022 as compared to the prior year period due to lower interest rates on our long-term debt and the repayment of the Royalty-Backed Loan on March 31, 2021.

Income Tax Expense

The income tax expense recorded for the three months ended March 31, 2022 was primarily due to pre-tax profits reported during the quarter, partially offset by the benefit associated with stock compensation deductions.

We regularly assess our ability to realize our deferred tax assets. Assessing the realizability of deferred tax assets requires significant management judgment. In determining whether our deferred tax assets are more-likely-than-not realizable, we evaluate all available positive and negative evidence, and weigh the objective evidence and expected impact. We continue to record a valuation allowance against certain of our foreign net deferred tax assets and a small component of our domestic deferred tax assets.

Our effective tax rate for each reporting period is presented as follows:

	Three Months Ended March 31,	
	2022	**2021**
Effective tax rate	25.8%	37.2%

Our effective tax rate in fiscal 2022 differs from the U.S. statutory rate of 21% principally due to the accrual of state taxes and the impact of non-deductible contingency reserve expense.

The decrease in the effective income tax rate for the three months ended March 31, 2022 is primarily due to the increased amount of stock compensation benefits recorded during that quarter.

Liquidity and Capital Resources

Cash Flows

The following table provides information regarding our cash flows:

(in thousands)	Three Months Ended March 31, 2022	2021
Net cash provided by operating activities	$ 10,264	$ 9,818
Net cash (used in) provided by investing activities	$ (1,390)	$ 13,303
Net cash used in financing activities	$ (2,179)	$ (34,791)

Net Cash Provided by Operating Activities

Net cash provided by operating activities of $10.3 million in the three months ended March 31, 2022 was primarily comprised of net income adjusted for the net effect of non-cash items such as the change in fair value of contingent assets and liabilities of $18.4 million (refer to Note 4, "Fair Value of Financial Instruments", for further details on contingent consideration liabilities, including CVRs). The primary working capital sources of cash were the timing of payments to large vendors. The primary working capital uses of cash were an increase in trade receivables from timing of sale orders and an increase in collection period as well as the timing of inventory purchases.

Net cash provided by operating activities of $9.8 million in the three months ended March 31, 2021 was driven primarily by net income of $9.0 million, depreciation, amortization and accretion expense of $8.1 million, stock-based compensation expense of $3.3 million, and deferred income taxes of $4.6 million. These net sources of cash were offset by a gain on sale of assets of $15.3 million and a net decrease of $1.5 million related to movements in our working capital accounts during the period. The overall decreases in cash from our working capital accounts were primarily driven by the payment of prior year annual bonuses as well as increased receivables from sales offset by a reduction in inventory due to obsolescence as well as the timing of inventory purchases.

Net Cash (Used in) Provided by Investing Activities

Net cash used in investing activities during the three months ended March 31, 2022 was primarily due to $3.2 million of capital expenditures offset by cash proceeds of $1.8 million received from the sale of our Puerto Rico subsidiary.

Net cash provided by investing activities during the three months ended March 31, 2021 was primarily due to cash proceeds of $15.8 million received from the sale of our Puerto Rico subsidiary, which was offset by $2.5 million of capital expenditures.

Net Cash Used in Financing Activities

Net cash used in financing activities during the three months ended March 31, 2022 is primarily attributable to the payments on long-term debt and other borrowings of $2.6 million related to the 2019 Term Facility and payments for minimum statutory tax withholding related to net share settlement of equity awards of $5.5 million offset by proceeds of $5.4 million from stock option exercises.

Net cash used in financing activities during the three months ended March 31, 2021 is primarily attributable to the payments on long-term debt and other borrowings of $35.6 million related to the 2019 Term Facility and Royalty-Backed Loan, including a voluntary repayment of the outstanding principal on the Royalty-Backed Loan and payments for minimum statutory tax withholding related to net share settlement of equity awards of $1.6 million offset by proceeds of $2.0 million from stock option exercises.

External Sources of Liquidity

In June 2019, we refinanced our 2017 $275.0 million five-year term loan facility with the 2019 Term Facility. In addition, we replaced our $75.0 million revolving facility with our current five-year revolving credit facility (the "2019 Revolving Facility" and together with the 2019 Term Facility, the "2019 Facility"). The terms of the 2019 Term Facility are set forth in the Credit Agreement, dated as of June 27, 2019, by and among us, the lenders from time to time party thereto and Wells Fargo Bank, N.A., as administrative agent and collateral agent, which was amended on June 19, 2020 (as amended, the "2019 Credit Agreement"). We have the right to request an increase to the 2019 Term Facility or request the establishment of one or more new incremental term loan facilities, in an aggregate principal amount of up to $100.0 million, plus additional amounts, in certain circumstances.

We are permitted to voluntarily repay the 2019 Term Loans, in whole or in part, without premium or penalty. The 2019 Term Facility requires us to make mandatory prepayments of the outstanding 2019 Term Loans in certain circumstances. The 2019 Term Facility amortizes at 5.0% per year through September 30, 2022 and 7.5% thereafter, until its June 27, 2024 maturity date.

Under the terms of the 2019 Revolving Facility, the lenders thereunder agreed to extend credit to us from time to time until June 27, 2024 consisting of revolving loans in an aggregate principal amount not to exceed $200.0 million at any time outstanding. The 2019 Revolving Facility includes a $20.0 million sub-facility for the issuance of letters of credit (the "Letters of Credit"). The 2019 Revolving Facility includes a $10.0 million sub-facility for swingline loans (the "Swingline Loans"). The Letters of Credit, Swingline Loans and the borrowings under the 2019 Revolving Facility are expected to be used for working capital and other general corporate purposes.

Under the 2019 Credit Agreement, loans bear interest at LIBOR plus a spread that ranges from 1.50% to 3.00% or the Base Rate (as defined in the 2019 Credit Agreement) plus a spread that ranges from 0.50% to 2.00%, and the commitment fee ranges from 0.15% to 0.40%, in each case based on our Total Net Leverage Ratio (as defined in the 2019 Credit Agreement).

The maximum total net leverage ratio and interest coverage ratio permitted by the financial covenant in our 2019 Credit Agreement is displayed in the table below:

2019 Credit Agreement

Period	Total Net Leverage Ratio
Q3 2021 and thereafter	3.50 to 1.00

Period	Interest Coverage Ratio
Q2 2021 and thereafter	3.00 to 1.00

As of March 31, 2022, we were in compliance with all financial and other covenants under the 2019 Credit Agreement.

Please refer to our Form 10-K for fiscal year ended December 31, 2021 for further details on the 2019 Facility and the 2019 Credit Agreement.

On June 19, 2020, as a result of the Progenics Acquisition, we assumed Progenics outstanding debt as of such date in the amount of $40.2 million. On November 4, 2016, Progenics, through its wholly-owned subsidiary, MNTX Royalties Sub LLC, entered into the Royalty-Backed Loan. The Royalty-Backed Loan bore interest at an annual rate of 9.5% and was scheduled to mature on June 30, 2025.

On March 31, 2021, we voluntarily repaid in full the entire outstanding principal on the Royalty-Backed Loan in the amount of $30.9 million, which included a prepayment amount of $0.5 million, and terminated the agreement.

Our ability to fund our future capital needs will be affected by our ability to continue to generate cash from operations and may be affected by our ability to access the capital markets, money markets or other sources of funding, as well as the capacity and terms of our financing arrangements.

We may from time to time repurchase or otherwise retire our debt and take other steps to reduce our debt or otherwise improve our balance sheet. These actions may include prepayments of our term loans or other retirements or refinancing of outstanding debt, privately negotiated transactions or otherwise. The amount of debt that may be retired, if any, could be material and would be decided at the sole discretion of our Board of Directors and will depend on market conditions, our cash position and other considerations.

Funding Requirements

Our future capital requirements will depend on many factors, including:

- The level of product sales and the pricing environment of our currently marketed products, particularly DEFINITY and PYLARIFY, as well as any additional products that we may market in the future, including decreased product sales resulting from the COVID-19 pandemic;
- Revenue mix shifts and associated volume and selling price changes that could result from contractual status changes with key customers and additional competition;
- The continued costs of the ongoing commercialization of PYLARIFY;
- The costs of acquiring or in-licensing, developing, obtaining regulatory approval for, and commercializing, new products, businesses or technologies, together with the costs of pursuing opportunities that are not eventually consummated;
- Our investment in the further clinical development and commercialization of products and development candidates, including AZEDRA, 1095, and LMI 1195;

- The costs of investing in our facilities, equipment and technology infrastructure;
- The costs and timing of establishing or amending manufacturing and supply arrangements for commercial supplies of our products and raw materials and components;
- Our ability to have product manufactured and released from manufacturing sites in a timely manner in the future, or to manufacture products at our in-house manufacturing facilities in amounts sufficient to meet our supply needs;
- The costs of further commercialization of our existing products, particularly in international markets, including product marketing, sales and distribution and whether we obtain local partners to help share such commercialization costs;
- The extent to which we choose to establish collaboration, co-promotion, distribution or other similar arrangements for our marketed products;
- The legal costs relating to maintaining, expanding and enforcing our intellectual property portfolio, pursuing insurance or other claims and defending against product liability, regulatory compliance, intellectual property or other claims;
- The cost of interest on any additional borrowings which we may incur under our financing arrangements; and
- The impact of sustained inflation on our costs of goods sold and operating expenses.

We are vulnerable to future supply chain shortages, disruptions or delays, especially for our single sourced products, raw materials and components. Disruption in our financial performance could also occur if we experience significant adverse changes in product or customer mix, broad economic downturns, sustained inflation, adverse industry or company conditions or catastrophic external events, including pandemics such as COVID-19, natural disasters and political or military conflict. If we experience one or more of these events in the future, we may be required to further implement expense reductions, such as a delay or elimination of discretionary spending in all functional areas, as well as scaling back select operating and strategic initiatives.

If our capital resources become insufficient to meet our future capital requirements, we would need to finance our cash needs through public or private equity offerings, debt financings, assets securitizations, sale-leasebacks or other financing or strategic alternatives, to the extent such transactions are permissible under the covenants of our 2019 Credit Agreement. Additional equity or debt financing, or other transactions, may not be available on acceptable terms, if at all. If any of these transactions require an amendment or waiver under the covenants in our 2019 Credit Agreement, which could result in additional expenses associated with obtaining the amendment or waiver, we will seek to obtain such a waiver to remain in compliance with those covenants. However, we cannot be assured that such an amendment or waiver would be granted, or that additional capital will be available on acceptable terms, if at all.

At March 31, 2022, our only current committed external source of funds is our borrowing availability under our 2019 Revolving Facility. We had $105.4 million of cash and cash equivalents at March 31, 2022. Our 2019 Facility, as amended, contains a number of affirmative, negative, reporting and financial covenants, in each case subject to certain exceptions and materiality thresholds. Incremental borrowings under the 2019 Revolving Facility, as amended, may affect our ability to comply with the covenants in the 2019 Facility, as amended, including the financial covenants restricting consolidated net leverage and interest coverage. Accordingly, we may be limited in utilizing the full amount of our 2019 Revolving Facility, as amended, as a source of liquidity.

The CVRs we issued in the Progenics Acquisition entitle holders thereof to future cash payments of 40% of PYLARIFY net sales over (i) $100.0 million in 2022 and (ii) $150.0 million in 2023, which, if payable, we currently intend to fund from our then-available cash. In no event will our aggregate payments under the CVRs, together with any other non-stock consideration treated as paid in connection with the Progenics Acquisition, exceed 19.9% (which we currently estimate could be approximately $100.0 million) of the total consideration we pay in the Progenics Acquisition. Refer to Note 4, “Fair Value of Financial Instruments”, for further details on contingent consideration liabilities.

Based on our current operating plans, we believe our balance of cash and cash equivalents, which totaled $105.4 million as of March 31, 2022, along with cash generated by ongoing operations and continued access to our 2019 Revolving Facility, will be sufficient to satisfy our cash requirements over the next twelve months and beyond.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations are based on our condensed consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these condensed consolidated financial statements requires us to make estimates and judgments that affect our reported assets and liabilities, revenues and expenses, and other financial information. Actual results may differ materially from these estimates under different assumptions and conditions. In addition, our reported financial condition and results of operations could vary due to a change in the application of a particular accounting standard.

There have been no other significant changes to our critical accounting policies or in the underlying accounting assumptions and estimates used in such policies in the three months ended March 31, 2022. For further information, refer to our summary of significant accounting policies and estimates in our Annual Report on Form 10-K filed for the year ended December 31, 2021.

Off-Balance Sheet Arrangements

We are required to provide the Massachusetts Department of Public Health and New Jersey Department of Environmental Protection financial assurance demonstrating our ability to fund the decommissioning of our North Billerica, Massachusetts and Somerset, New Jersey production facilities upon closure, though we do not intend to close the facilities. We have provided this financial assurance in the form of a $28.2 million surety bond.

Since inception, we have not engaged in any other off-balance sheet arrangements, including structured finance, special purpose entities or variable interest entities.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

For quantitative and qualitative disclosures about market risk, see Part II, Item 7A. “Quantitative and Qualitative Disclosures About Market Risk,” of our Annual Report on Form 10-K for the year ended December 31, 2021. Our exposures to market risk have not changed materially since December 31, 2021.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

The Company’s management, with the participation of the Company’s Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”), its principal executive officer and principal financial officer, respectively, has evaluated the effectiveness of the Company’s disclosure controls and procedures as defined in Rule 13a-15(e) and 15d-15(e) of the Exchange Act. Based on that evaluation, the Company’s CEO and CFO concluded that the Company’s disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) were effective as of the period covered by this report.

Changes in Internal Controls Over Financial Reporting

There were no changes in our internal control over financial reporting during the three months ended March 31, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

We are continually monitoring and assessing the pandemic status and geopolitical environment to determine any potential impact on the design and operating effectiveness of our internal controls over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

Information with respect to certain legal proceedings is included in Note 19, “Commitments and Contingencies”, to the condensed consolidated financial statements contained in Part I, Item 1. Financial Statements of this Quarterly Report on Form 10-Q and is incorporated herein by reference.

Item 1A. Risk Factors

There have been no material changes to the risk factors set forth in our Annual Report on Form 10-K for the year ended December 31, 2021, except as set forth below:

Our ability to continue to grow PYLARIFY as a commercial product is dependent on (A) our ability to obtain FDA approval for additional PMFs to manufacture PYLARIFY, (B) the ability of PMFs to manufacture PYLARIFY to meet product demand, (C) our ability to sell PYLARIFY to customers, (D) our ability to obtain and maintain adequate coding, coverage and payment for PYLARIFY, and (E) our ability to establish PYLARIFY as a leading PSMA PET imaging agent in a competitive environment in which other PSMA PET imaging agents have been approved and additional ones are in development.

The commercial launch of PYLARIFY has been complex and expensive. To manufacture PYLARIFY, we assembled and qualified a nationwide network of PMFs with radioisotope-producing cyclotrons that make F 18, which has a 110-minute half-life, so PYLARIFY is manufactured and distributed rapidly to end-users. Because each of the PMFs manufacturing these products is deemed by the FDA to be a separate manufacturing site, each has to be separately approved by the FDA. Although we successfully qualified 21 PMFs in 2021 and continue to qualify additional PMFs in 2022, such that PYLARIFY is broadly available across the U.S. (including through our efforts to fly doses to certain markets ahead of PMF activation), we can give no assurance that the FDA will continue to approve PMFs in accordance with our planned roll-out schedule. If FDA approval of manufacturing sites is delayed or withdrawn, our future business, results of operations, financial condition and cash flows could be adversely affected.

PYLARIFY is sold in the U.S. to hospitals, independent imaging centers and government facilities and some sales are generated through a PYLARIFY direct sales team as well as a sales team at some of our PMF partners. We generally do not use group purchasing arrangements to sell PYLARIFY and require each customer to enter into a contract directly with us or our PMFs. During 2021, we hired additional employees to assist us with this commercialization of PYLARIFY. Our ability to continue to successfully grow PYLARIFY depends, in part, on our ability to continue to enter into arrangements directly with the hospitals, independent imaging centers and government facilities that we serve. Any delay or inability to enter into these arrangements could have an adverse impact on our future business, results of operations, financial condition and cash flows.

In addition, obtaining adequate coding, coverage and payment for PYLARIFY is critical, including not only coverage from Medicare, Medicaid and other government payors, as well as private payors, but also appropriate payment levels to adequately cover our customers' costs of using PYLARIFY in PET/CT imaging procedures. We received notification that our HCPCS code, which enables streamlined billing, went into effect as of January 1, 2022. In addition, effective January 1, 2022, CMS granted Transitional Pass-Through Payment Status for PYLARIFY, enabling traditional Medicare to provide an incremental payment for PET/CT scans performed with PYLARIFY in the hospital outpatient setting. If other government payors or private payors do not provide adequate reimbursement for the use of PYLARIFY, our future business, results of operations, financial condition and cash flows could be adversely affected.

The successful growth of PYLARIFY is also dependent on our ability to establish PYLARIFY as a leading PSMA PET imaging agent in a competitive environment in which other PSMA PET imaging agents have been approved and additional ones are in development. PYLARIFY currently competes with Telix Pharmaceuticals Limited's recently-approved Illuccix (gallium-68 PSMA-11 injection), Novartis AG's recently-approved Locametz (gallium-68 PSMA-11 injection) and Bracco's Axumin (fluciclovine F 18). We also face potential competition from an F 18 PSMA PET imaging agent that Bracco has in late stage clinical development, which we believe could be approved by the FDA for commercialization later in 2022 or in 2023. To the extent we lose market share to existing or future competitors, such loss of market share could have an adverse impact on our future business, results of operations, financial condition and cash flows. Moreover, because we are still early in the commercialization of PYLARIFY, we can give no assurance as to how clinical practice may evolve or what our ultimate market penetration or market share may be.

Our success in growing PYLARIFY also depends, in part, on our successfully establishing the use of PYLARIFY for approved indications and potentially for additional indications. For example, we believe the recent approval of Pluvicto for the treatment of adult patients with PSMA-positive mCRPC who have already been treated with other anticancer treatments (androgen receptor pathway inhibition and taxane-based chemotherapy) creates a new addressable market for the use of PSMA PET imaging in patient selection for PSMA-targeted therapy that increases the total addressable market in the U.S. by an additional 30,000 new scans per year for patients with mCRPC. However, the prescribing information for Pluvicto specifies that a PSMA-11 based PSMA PET imaging agent be used for patient selection, and PYLARIFY is not a PSMA-11 based imaging agent. In March 2022, we announced a strategic collaboration with Novartis to include PYLARIFY in prostate cancer trials with Pluvicto. While we note that FDA-approved labels for F 18 based and PSMA-11 based PSMA PET imaging agents have generally been treated as a class of drugs, including recently by the Society for Nuclear Medicine and Molecular Imaging in its appropriate use criteria, we can give no assurances that the Novartis prostate cancer trials using PYLARIFY will be successful, that the Pluvicto prescribing information will be expanded to incorporate F 18 based PSMA PET imaging agents like PYLARIFY or how clinical practice may evolve. To

the extent we are unsuccessful in establishing the use of PYLARIFY for approved or new indications, such lack of success could have an adverse impact on our future business, results of operations, financial condition and cash flows.

We face significant competition in our business and may not be able to compete effectively.

The markets for our products are highly competitive and continually evolving. Our principal competitors for our current commercial products and leading clinical development candidates include large, global companies that are more diversified than we are and that have substantial financial, manufacturing, sales and marketing, distribution and other resources:

- For DEFINITY, our competitors currently include GE Healthcare and Bracco.
- For PYLARIFY, our competitors currently include approved imaging agents from Telix Pharmaceuticals Limited, Novartis AG and Bracco, and may in the future include an F 18 PSMA PET imaging agent that Bracco has in late stage clinical development, which we believe could be approved by the FDA for commercialization later in 2022 or in 2023. In addition, the University of California, San Francisco and the University of California, Los Angeles have approved NDAs for a gallium-68 PSMA-11 injection for PSMA PET imaging, which we believe will primarily be used within their hospital systems.
- For a number of our radiopharmaceutical commercial products, our competitors currently include Curium, GE Healthcare, Bracco and Jubilant Life Sciences, an affiliate of JHS and Jubilant Radiopharma, as well as other competitors, including NorthStar and potentially BWXT Medical.
- For RELISTOR, our principal competitors include Nektar Therapeutics, in collaboration with AstraZeneca PLC; Cubist Pharmaceuticals, a subsidiary of Merck & Co., Inc.; Mallinckrodt plc, in collaboration with Takeda Pharmaceutical Company Limited; and BioDelivery Sciences International, Inc.; together with other prescription, as well as over-the-counter, laxatives used as first line therapy for OIC.
- For AZEDRA, there are currently no FDA approved anticancer treatments in the U.S. for malignant, recurrent, and/or unresectable pheochromocytoma and paraganglioma.
- For 1095, our principal competitors in the field of radiopharmaceutical therapeutics for mCRPC include Novartis AG, which recently received FDA approval for its PSMA-targeted therapeutic; and may include POINT Biopharma, Telix Pharmaceuticals Limited, and Bayer HealthCare Pharmaceuticals Inc., each of which have product candidates in development.
- For LMI 1195, our principal competitors may include GE Healthcare's iobenguane 123 injection.
- For flurpiridaz, our principal competitors may include rubidium generators from Bracco and Jubilant Radiopharma.

We cannot anticipate the actions of our current or future competitors in the same or competing diagnostic modalities, such as significant price reductions on products that are comparable to our own, development of new products that are more cost-effective or have superior performance than our current products or the introduction of generic versions after our proprietary products lose their patent protection. In addition, distributors of our products could attempt to shift end-users to competing diagnostic modalities and products, or bundle the sale of a portfolio of products, in either case to the detriment of our specific products. Our current or future products could be rendered obsolete or uneconomical as a result of these activities.

Further, the radiopharmaceutical industry continues to evolve strategically, with several market participants either recently sold or for sale. In addition, the supply-demand dynamics of the industry are complex because of large market positions of some participants, legacy businesses, government subsidies (in particular, relating to the manufacture of radioisotopes), and group purchasing arrangements. We cannot predict what impact new owners and new operators may have on the strategic decision-making of our competitors, customers and suppliers, and such decision-making could have a material adverse effect on our business, results of operations, financial condition and cash flows.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Repurchases

The following table presents information with respect to purchases of common stock we made during the three months ended March 31, 2022. The Company does not currently have a share repurchase program in effect. The 2015 Equity Incentive Plan, adopted by the Company on June 24, 2015, as amended on April 26, 2016 and as further amended on April 27, 2017, April 24, 2019, April 28, 2021 and April 28, 2022 (the "2015 Plan"), provides for the withholding of shares to satisfy minimum statutory tax withholding obligations. It does not specify a maximum number of shares that can be withheld for this purpose. The shares of common stock withheld to satisfy minimum tax withholding obligations may be deemed to be "issuer purchases" of shares that are required to be disclosed pursuant to this Item 2.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program
January 2022**	382	$ 29.16	*	*
February 2022**	33,400	$ 47.46	*	*
March 2022**	75,908	$ 51.49	*	*
Total	109,690		*	

* These amounts are not applicable as the Company does not have a share repurchase program in effect.

** Reflects shares withheld to satisfy minimum statutory tax withholding amounts due from employees related to the receipt of stock which resulted from the exercise or vesting of equity awards.

Dividend Policy

We did not declare or pay any dividends, and we do not currently intend to pay dividends in the foreseeable future. We currently expect to retain future earnings, if any, for the foreseeable future, to finance the growth and development of our business and to repay indebtedness. Our ability to pay dividends is restricted by our financing arrangements. See Part I, Item 2. "Management's Discussion and Analysis of Financial Condition and Results of Operations-Liquidity and Capital Resources-External Sources of Liquidity" for further information.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

EXHIBIT NUMBER	DESCRIPTION OF EXHIBITS	INCORPORATED BY REFERENCE			
		FORM	FILE NUMBER	EXHIBIT	FILING DATE
10.1* †	Manufacturing and Supply Agreement with Jubilant HollisterStier, effective as of February 23, 2022.				
10.2* +	Form of Restricted Stock Unit Award Agreement (Employee Time-Based Vesting) of Lantheus Holdings, Inc.				
10.3* +	Form of Restricted Stock Unit Award Agreement (Relative Total Shareholder Return Performance-Based Vesting) of Lantheus Holdings, Inc.				
10.4* +	Form of Stock Option Award Agreement (Time Vesting) of Lantheus Holdings, Inc.				
31.1*	Certification of Chief Executive Officer pursuant to Exchange Act Rule 13a-14(a).				
31.2*	Certification of Chief Financial Officer pursuant to Exchange Act Rule 13a-14(a).				
32.1**	Certification pursuant to 18 U.S.C. Section 1350.				
101.INS*	Inline XBRL Instance Document				
101.SCH*	Inline XBRL Taxonomy Extension Schema Document				
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document				
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document				
104*	Cover Page Interactive Data File (embedded within the Inline XBRL document)				

* Filed herewith.

** Furnished herewith.

† Portions of this exhibit have been omitted for confidential treatment pursuant to Item 601(b)(10)(iv) of Regulation S-K.

+ Indicates management contract or compensatory plan or arrangements

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

LANTHEUS HOLDINGS, INC.

By:	/s/ MARY ANNE HEINO
Name:	Mary Anne Heino
Title:	*President and Chief Executive Officer (Principal Executive Officer)*
Date:	April 29, 2022

LANTHEUS HOLDINGS, INC.

By:	/s/ ROBERT J. MARSHALL, JR.
Name:	Robert J. Marshall, Jr.
Title:	*Chief Financial Officer and Treasurer (Principal Financial Officer)*
Date:	April 29, 2022

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY "**", HAS BEEN OMITTED BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO LANTHEUS HOLDINGS, INC. IF PUBLICLY DISCLOSED.**

MANUFACTURE AND SUPPLY AGREEMENT

THIS AGREEMENT is effective as of the date it is signed, by the last party to do so (the "**Effective Date**")

B E T W E E N: **JUBILANT HOLLISTERSTIER LLC**, with its principal place of business located at 3525 N Regal St, Spokane, WA 99207, United States ("**Supplier**");

AND:

LANTHEUS MEDICAL IMAGING, INC., having its head office at 331 Treble Cove Rd., N. Billerica, MA 01862 ("**Purchaser**")

WHEREAS Purchaser desires to have Supplier manufacture and supply certain pharmaceutical products;

AND WHEREAS Supplier desires to manufacture and supply Purchaser with certain pharmaceutical products;

AND WHEREAS the Parties are willing to carry out the foregoing pursuant to the terms and conditions set forth in this Agreement.

NOW THEREFORE in consideration of the mutual covenants and agreements in this Agreement, Purchaser and Supplier agree with each other as follows:

Article I- INTERPRETATION

1.1 **Defined Terms**.

As used in this Agreement and in the Quality Agreement (as defined below), the following terms have the following meanings unless the context clearly requires otherwise:

"**Accepted Purchase Order(s)**" shall have the meaning ascribed hereto in Section 4.3(c) of this Agreement.

"**Active Pharmaceutical Ingredient**" means the Product active pharmaceutical ingredient(s) supplied by Purchaser for the Manufacturing of the Products.

"**Affiliate**" means any corporation or other business entity directly or indirectly controlled by, controlling, or under common control with a Party or its parent corporation. The term **"control"** (including, with correlative meaning, the terms "controlled by," "controlling" and "under common control with") means the direct or indirect ownership of more than fifty (50%) percent of the outstanding shares or other voting rights of the subject entity or possession, directly or indirectly, of the power to elect or appoint fifty percent (50%) or more of the members of the governing body of the corporation or other entity or the power to direct or cause the direction of the management and policies of such Party, whether through the ownership of voting securities, by contract or otherwise, or such other relationship as, in fact, constitutes actual control.

"**Agreement**" means this Manufacture and Supply Agreement and all schedules and instruments supplemental to or amending thereto.

"**Annual Minimum Purchase**" has the meaning referenced thereto in Section 3.2 of this Agreement.

"**Batch**" means a batch of Products as specified in Schedule "C" attached hereto (with a theoretical maximum production size as set forth in Schedule "C).

"**Business Day**" or "**Business Days**" means any day other than Saturday, Sunday or a holiday generally recognized in the United States of America.

"**Calendar Year(s)**" means January 1 to December 31 of any given year or years, as the case may be.

"**CFR**" means the U.S. Code of Federal Regulations.

"**Current Good Manufacturing Practices**" or "**cGMP**" or "**GMP**" means, as applicable in accordance with the Territory in which the Products will be distributed in, the practices set out in the guidelines (i) published as the Good Manufacturing Practices for Drug Manufacturers and Importers by the HPFBI, as amended from time to time, (ii) for the manufacture of pharmaceutical products and the Current Good Manufacturing Practices as defined in United States 21 CFR 210, et seq., as amended from time to time, and (iii) the EEC Guide to Good Manufacturing Practices for Medical Products, as amended from time to time.

"**DEFINITY**" shall have the meaning ascribed to it in Schedule "D".

"**Designated Supplier**" shall have the meaning ascribed to it in the Quality Agreement.

"**Designated Supplier's Audit**" shall have the meaning ascribed to it in the Quality Agreement.

"**Facility**" means Supplier's facility located at **** used in the Manufacturing of the Products hereunder and, subject to Purchaser's prior written approval, such other facilities used by Supplier in the Manufacturing of Products hereunder

"**FDA**" means the United States Food and Drug Administration, or any successor to it.

"**Firm Zone**" has the meaning ascribed thereto in Section 4.2(a) of this Agreement.

"**Force Majeure**" has the meaning ascribed thereto in Section 11.2(a) of this Agreement.

"**Governmental Authority**" or "**Regulatory Authority**" means any court, tribunal, arbitrator, agency, commission, official or other instrumentality of The United States of America, any relevant foreign country or territory, or any domestic or foreign state, province, country, city or other political subdivision thereof, having responsibility for regulation or otherwise as to the Parties including as to the Manufacturing, marketing, distribution or sale of the Product and/or the services provided under this Agreement.

"**Incoterms® 2020**" means the International Commercial Terms published by the International Chamber of Commerce, as amended from time to time, codifying the contractual rules for the interpretation of standardized commercial terms for transactions. Incoterms® 2020 shall be deemed to have been incorporated by reference in this Agreement except in so far as they may conflict with any other provision of this Agreement, in which case the Agreement provision shall prevail.

"**Indemnitees**" means either Party, as the case may be, and that Party's shareholders, directors, officers, employees, agents and representatives.

"**Intellectual Property**" means all domestic or foreign (i) trademarks, service marks, trade names, trade dress, logos and slogans and all goodwill associated therewith; (ii) patent, patent rights, industrial and other designs, including any and all applications, applications for registration, registrations, divisions, continuations, continuations-in-part, extensions, substitutions, renewals, revalidations, re-examinations, reissues or additions, including supplementary certificates of protection, or of to any of the foregoing items; (iii) copyright, any original work or authorship fixed in any tangible medium of expression, including literary works, all forms and types of computer

software, all source code, object code, firmware, development tools, files, records and data, and all documentation related to any of the foregoing, all musical, dramatic, pictorial, graphic and artistic works; (iv) trade secrets, technology, discoveries and improvements, know-how, proprietary rights, formulae, confidential and proprietary information, technical information, techniques, inventions, designs, drawings, procedures, processes, models, formulations, manuals and systems, whether or not patentable or copyrightable, including all biological, chemical, biochemical, toxicological, pharmacological and metabolic material and information and data relating thereto and formulation, clinical, analytical and stability information and data which have actual or potential commercial value and are not available in the public domain; and (v) all other intellectual property or proprietary rights, in each case whether or not subject to statutory registration or protection.

"**Inventory Carrying Fee(s)**" shall have the meaning ascribed thereto in Section 4.2(g).

"**Law(s)**" means any international, national, federal, state, provincial and local law, statute, code, rule, regulation, orders, decrees, guideline (including Current Good Manufacturing Practices), ordinance or other pronouncement of any Governmental Authority having the effect of law in the United States, any relevant foreign country or any territory or any domestic or foreign state, province, county, city or other political subdivision, as may be amended from time to time, that govern the Parties' respective obligations under this Agreement.

"**Licences**" means the licences, permits, certificates, authorizations or approvals issued to Supplier by the relevant Governmental Authority in respect of its site of manufacture of the Products.

"**Long Lead Time Materials**" has the meaning referenced thereto in Section 4.2(d) of this Agreement.

"**Losses**" mean any and all damages, fines, fees, settlements, payments, obligations, penalties, deficiencies, losses, costs and expenses (including without limitation, interest, court costs, reasonable fees of attorneys, accountants and other experts and other reasonable expenses of litigation or other proceedings or of any claim, default or assessment).

"**Manufacture**" or **"Manufactured"** means to effect the operation required in the manufacture, processing, filling, testing, packaging, labelling or storage, as the case may be, of the Products by Supplier.

"**Manufacturing**" means any operation required in the manufacture, processing, filling, testing, packaging, labelling or storage, as the case may be, of the Products by Supplier.

"**Manufacturing Records**" shall have the meaning ascribed to it in Section 5.8.

"**Material Zone**" has the meaning ascribed thereto in Section 4.2(b) of this Agreement.

"**Materials**" mean all materials and ingredients used in the Manufacturing of Products by Supplier including, but not limited to, Active Pharmaceutical Ingredient(s), raw materials, components, packaging, labeling materials, and shipping materials.

"**Materially Adversely Affect Supplier's Business**" means a consequence or series of consequences that have a meaningful negative impact on Supplier's business in any given year, as determined by Supplier, in its discretion, acting reasonably.

"**MOQ**" or "**Minimum Order Quantity**" has the meaning ascribed to it in Section 4.2(e) of this Agreement.

"**Ongoing Forecast**" has the meaning ascribed thereto in Section 4.1 of this Agreement.

"**Open Zone**" has the meaning ascribed thereto in Section 4.2(c) of this Agreement.

"**Party**" means either Purchaser or Supplier, individually; "**Parties**" means Purchaser and Supplier collectively.

"**Person**" means any natural person, entity, corporation, general partnership, limited partnership, proprietorship, other business organization, trust, union, association or Governmental Authority.

"Prices" or **"Price"** means the total aggregate cost of each Product as set out in Schedule "C".

"**Prior Agreement**" means each of the following agreements between the Parties: (i) Manufacturing and Supply Agreement, dated as of February 1, 2012, as amended, for DEFINITY® (Perflutren Lipid Microsphere) Injectable Suspension; (ii) Manufacturing and Supply Agreement, dated as of May 3, 2012, as amended, for CARDIOLITE® Kit for the Preparation of Technetium Tc99m Sestamibi for Injection; (iii) Manufacturing and Supply Agreement, dated as of May 3, 2012, as amended, for NEUROLITE® Kit for the Preparation of Technetium Tc99m Bicisate for Injection; and (iv) Manufacturing and Supply Agreement, dated as of March 29, 2010, as amended, for 30mL Sterile EVAC Vials.

"Proceeding" means applicable action, claim, suit, proceeding, arbitration or Governmental Authority action, notification, investigation or audit.

"**Producer Price Index**" or "**PPI**" means the Producer Price Index for Pharmaceutical Preparation Manufacturing (pcu325412325412) as published by the U.S. Department of Labor, Bureau of Labor Statistics, or a successor agency. In the event that the Bureau of Labor Statistics stops publishing the Producer Price Index or substantially changes its content or format, the Parties will substitute another comparable index published monthly by a mutually agreeable source. If the Bureau of Labor Statistics redefines the base year for the Producer Price Index from 1981 to another year, the Parties will continue to use the Producer Price Index but will convert to the new base year using an appropriate conversion formula.

"**Product(s)**" means the Products listed in Schedule "C".

"**Product Developments**" shall have the meaning ascribed hereto in Section 8.1(c) of this Agreement.

"**Purchase Order(s)**" shall have the meaning ascribed hereto in Section 4.3(a) of this Agreement.

"**Purchaser Intellectual Property**" means any and all Intellectual Property (i) owned by Purchaser prior to or as of the Effective Date; (ii) developed or acquired by Purchaser after the Effective Date provided that such Intellectual Property does not utilize nor is based on any Supplier Intellectual Property; or (iii) Product Developments.

"Quality Agreement" means the agreement which sets out the details of the allocation of tasks between the Parties as related to the Manufacturing of the Product, including responsibilities for quality assurance and control of Materials, packaging components, bulk Product and finished Product, a copy of which is attached hereto as Schedule "B".

"**Rejected Batch**" has the meaning ascribed thereto in Section 5.2(b) of this Agreement.

"**Rejection Notice**" has the meaning ascribed thereto in Section 5.2(b) of this Agreement.

"**Replacement Batch**" has the meaning ascribed thereto in Section 5.2(e) of this Agreement.

"**Specifications**" means, with respect to any Products, all specifications for materials, manufacturing procedures, sampling plans for the Products as well as the procedures, requirements (regulatory or otherwise), standards and other items necessary to Manufacture the Products, as approved by the Parties and attached as Schedule "A" and the quality standards, including tests, analytical

procedures and acceptance criteria, that are established to confirm the quality of the Product which are mutually agreed to in writing and contained or referenced in the Master Batch Record for the Product or as otherwise mutually agreed to in writing by the Parties.

"**Supplier Intellectual Property**" means: (i) all Intellectual Property owned by Supplier prior to and as of the Effective Date; or (ii) all Intellectual Property developed or acquired by Supplier after the Effective Date independent of the performance of its obligations under this Agreement, provided that such Intellectual Property does not utilize nor is based on any Purchaser Intellectual Property or Product Developments.

"**Technology**" means, collectively, all information, designs, formulae, algorithms, procedures, methods, techniques, ideas, know-how, research and development, technical data, programs, subroutines, tool design, material specifications, processes, inventions (whether patentable or unpatentable and whether or not reduced to practice), apparatus design, creations, improvements, works of authorship and other similar materials, and all recordings, graphs, drawings, reports, analyses, and other writings, and other tangible embodiments of the foregoing, in any form whether or not specifically listed herein, and all related technology, that are used in, incorporated in, embodied in, displayed by or relate to, or are used in connection with the foregoing. For clarification Technology specifically excludes actual equipment.

"**Term**" means, collectively, the Initial Term and any Renewal Term, as the case may be.

"**Territory**" means the countries or regions described in Schedule "E". Additional countries or regions may be added to the Territory at Purchaser's request and reasonable cost and expense (including, as evidenced by reasonable documentation made available to Purchaser, Supplier's reasonable internal personnel costs and out-of-pocket expenses) upon at least **** (****) days prior written notice.

1.2 **Incorporation of Schedules**.

The terms of the Schedules attached or referred to herein are an integral part of this Agreement. The following Schedules are attached hereto:

- Schedule "A" – Product Specifications
- Schedule "B" – Quality Agreement
- Schedule "C" – Product Prices
- Schedule "D" – Definitions and List of Materials
- Schedule "E" – List of countries/regions

1.3 **Currency**.

Except as otherwise expressly stated, all dollar amounts referred to in this Agreement are in US dollars.

1.4 **General**.

Article headings in this Agreement are for convenience only and shall not be used in interpreting this Agreement. The Agreement shall be read with such changes in gender or number as the context requires. The definitions in Article 1 shall apply equally to both the singular and plural forms of the terms defined. The words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation". All references herein to Articles, Sections, paragraphs, clauses and Schedules shall be deemed references to Articles, Sections, paragraphs and clauses of this Agreement and Schedules to this Agreement unless the context shall otherwise require. Any reference herein to any person or entity will be construed to include the person's or entity's successors and assigns. The words "herein", "hereof" and "hereunder", and words of similar import,

will be construed to refer to this Agreement in each of their entirety, as the context requires, and not to any particular provision hereof. The word "notice" means notice in writing (whether or not specifically stated) and will include notices, consents, approvals, and other written communications contemplated under this Agreement. The provisions that require that a Party, the Parties, or any committee hereunder "agree," "consent" or "approve" or the like will require that such agreement, consent, or approval be specific and in writing, whether by written agreement, letter, approved minutes, or otherwise (but excluding instant messaging), and, unless expressly stated otherwise in the relevant provision of this Agreement, that such agreement, consent, or approval not be unreasonably withheld, conditioned, or delayed. All references to any specific law, rule or regulation, article, Section or other division thereof, will be deemed to include the then-current amendments thereto or any replacement or successor law, rule or regulation thereof. The term "or" is disjunctive but not necessarily exclusive.

Article II - MANUFACTURING

2.1 **Agreement to Manufacture Products**.

For the Term of this Agreement, Supplier agrees to Manufacture (i) DEFINITY **** for Purchaser and (ii) the other Products identified in Schedule "A" **** for Purchaser, in each case, in the Facility in accordance with the terms set out in this Agreement and Purchaser agrees to purchase the Products from Supplier during the Term.

2.2 **Conformance with Specifications**.

Supplier shall Manufacture the Products in accordance with the Specifications. Either of the Parties shall have the right to request changes to any of the Specifications. Recommendations to change any of the Specifications shall be in writing. Supplier shall not implement any change to the Specifications before both Parties have agreed to such changes in accordance with the procedures set forth in the Quality Agreement.

2.3 **Conformance with cGMP**.

Supplier shall Manufacture the Products in accordance with applicable Current Good Manufacturing Practices and applicable Laws as reasonably interpreted by the Parties. Each Party shall promptly notify the other of knowledge of any new instructions or specifications required in order to comply with Current Good Manufacturing Practices or applicable Laws, and shall cooperate in agreeing on the best means to comply with any new requirements.

2.4 **Supply of Active Pharmaceutical Ingredients**.

Purchaser shall provide to Supplier, at ****, the APIs and such other Materials to be supplied by Purchaser listed in Schedule "D" (the "**LMI Materials**") in quantities sufficient to meet Purchaser's requirements for each Product as further set forth in Article IV. Supplier will provide Purchaser with an inventory report for the LMI Materials on a **** (or as otherwise agreed to by the Parties). Prior to delivery of the LMI Materials to Supplier, Purchaser shall provide to Supplier a copy of the Material Safety Data Sheet ("**MSDS**") for such LMI Material, and follow up with any subsequent revisions thereto. Purchaser shall supply the LMI Materials, including the APIs, and Certificates of Analysis and Certificates of Compliance therefore DDP (as defined in Incoterms 2020) the Facility no later than **** (****) days before the scheduled Manufacturing date. Upon receipt of the API, Supplier's sole obligation with respect to evaluation of the API shall be to perform an identification testing, as agreed to by the Parties in writing, upon the receipt of API. Supplier will not be responsible for confirming that the API and LMI Materials meets applicable Specifications. Supplier shall use the Purchaser's API solely and exclusively to Manufacture the Product under this

Agreement. Title to and risk of loss of API and LMI Materials shall at all times remain with Purchaser, and Supplier shall have no liability with respect to cost, loss, or damage of API and LMI Materials at any time, except to the extent such loss/damage is the result of the negligence or willful misconduct of Supplier or breach of this Agreement or the applicable Quality Agreement by Supplier. In the event of loss/damage of API or LMI Materials resulting from the negligence or willful misconduct of Supplier or breach of this Agreement or the applicable Quality Agreement by Supplier, Supplier shall issue a credit to Purchaser (at Purchaser's election) for an amount equal to ****; provided that the credit will be limited to the lesser of (i) (a) **** ($****) or (b) **** (as demonstrated by reasonable evidence and documentation therefore provided to Supplier), per Batch, (ii) **** ($****) in the aggregate in any calendar year, or (iii) **** ($****) in the aggregate for the Term of this Agreement. Any credits hereunder not settled within **** of issuance, or within **** (****) days of the effective date of any termination or expiration of this Agreement, will be refunded to Purchaser.

2.5 **Supply of Materials**.

The Parties shall supply the Materials as set forth in Schedule "D".

2.6 **Third Party Suppliers and Designated Suppliers**.

Third party suppliers and Designated Suppliers of Materials (other than LMI Materials) must be agreed upon between the Parties, including any changes thereto during the Term of this Agreement.

Article III - CONSIDERATION

3.1 **Price of Products and Adjustment.**

(a) **Price of Products**. The price of the Products shall be as set out in Schedule "C" (the "**Price**").

(b) **Price Increase.** Supplier may implement a Price increase **** annually, on **** of each Calendar Year starting on **** ("**Price Increase Date**"), in an amount equal to the lesser of (a) **** percent (****%) or (b) **** in the PPI during the immediately preceding **** (****) month period ending **** (or if such PPI data is not available for the timely implementation of the increase in Unit Pricing, the most recent **** (****) month period for which such PPI data is available). In addition but only to the extent not already covered by the PPI increase, if Supplier's cost for any Materials (not covered by the PPI calculation, and not supplied by Supplier Affiliates) increases by more than **** percent (****%) during the relevant foregoing period, Supplier shall be entitled to increase (no more than **** annually, on **** of each Calendar Year starting on ****) the Price by the amount of such price increase for such Materials, over and above the increase on account of PPI, and as to any such increase tied to a change in Supplier's cost Materials, Supplier shall provide Purchaser copies of invoices evidencing the increased cost of such Materials.

Supplier also reserves the right to increase the Price or other fees if change(s) to applicable Laws or regulations, including, but not limited to changes in cGMP, or changes to the process increase the cost of Manufacturing the Product or of any other activities contemplated under this Agreement.

(c) **Samples**. The Price shall also be payable for all samples of Products required to be maintained by Supplier under the terms of this Agreement, if applicable, or any applicable Law, if applicable, as well as any additional samples which the Purchaser requires, as the case may be, in addition to shipping and handling costs.

3.2 **Annual Minimum Purchases.**

The Prices is dependent on the following annual minimum purchases:

- DEFINITY (applicable on Purchaser's worldwide demand):
  - Calendar year 2022: ****%
  - Calendar year 2023: ****%

- Calendar year 2024: ****% with a minimum of **** batches for the year at USD**** per vial
- Calendar year 2025 and Terminal Supply Year (if applicable): ****% with a minimum of **** batches for the year at the price of the previous year, after applying the price increase mechanism set forth in section 3.1(b)
- Calendar years 2026 and 2027, a minimum commitment of **** batches applying the price increase mechanism set forth in section 3.1(b),

and

- Cardiolite: **** batches
- Neurolite: **** batches
- Neurolite buffer: **** batches
- EVAC Vials: **** batches

during each Calendar Year of the Term and the Terminal Supply Year, if applicable (collectively the "**Annual Minimum Purchase**").

Subject to the provisions of Section 4.3(a), if Purchaser fails to purchase from Supplier in any given Calendar Year the Annual Minimum Purchases, Purchaser shall ****. However, if Supplier, in any given Calendar Year, is not able to fulfil a Purchase Order by the specified delivery date (other than as a result of Purchaser's own fault or negligence), such orders shall be taken into account when calculating if the Annual Minimum Purchase has been met, as if such order had been actually purchased by Purchaser. For greater certainty, the **** shall not be reduced in any way if Supplier is not able to fulfil a Purchase Order by the specified delivery date as the result of (i) delays in delivery by Purchaser of any LMI Materials or (ii) delays caused by changes requested by Purchaser to be provided pursuant to this Agreement.

3.3 **Minimum Batch Size.**

Minimum Batch sizes shall be based on the minimum Manufacturing Batch size as agreed by the Parties and set forth in Schedule "C" hereto. A Manufacturing Batch may not be divided for different markets unless expressly agreed to in writing by Supplier.

3.4 **Payment**.

Supplier may invoice Purchaser upon delivery of the Product (****Incoterm 2020). Purchaser shall pay Supplier, for all Products Manufactured under the terms of this Agreement, within **** (****) days of the invoice date for all undisputed invoices, provided, however, that Purchaser will have the obligation to pay within the foregoing delay any undisputed amount of a disputed invoice. In addition, the interest rates set forth in the next sentence will apply to any disputed amount paid after the **** (****)-day delay, if it is ultimately concluded that the disputed amount of a disputed invoice shouldn't have been disputed in the first place. Supplier shall issue invoices in respect of the Product upon shipment of such Product with interest at the rate of **** percent (****%) per month (****percent (****%) per annum) payable on all undisputed amounts not paid on the due date.

3.5 **Taxes**.

In addition to the amounts paid by Purchaser pursuant to Section 3.1, Purchaser shall pay to Supplier all applicable use, consumption, sales or excise taxes of any taxing authority (but not including any tax related to Supplier's income). The amount of such taxes will be added to the Price in effect at the time of shipment thereof and will be reflected in the invoices submitted to Purchaser by Supplier pursuant to Section 3.4 hereof. Purchaser shall pay the amount of such taxes to Supplier in accordance with the payment provisions set forth in Section 3.4 hereof.

3.6 **Capital Expenditures.**

Intentionally left blank.

3.7 **Additional Services**.

Any additional services requested by Purchaser that are not contemplated under this Agreement shall be payable separately, following the receipt of a Purchase Order from Purchaser. No additional services will be performed by Supplier before a Purchase Order has been placed by Purchaser for such additional service(s).

The cost for the additional services shall be payable by Purchaser within **** (****) days of the date of an invoice received by Purchaser from Supplier.

3.8 **Cost of Changes to Specifications**.

(a) **Changes Requested by Purchaser**. **** associated with changes requested by Purchaser to Materials or components of the Products, process and other Specifications and/or controls, as well as the Manufacturing and/or packaging of Products shall be borne by ****. In addition, **** shall be responsible for **** related to Materials purchased or ordered by Supplier for the Manufacturing of the Products which are unusable as a result of such changes made, including without limitation, changes to the graphics used on packaging, films, dies, proofs, provided that such changes were made at Purchaser's request. **** agrees to use reasonable efforts to minimize these costs to ****.

(b) **Changes to Comply with cGMP**. **** shall be responsible for **** associated with changes required in the Specifications of the Products in order to comply with changes to cGMP occurring after the date of this Agreement, solely to the extent such changes are directly related to the Manufacture of the Products and not to the extent such changes are associated with the Manufacture of pharmaceuticals products generally.

(c) **Changes to Comply with Applicable Laws.** **** shall be responsible for **** associated with the Manufacture of the Products in order to comply with changes in applicable Laws occurring after the date of this Agreement (including with respect to any of the Materials used in that Product), solely to the extent such changes are directly related to the Manufacture of the Products, and not to the extent such changes are associated with the Manufacture of pharmaceuticals products generally.

3.9 **Annual Product Maintenance**

Purchaser shall pay to Supplier an annual product maintenance fee ("**APMF**") for the Products. The APMF will cover an array of Product support activities, which are irrespective of manufactured product volumes, and includes the following:

- Dedicated primary point of contact for all commercial manufacturing activities
- Scheduling, planning, and communicating all commercial manufacturing activities
- Drug Master File (DMF) updates with the FDA, EU and JP.
- Annual GUDFA fee participation
- Annual audit.
- Annual Product Review in accordance with 21 CFR § 211.180.
- Host all Person-in-Plant activities
- Product license or permits from local, state and all federal authorities.
- Access to document library (additional copies of batch paperwork or other batch documentation when requested).
- Product documentation and sample storage (retains) relating to cGMP requirements.
- Re-qualification of raw material vendors.
- Maintenance and storage of raw material vendor audit reports.

The APMF will be payable **** annually beginning February 2, 2022. The APMF for all Products combined is fixed at **** (USD ****) per **** (****) months, for the Term of the Agreement. In the event that this Agreement is terminated prior to the expiration of the Term, then the APMF shall

be prorated up to the date of termination for such partial calendar year, unless Supplier terminates under Section 11.2, in which case, no such proration shall occur.

Article IV - PRODUCT SUPPLY

4.1 **Ongoing Forecasts.**

Ongoing Forecasts. Purchaser shall provide Supplier with a copy of its forecast of its anticipated Product Manufacturing requirements for the **** (****) month period commencing the following month (the "**Ongoing Forecast**") on or before the **** (****) Friday of each month of the Term of the Agreement. Each Ongoing Forecast shall provide delivery dates for each Firm Zone (as defined in Section 4.2(a)), in addition to quantity and purchase order specifics for the Material Zone and the Open Zone. In the event that an Ongoing Forecast is not delivered on the **** (****) week of a given calendar month in accordance with this provision, the prior month's Ongoing Forecast will constitute that month's Ongoing Forecast.

4.2 **Order Procedures**.

(a) **Firm Zone**. **** percent (****%) of the Product quantities forecasted for the **** months of an Ongoing Forecast, and **** percent (****%) of the Product quantities forecasted for the **** (****) months of an Ongoing Forecast, are deemed to be firm orders, and as such Purchaser is committed to same and Supplier is committed to providing the same. The Parties shall use reasonable best efforts to negotiate any change in the delivery date of any firm order; provided, however, that:

(i) ****; and

(ii) ****.

(b) **Material Zone**. Excluding the Firm Zone, Product quantities forecasted for the **** (****) months of an Ongoing Forecast (the "**Material Zone**") are deemed to be firm as they relate to the quantities of Materials to be ordered. Changes of timing for delivery of Materials within the Material Zone may be made to respond to changing Purchaser demand; provided, however, that if any order made by Purchaser for Products to be delivered during the Material Zone of an Ongoing Forecast is cancelled, deferred or reduced, so as to result in a lesser quantity of Products ordered by Purchaser than indicated in the corresponding month of such Material Zone, ****. For greater clarity, ****.

(c) **Open Zone**. Product quantities forecasted for the **** (****) months of an Ongoing Forecast (the "**Open Zone**") are deemed to be open as they relate to the quantities of Materials to be ordered and Purchaser is not committed to same. The Parties acknowledge and agree that the requirements specified in the Open Zone of an Ongoing Forecast are for the purposes of Supplier's internal scheduling and planning only and Purchaser shall not be responsible for any costs of Materials procured or other expenses incurred by Supplier for the purpose of meeting the requirements specified in the Open Zone, unless related to Long Lead Time Materials or Materials ordered based on MOQ, as referenced in Section 4.2(d) and 4.2(e) or agreed to by both Parties.

(d) **Long Lead Time Materials**. Any inventory of Materials held by Supplier beyond requirements necessary for the supply of the Products required under the Firm Zone, the Material Zone or any pre-approved safety stock ("**Long Lead Time Materials**"), excluding Materials ordered based on MOQ, is the responsibility of ****. However, if the Parties

agree on the purchase or entering into of commitments to purchase any Long Lead Time Materials based on the Ongoing Forecast for a specified month and those Long Lead Time Materials cannot be ****.

(e) **Minimum Order Quantity**. Purchaser acknowledges and agrees that some Materials to be purchased by Supplier for the Manufacture of the Products may be subject to a minimum quantity per order ("**Minimum Order Quantity**" or "**MOQ**"). The Parties acknowledge and agree that a Minimum Order Quantity of Materials may exceed the requirements for such Materials for the Manufacture of the Product quantities forecasted in the Firm Zone and in the Material Zone. **** shall be responsible for the cost of any such unused, obsolete or excess Materials procured by Supplier based on a Minimum Order Quantity for the purpose of meeting the requirements specified in the corresponding months of Firm Zone and Material Zone of an Ongoing Forecast, provided that ****.

(f) **Safety Stock**. Purchaser will carry sufficient safety stock of the Products to support the necessary Purchaser service levels and Firm Zone and Material Zone lead times. Supplier will carry the necessary safety stock of Materials to support the Firm Zone and Material Zone lead times and to ensure timely delivery of orders of Products. Any safety stock of Long Lead Time Materials may be carried by Supplier, but must be approved in writing by Purchaser.

(g) **Inventory Carrying Fees.** If Supplier is required to store at the Facility Materials supplied to it by Purchaser for a period longer than **** (****) Business Days, or store finished Products for a period longer than **** (****) Business Days after the Product has been released to Purchaser by Supplier, then Purchaser shall pay to Supplier a reasonable and customary inventory carrying fee, such fee being in addition to the Price ("**Inventory Carrying Fee**"). Said Inventory Carrying Fee as be established at **** US dollars (USD ****) per pallet per month for Calendar Year and may be increased by Supplier from time to time by a **** (****) day notice, but not by more than ****% for each Calendar Year.

During the Term of this Agreement, Supplier will provide Purchaser with a system generated **** inventory report for the Materials and Products stored in its Facility. Supplier will perform a physical inventory of the Materials stored in its Facility on **** basis only, except in the event of significant discrepancies between the physical inventory and the system generated **** inventory reports. Additional physical inventories may be performed by Supplier upon Purchaser's written request and subject to payment by Purchaser of an additional fee through an agreed upon quote.

(h) **Delays in delivery of Materials by Third Party Supplier**. Delivery dates specified in Purchase Orders are subject to Supplier's receipt of Materials from the third-party supplier thereof (as the case may be) not less than **** (****) weeks prior to the specified delivery date. Supplier agrees to use commercial reasonable efforts to Manufacture the Product as soon as possible in the event that the supplier of the Materials fails to deliver the Materials in accordance with this schedule.

(i) **Graphic Changes**. If there is to be change to any artwork for any Product, at least **** (****) weeks prior to the intended first delivery date of such Product with such changed artwork, Purchaser shall provide to Supplier, at no cost, digital artwork in a format acceptable to Supplier and in compliance with the packaging specifications for such Product. All one time costs and expenses associated with any such artwork changes shall be the responsibility of Purchaser and shall be charged directly to the Purchaser and are not included in the Price.

4.3 **Purchase Orders**

(a) **General**. Purchaser shall deliver to Supplier purchase orders (each a "**Purchase Order**") for the aggregate Product volumes in each Firm Zone. Each Purchase Order shall specify the volumes of Products ordered, the Price, the requested delivery date, the destination of

delivery of the Products and Purchaser's instructions for such delivery, in accordance with the provisions of Section 5.1(b) of this Agreement. Purchase Orders shall be issued a minimum of **** (****) months prior to the requested delivery date.

(b) **Delivery of Purchase Order.** The Purchase Orders may be delivered electronically or by other means in such location, as Supplier shall designate from time to time. Supplier shall promptly acknowledge acceptance of each Purchase Order by sending to Purchaser electronic (email and/or fax) written notice of acknowledgement and acceptance for each Purchase Order promptly (but in any event, no later than **** (****) Business Days) after its receipt.

(c) **Rejection and Deemed Acceptance**. Notwithstanding anything in this Agreement to the contrary, Supplier reserves the right at its discretion to reject without liability any Purchase Order for reasons related to production scheduling limitations or otherwise; provided, however, that failure by Supplier to deliver to Purchaser a written notice objecting to a Purchase Order within **** (****) Business Days after receipt of the Purchase Order shall constitute Supplier's deemed acceptance of said Purchase Order ("**Accepted Purchase Order**"), and provided further, that in the event Supplier rejects a Purchase Order (unless such rejection is due to excess volume requirements substantially inconsistent with the amounts set forth in the **** months of an Ongoing Forecast, and subject to 4.3(a)), Purchaser will be deemed to have ordered such order for purposes of determining Purchaser's satisfaction of Annual Minimum Purchase requirements within the annual period.

(d) **Capacity Constraints**.

(i) Subject to an event of Force Majeure, Supplier shall Manufacture the Products and shall use commercially reasonable efforts to deliver Products, which are subject to an Accepted Purchase Order, by the specified delivery date referenced therein. In the event that Supplier is not able to fulfil an Accepted Purchase Order by the specified delivery date (for any reason):

A. Supplier shall notify Purchaser promptly upon discovery of its inability to comply with the terms of the Accepted Purchase Order; and

B. Supplier will take such actions as may be reasonably requested by Purchaser to minimize the damage to Purchaser caused by Supplier's inability to comply with the terms of the Accepted Purchase Order.

C. If Supplier is unable to fill a Purchase Order within **** (****) days of the scheduled delivery date Purchaser has the right to cancel the order without penalty and will be deemed to have ordered such order for purposes of determining Purchaser's satisfaction of Annual Minimum Purchase requirements within the annual period.

(e) **Accommodations**. From time to time, due to significant unforeseen circumstances, Purchaser may deliver to Supplier a Purchase Order for Product volumes in excess of those specified in any Firm Zone or Material Zone. Supplier will work with Purchaser on a reasonable commercial basis to assist with delivery of such volume excesses provided, however, that, until Supplier accepts (or is deemed to have accepted) such Purchase Order:

(i) Supplier shall have no obligation to use commercially reasonable efforts to assist Purchaser with meeting such excess volume requirements; and

(ii) Supplier shall have no obligation to use commercially reasonable efforts to assist Purchaser with meeting such excess volume requirements if to accommodate such

request would Materially Adversely Affect Supplier's Business including, without limitation, Supplier's ability to fulfill its commitment to its other customers; or

(iii) to the extent such demand exceeds **** percent (****%) of the Product volumes specified in the Firm Zone or Material Zone.

(f) **Conflict.** In ordering and delivering the Products pursuant hereto, Supplier and Purchaser may employ their standard forms, but nothing in those forms shall be construed to modify, amend or supplement the terms of this Agreement. Other than with respect to quality matters, which is addressed in Section 5.4, in the event of any conflict between the terms and conditions of this Agreement and the terms and conditions of any Purchase Order, the terms and conditions of this Agreement shall prevail to the extent of such conflict.

(g) **Rescheduling by Purchaser.** Should Purchaser reschedule any part of their Accepted Purchase Order (other than as a result of Supplier's request to reschedule such Accepted Purchase Order or Supplier's inability to satisfy such Accepted Purchase Order), the following will apply; provided however, that Supplier will make a good faith effort to use the capacity created by any such cancellation, in which case the fees below will be reduced commensurately:

- Should Purchaser postpone all or part of any Purchase Order less than **** (****) days prior to Supplier's scheduled fill date, Purchaser shall pay Supplier a non-refundable and non-creditable fee equivalent to ****% of the purchase price for the entire purchase order;

- Should Purchaser postpone all or part of any Purchase Order **** (****) to **** (****) days prior to Supplier's scheduled fill date, Purchaser shall pay Supplier a non-refundable and non-creditable fee equivalent to ****% of the purchase price for the entire purchase order; or

- Should Purchaser postpone all or part of any Purchase Order **** (****) to **** (****) **** prior to Supplier's scheduled fill date, Purchaser shall pay Supplier a non-refundable and non-creditable fee equivalent to ****% of the purchase price for the entire purchase order.

If Supplier is unable to fill a Purchase Order within **** of the scheduled delivery date Purchaser has the right to cancel the order without penalty and will be deemed to have ordered such order for purposes of determining Purchaser's satisfaction of Annual Minimum Purchase requirements within the annual period.

4.4 ****** Qualification**. Purchaser shall have the right to qualify **** as a manufacture of Products and to seek and obtain regulatory approval(s) of such ****. If Purchaser desires to exercise its rights in this Section 4.4, Purchaser shall notify Supplier of such decision in writing.

Article V - DELIVERY, TITLE AND ACCEPTANCE

5.1 **Product Storage and Shipment**.

(a) **Storage Conditions**. The Materials and Products Manufactured by Supplier are to be stored and transported in accordance with the conditions agreed between Purchaser and Supplier and in accordance with the Specifications.

(b) **Shipping Responsibilities**. The Products ordered by Purchaser pursuant to this Agreement and any small parcels shall be deemed delivered by Supplier to Purchaser once delivered on the Facility's loading dock **** (Incoterms® 2020). Shipment of the Products and small parcels shall be at **** sole cost and expenses. **** shall be liable for any and all

transportation charges, including without limitation freight, duties and taxes levied in connection with the supply of Products and any small parcels and shipment of same. Supplier shall arrange for the shipment of the Products in accordance with Purchaser's instructions. Purchaser shall select and retain the carrier and insurance company for shipping of the Products in accordance with the terms of this Agreement. Purchaser shall provide Supplier with its carrier's name and account number and its insurance company contact information. Supplier will schedule freight pick up with Purchaser's selected carrier and complete the documentation on behalf of Purchaser for each shipment of Product by using Purchaser's account number. All costs and invoices shall be charged by Purchaser's selected carrier directly to **** for all third party costs related to same. If Purchaser wishes the delivery of the Products to be on any unique pallets, Purchaser shall, at its own cost and expense, make such pallets available to Supplier. Notwithstanding the above, Supplier will use treated-wood pallets, unless a different type of pallet is made available by Purchaser. Purchaser shall be responsible for the supply of single use data loggers, if required by Purchaser. Supplier may supply a single use data logger and/or dry ice with each Batch of Product shipped if requested by Purchaser in writing subject to payment by Purchaser of an additional fee to be quoted to Purchaser prior to shipment per data logger and per bag of twelve (12) kilos of dry ice.

(c) **Transfer of Title**. Notwithstanding anything to the contrary, title to and risk for the Products supplied to Purchaser under this Agreement passes to Purchaser **** (Incoterms® 2020) ****, at the time the Products ****, not cleared for export and not loaded on any collecting vehicle. Supplier shall not be liable to Purchaser for the costs of loss of any kind arising out of or in relation to damage to or loss of the Products, however caused, which occurs after title to and risk for the Products passes to Purchaser, nor shall any liability of Purchaser to Supplier under this Agreement be diminished or extinguished by reason of such loss or damage. For greater certainty, **** shall be liable for all costs and risks of loss while Products are in transit.

5.2 **Purchaser Acceptance**.

(a) **Quantitative Defects.** Purchaser shall inform Supplier in writing of any claim relating to quantitative defects in shipments of Products within **** (****) days from the receipt of such shipment by Purchaser and Purchaser shall provide to Supplier copies of any appropriate documents relating to such defects. Supplier shall at its own expense provide Purchaser with any missing quantities of such Products as soon as reasonably possible after receipt of notice from Purchaser. Any claim for a quantitative defect which is not made within such **** (****) day period shall be deemed to have been waived by Purchaser, provided, however, that failure to make a quantitative defect claim shall not be construed as a waiver of any indemnification rights, breach claim or other remedies that Purchaser may have available to it.

(b) **Qualitative Defects**. Purchaser shall have **** (****) days from the receipt of each shipment of Products in which to determine by appropriate validated tests and assays whether or not each Batch delivered conforms to the Specifications ("**Conformity Determination**"). In the case of hidden or latent defects, such Conformity Determination must be made within **** (****) days from the receipt of each shipment of Products. If Purchaser deems that a Batch does not conform to the Specifications ("**Rejected Batch**"), unless such non-conformance is the result of a change in the Active Pharmaceutical Ingredient or any LMI Materials supplied by Purchaser or any Designated Supplier hereunder or a defect in the formula for the Manufacturing of the Product, Purchaser may reject such Batch by giving written notice to Supplier within **** (****) Business Days of the Conformity Determination ("**Rejection Notice**"). Purchaser must specify in reasonable detail the manner in which such Batch fails to meet the Specifications. Purchaser may withhold payment for any Batch of Products for which a Rejection Notice has been given to Supplier until the matter is resolved. Purchaser shall be deemed to have accepted any Batch with respect to which it fails to notify Supplier as provided above, provided, however, that failure

to make a qualitative defect claim shall not be construed as a waiver of any indemnification rights, breach claim or other remedies that Purchaser may have available to it.

(c) **Disposition of Rejected Batch**. Supplier shall have **** (****) days from the receipt of the Rejection Notice to accept or reject Purchaser's claims and submit a report on the Rejected Batch indicating the investigation and testing done and the recommended disposition to Purchaser, as the case may be. Purchaser shall review such report and notify Supplier that Purchaser either requests additional data, approves the recommended disposition of the Rejected Batch or will otherwise direct Supplier as to how Purchaser wishes the Rejected Batch to be disposed of.

(d) **Dispute of Test Results**. If the Parties fail to agree on whether a Batch of Products fails in whole or part to meet the Specifications and on the disposition of such Rejected Batch, such dispute shall be resolved promptly by an independent testing organization of recognized repute within the pharmaceutical industry of the Territory in which such Batch is to be distributed, mutually agreed upon by the Parties. The appointment of such organization shall not be unreasonably delayed by either Party. The decision of such testing organization shall be binding on both Parties. The fees and costs of the testing organization, and storage and handling of the Products during the resolve of the dispute shall be borne by the Party whose position is not sustained by the testing organization.

(e) **Rework and Replacement of Rejected Batch**.

(i) If the Parties agree that a Rejected Batch fails in whole or in part to conform to the Specifications, or if a dispute between the Parties in this regard has been resolved pursuant to Section 5.2(d) in favour of Purchaser, Supplier agrees to use **** to destroy the Rejected Batch and deliver a replacement Batch for the Rejected Batch ("**Replacement Batch**") within **** (****) days of the date Supplier accepts Purchaser's written Rejection Notice or the date of the final resolution of the dispute, whichever is later, provided that Supplier has all Materials in inventory, including, when applicable the Active Pharmaceutical Ingredient and Long Lead Time Materials. Any costs related to any additional API or Materials needed as a result of such Rejected Batch shall be borne by ****.

(ii) Notwithstanding the existence of a dispute concerning Products rejected by Purchaser, pending resolution of such dispute, Supplier shall, within **** (****) days of issue by Purchaser of a Purchase Order for additional Products of the type and quantity claimed to be rejected as contemplated by 5.2(b) hereof, deliver such additional Products, and Purchaser shall be obligated to pay for such Products in accordance with 3.4 hereof. In the event that it is ultimately determined that the Rejected Batch was properly rejected by Purchaser, Supplier shall issue a credit to Purchaser against a future batch of Product in the amount equivalent to the price paid for the rejected batch.

(iii) Notwithstanding anything to the contrary contained herein, should the Rejected Batch have failed to meet the Specifications due to defects in the Purchaser's formula for the Manufacturing of the Product, a Force Majeure applicable to Purchaser or Purchaser's negligence or willful misconduct, Supplier shall have no obligation to deliver a Replacement Batch to Purchaser and Purchaser shall provide payment for the Rejected Batch.

(f) **Batch Yield.** Supplier makes no warranty as to the achievement of a certain yield.

5.3 **Recalls**.

(a) Purchaser shall be responsible for recalls, withdrawals and field corrections (each, a "**Recall Event**") of the Products. Supplier shall cooperate with Purchaser in the event of any Recall Event with respect to the quality of the Products Manufactured by Supplier and provide such reasonable assistance in connection therewith as Purchaser may reasonably request. The costs of any Recall Event shall be borne by Purchaser; provided, however, that Supplier shall be responsible to the extent the Recall Event is related to the negligence, wilful misconduct or breach of this Agreement or the Quality Agreement. For greater certainty, Supplier shall not be responsible if it Manufactured the Products in accordance with the Specifications provided by Purchaser for the Products.

5.4 **Form of Quality Agreement**.

The Parties agree to fairly and in good faith work towards finalizing the terms of a quality agreement related to the Products ("**Quality Agreement**") to be executed in a timely fashion and in a manner which allocates the task relating to the Manufacturing of the Products in accordance with and subject to the terms of this Agreement. The Parties agree that to the extent of an inconsistency with the terms of the Quality Agreement and the Agreement, the terms of the Quality Agreement shall prevail with respect to quality matters and the latter shall prevail to the extent of non-quality matters. Any default under the Quality Agreement shall be deemed a default under this Agreement.

5.5 **Testing**.

Supplier shall perform the quality control tests and assays identified in the Quality Agreement and in accordance therewith. No reduced testing will be performed by Supplier on Materials supplied by Purchaser, including without limitation the Active Pharmaceutical Ingredients, unless Purchaser supplies Supplier with reduced testing indications and protocol and subject to Purchaser's written confirmation that it has a valid vendor certification program pursuant to applicable Law.

5.6 **Product Batch Release**.

Supplier shall be responsible for the technical release to Purchaser of each production Batch of Products, and Purchaser shall be responsible for the release of the Products to the market. To the extent necessary in relation to the release of any Product by Purchaser, each Batch of Product delivered by Supplier to Purchaser shall be accompanied by a "Certificate of Manufacture" which certifies the date of Manufacturing, expiration date of the Product and that the Batch was Manufactured in conformance with the Specifications and cGMP, and a "Certificate of Analysis" for in-process testing which lists the in-process tests performed by Supplier and sets forth the results of those tests and a list of the quality events.

A full Batch record (i.e. Certificate of Analysis, Certificate of Manufacture, list of quality events, Manufacturing Records and packaging records) will be provided by Supplier to Purchaser per Product and per dosage form with every shipment.

5.7 **Designated Suppliers Audit**.

If Purchaser and Supplier agree that Supplier shall be responsible for the performance of a Designated Supplier's Audit, Purchaser agrees that such Designated Supplier's Audit shall be performed ****, including without limitation travelling expenses and accommodations, incurred as a result of such Designated Supplier's Audit. Supplier will provide a quote for the fees and expenses prior to the audit.

5.8 **Manufacturing Records**.

Supplier shall maintain true, accurate and complete records regarding the Manufacturing of the Products as required by applicable Law and in accordance with cGMP ("**Manufacturing Records**") including, without limitation, the information required to be maintained pursuant to the Quality Agreement.

Article VI - REGULATORY MATTERS

6.1 **Audit and Inspection except as otherwise set forth in the Quality Agreement**:

(a) **Purchaser Audit**. Supplier grants Purchaser the right to audit or to appoint third parties to audit the Facility and the documentation demonstrating Supplier's satisfactory performance of its obligations under Article II. Such audit shall be conducted during normal business and/or manufacturing hours for a period not to exceed **** (****) Business Days and by a maximum of two (2) auditors (in addition to any qualified person, who may require additional days). Additional auditors or Business Days may be agreed upon between the Parties in writing subject to payment by Purchaser of an additional fee of $****USD per additional auditor per additional Business Day. Purchaser shall notify Supplier in writing at least **** in advance of such an audit. The Parties agree that audits may only be performed during the months of February through June and September through November inclusively. Notwithstanding anything to the contrary contained herein, Purchaser may exercise such right not more than once in any Calendar Year, save and except for situations where a single audit reveals significant concerns from the perspective of Purchaser, acting reasonably, that require appropriate additional audit follow-up, or when an audit for cause is warranted. Any third party appointed by Purchaser to perform such an audit shall at all times be bound by the obligations of confidentiality and non-disclosure of Supplier's confidential information and agree to disclose to Purchaser only such information as is necessary to determine if Supplier is performing its obligations under Article II. Such third party shall also agree to disclose to Supplier the results of its review. It is furthermore agreed that the on-site availability of Purchaser or such third party shall have no bearing on Supplier's production schedule as Supplier shall be authorized and entitled to proceed with same in the absence of Purchaser's representative.

(b) **Inspection by Governmental Authorities**. Supplier shall permit inspections of the Facility by Governmental Authorities of all relevant territories (such as the FDA, HPFBI or equivalent foreign regulatory authorities) with respect to the fulfillment of any requirement for any License during the Term of this Agreement and, if necessary, thereafter, and unless prohibited by applicable Law, shall permit Purchaser to have representatives on-site for such inspection.

(c) **Inspection Notification**. Supplier agrees to promptly (but in any event within 48 hours) notify Purchaser of any inspection by any Governmental Authority pending as of the date hereof or as notice of same may arise, and of any communications to or from any Governmental Authority (including the reporting of adverse drug experiences or field alerts) which might adversely affect Supplier's ability to perform its obligations under this Agreement. Supplier shall keep Purchaser informed of the resolution of the matter with the relevant Governmental Authority.

6.2 **Regulatory Support Services**.

Supplier will provide reasonable support for any submissions required to the HPFBI, FDA and other applicable Governmental Authority to support contract manufacturing of Purchaser's Products by Supplier at the Facility. Supplier shall not be responsible for any regulatory efforts required in respect of the Manufacturing of the Products, other than regulatory efforts associated with requests by Purchaser for changes to the Specifications.

The Parties agree that all regulatory support services, including without limitation the gathering of documents in support of a Product submission, notarization of documents, company registration (such as CoA's and form 2657), auxiliary regulatory services (such as sterility packages, clarifax, question answering), will be charged to Purchaser at Supplier's then applicable rate in addition to any and all reasonable legal fees and notary fees, where applicable and all reasonable costs and expenses associated therewith. The rate to be charged by Supplier for the preparation of a Product submission will be provided by Supplier upon request and is subject to change from time to time.

Article VII - REPRESENTATIONS AND WARRANTIES

7.1 **Supplier Representations and Warranties**.

(a) **Representations and Warranties**. Supplier represents, warrants and covenants, while acknowledging that Purchaser is relying on such representations and warranties in entering into this Agreement, that:

(i) in performing its services hereunder, Supplier shall comply with all provincial, state, local and federal Laws and the cGMP applicable to such services (including all applicable laws and regulations regarding conflict minerals and will assist Purchaser in meeting its obligations under such laws and regulations) and shall hold, and shall continue to hold during the Term of this Agreement, all material Licenses necessary or required for the Manufacturing of the Products and the performance of its obligations hereunder, and, to its knowledge, the services provided by Supplier and the use, practice or exploitation of Supplier's Technology or Supplier's Intellectual Property will not infringe, violate or misappropriate the intellectual property rights of any third party;

(ii) the Facility, all equipment and tooling utilized in the Manufacturing of the Products hereunder, and the procedures and processes (including installation, operation and performance qualifications) instituted by Supplier in connection herewith are, and shall continue during the term of this Agreement, to be in material compliance with all applicable Laws and maintained in good operating condition;

(iii) Supplier shall carry and keep in good force during the Term of this Agreement and for a period of one year following the expiration or other termination of this Agreement insurance coverage in such form and amount as a reasonable party in similar circumstances would carry and keep to fulfil its obligations hereunder, including insurance coverage for the Active Pharmaceutical Ingredient it supplies while it is stored in Supplier's Facility and including commercial general liability insurance (including Products Completed Operations) with an insurance carrier reasonably acceptable to Purchaser, with limits of liability, including excess coverage, of not less than $**** combined single limit bodily injury and property damage covering its duties and obligations under the Agreement Within **** (****) days of receipt of written request by Purchaser, Supplier shall submit a certificate of such insurance (which shall include such information) to Purchaser. If such certificate is not furnished within **** (****) days, Purchaser shall notify Supplier in writing and give Supplier **** (****) days to cure such breach. If Supplier fails to provide the certificate during such **** (****) day cure period, Purchaser may, at its option, immediately terminate this Agreement or any amendment thereof;

(iv) Upon delivery ****, **** (Incoterms® 2020), Products Manufactured by Supplier under the terms of this Agreement:

A. will comply with the Specifications;

B. will have been manufactured in accordance with the terms of this Agreement, the Quality Agreement, the Master Batch Record and cGMPs applicable in the Territory;

C. will have been manufactured, packaged, labeled, tested and/or re-tested in compliance with applicable provisions of the Federal Food, Drug and Cosmetic Act (the "Act"), regulations thereunder, and any other comparable laws and regulations applicable in the Territory where the Product is being distributed, relating to development, manufacture and supply under this Agreement, and in compliance

with the specific U.S. or other applicable regulatory approvals regarding the Product;

D. shall not contain any material that would cause the Products to be adulterated within the meaning of the FDA or other applicable law where the Product is being distributed;

E. shall be free from material defects in Materials and workmanship not otherwise caused by Materials supplied by Purchaser or by any Designated Suppliers or defect in the Specifications and/or in Purchaser's formula for the Manufacturing of the Product; and

F. will have minimum shelf life provided on Schedule "C", provided however, that if after the manufacture of Product, Supplier launches an investigation that causes Product shipment to be delayed and the investigation results in delayed release of one or more Batches of Product and the investigation determines that the deviations in such Batch that triggered the investigation were the fault of LMI Materials that did not meet specifications or Purchaser's specified process was at fault then Supplier must specify in reasonable detail the manner in which such LMI Materials failed to meet the Specifications or that Purchaser's specific process was at fault. If Purchaser agrees with the results of such investigation, it shall accept and pay for such Product, even if Product has less than the minimum shelf life set forth on Schedule "C". Supplier shall use commercially reasonable efforts to expeditiously determine the cause of any such failures. In addition to the foregoing, in all other cases, Purchaser shall use commercially reasonable efforts to accept Product with less than the minimum shelf life set forth on Schedule "C". If Purchaser does not agree with such results, then the independent testing provisions of Section 5.2(d) shall apply.

(b) **Exclusions**. The warranties with respect to the Products shall not apply to any Product which, through no fault of Supplier:

(i) has been tampered with or otherwise altered;

(ii) has been subject to misuse, negligence or accident;

(iii) has been stored, handled or used in a manner contrary to the Specifications, HBFBI, FDA or other Governmental Authority's requirements;

(iv) has expired its stated shelf life;

(v) fails due to defects in the Specifications or as the result of problems with the LMI Materials, including without limitation the Active Pharmaceutical Ingredient, that could not be detected by the quality control tests provided for herein.

(c) **Limitation**. Subject to applicable Law, the foregoing representations and warranties are limited and are in lieu of any other warranty, and except as set forth above. Except as set forth above, Supplier makes no warranty or representation, express or implied, with respect to the Products, whether as to merchantability, quality, fitness for a particular purpose or otherwise.

7.2 **Purchaser Representations and Warranties**.

(a) **Representations and Warranties.** Purchaser represents and warrants, while acknowledging that Supplier is relying on such representations and warranties in entering into this Agreement, that:

(i) it shall provide all information necessary for Supplier to Manufacture the Products in accordance with the Specifications and all applicable Laws, including cGMP, and shall make its employees available on a timely basis to respond to questions concerning such information;

(ii) to the extent that Purchaser supplies any Materials, including the Active Pharmaceutical Ingredient, or other information to Supplier (including packaging and labelling requirements) or engages in Manufacturing with respect to any of the Products (either directly or indirectly through a third party), all such Materials or other information and Manufacturing will comply with the Specifications and applicable Laws, including cGMP;

(iii) it shall obtain and maintain all necessary permits, registrations and licences required for it to perform its obligations to Supplier under this Agreement and shall comply with all applicable Laws in carrying out its obligations under this Agreement;

(iv) to the best of its knowledge, the Technology provided by Purchaser to Supplier pursuant to this Agreement does not infringe, misappropriate or violate any Intellectual Property of a third party;

(v) the Purchaser Intellectual Property licensed to Supplier pursuant to Section 8.1(e) is free and clear of any lien, encumbrance, security interest or restriction on license inconsistent with the rights granted to Supplier and Purchaser has not previously granted and will not grant to any third party during the Term of this Agreement any right, license or interest in or to the Purchaser Intellectual Property or any portion thereof, inconsistent with the rights granted to Supplier herein;

(vi) Except for the Technology and Intellectual Property provided by Supplier, to its knowledge, Purchaser has all necessary Technology and Intellectual Property rights to enable Supplier to Manufacture the Product for Purchaser in accordance with the terms and condition of this Agreement; and

(vii) Purchaser shall carry and keep in good force during the term of this Agreement and for a period of one year following the expiration or other termination of this Agreement insurance coverage, including product liability insurance coverage, in such form and amount as a reasonable party in similar circumstances would carry and keep to fulfil its obligations hereunder, including without limitation insurance coverage for the Active Pharmaceutical Ingredient while it is stored in Supplier's Facility in an amount of no less than $**** US dollars. Within **** (****) days of receipt of written request by Supplier, Purchaser shall submit a certificate of such insurance (which shall include such information) to Supplier. If such certificate is not furnished within **** (****) days, Supplier shall notify Purchaser in writing and give Purchaser **** (****) days to cure such breach. If Purchaser fails to provide the certificate during such **** (****) day cure period, Supplier may, at its option, immediately terminate this Agreement or any amendment thereof;

(viii) after diligent inquiry, Purchaser represents that the sale, distribution, marketing, promotion and use of the Product does not and will not infringe any third party Intellectual Property rights or other rights and that it is not aware of any patents existing in the Territory which could adversely impact upon or prevent Supplier from Manufacturing the Product as contemplated by the terms hereof; and

(ix) Purchaser has the lawful right to enter into this Agreement for the Manufacturing of the Product without breach of any other contractual obligations it may have.

(b) **Debarment**. Each Party represents and warrants that neither of its officers, directors or employees performing services under this Agreement has been debarred or convicted of a crime which could lead to debarment. Each Party shall notify the other immediately in the event that such Party or any of its officers, directors, employees performing services under this Agreement:

(i) becomes debarred or receives notice of action or threat of action with respect to its debarment; or

(ii) becomes the object of any investigation or subject of any report regarding such Party or any of its officers, directors, employees performing services under this Agreement, in connection with any activity that could result in debarment or suspension or refusal of approval.

(c) **No Conflict**. Each Party warrants and represents that no trade secrets or other confidential information of any other person, firm, corporation, institution or other entity will be wrongfully disclosed by it to the other Party or any third party in connection with any of the services called for hereunder. Each Party further warrants and represents that none of the provisions of this Agreement, nor the services which will be performed by Supplier pursuant to the work to be performed hereunder, contravenes or is in conflict with any agreement of such Party or its Affiliates with, or obligation to, any other person, firm, corporation, institution or other entity including, without limiting the generality of the foregoing, employment agreements, consulting agreements, service agreements, disclosure agreements or agreements for assignment of inventions. Supplier shall not subcontract with any third party or use Affiliates or agents to perform any of its obligations hereunder without the prior written consent of Purchaser. Supplier shall cause all of its employees and any permitted subcontractor, agent or Affiliate to be bound by, and to comply with, all confidentiality, quality assurance, regulatory and other obligations and requirements as set forth in this Agreement.

Article VIII - INTELLECTUAL PROPERTY; NONDISCLOSURE; CONFIDENTIALITY

8.1 **Ownership**

(a) **Purchaser Rights**. Supplier acknowledges that Purchaser is the sole owner of Purchaser Intellectual Property and of all data and information relating to the Products, including the Specifications and any other information relating thereto delivered by Purchaser to Supplier under this Agreement, except to the extent such information is in the public domain or owned by a third party.

(b) **Supplier Rights**. Purchaser acknowledges that Supplier is the sole owner of the Supplier Intellectual Property except to the extent such information is in the public domain.

(c) **Product Developments**. All Intellectual Property relating to a Product conceived, reduced to practice, authored or otherwise generated or developed in the course of activities under this Agreement, either by or on behalf of Supplier, except to the extent it has general applicability to the manufacture of pharmaceutical products other than the Products, shall be Product Developments. Purchaser shall own all right, title and interest in and to all ****. Supplier will, and hereby does, assign to Purchaser all of its rights, title and interest in and to Product Developments and rights to Intellectual Property arising therefrom. Supplier will provide reasonable assistance to Purchaser, at Purchaser's expense, in obtaining and enforcing Purchaser's ownership of the Product Developments including as applicable the assignment to Purchaser of the right, title and interest of its employees or independent contractors in and to such Product Developments.

(d) **Patents**. As soon as practicable, Supplier shall inform Purchaser in writing of such Product Development. Upon Purchaser's reasonable request and at Purchaser's expense, Supplier shall take such reasonable actions as Purchaser deems necessary or appropriate to assist

Purchaser in obtaining patent or other proprietary protection in Purchaser's name with respect to all Product Developments.

(e) **License**. Under the terms and subject to the conditions of this Agreement, Purchaser hereby grants Supplier a **** license to use the Purchaser Intellectual Property and the Product Developments solely for the purposes of performing its obligations hereunder. Supplier shall have no right to make, manufacture, supply, distribute, use or sell the Products or use any Purchaser Intellectual Property for any other purpose.

8.2 **Reproduction of and Right to Use Trademarks**.

Solely in connection with Supplier's performance of this Agreement, Purchaser hereby grants Supplier the right to reproduce and print on the Products and/or Product packaging such trademarks, trade dress, brand names, and/or trade names that Purchaser may designate in writing from time to time, strictly in accordance with trademark usage and packaging guidelines set forth in the Specifications or otherwise provided by Purchaser in writing. Samples of all such uses of Purchaser's trademarks, trade dress, brand names and/or trade names on the Products or Product packaging shall be submitted to Purchaser for its written approval prior to production. The permission granted to Supplier herein is restricted to usage of such trademarks, trade dress, brand names and/or trade names on or in connection with the Products supplied under this Agreement, and such permission extends only for the Term of this Agreement or such shorter period as may be designated or required by Purchaser.

8.3 **Supplier's Ownership of Other Property**.

Except as otherwise specified herein, it is agreed that Supplier is the sole owner of any and all machinery and equipment used by Supplier in connection with the Manufacturing of the Products in accordance with this Agreement.

8.4 **Infringement**.

(a) **Notice**. In the event that either Party becomes aware if actual or threatened infringement of Intellectual Property related to any Product, that Party shall promptly so notify the other in writing. Purchaser shall have the right, but not the obligation, to bring at its own expense an infringement action or file any other appropriate action or claim related to infringement of such Intellectual Property against any third party. Supplier shall have the option to join in (but not control) such action to the extent Supplier believes it has been damaged by the actions of such third party.

(b) **Settlement**. Each Party shall cooperate and provide reasonable assistance in any action as described above. No settlement or other voluntary final disposition of any suit defended or action brought by or against either Party may be entered into without the consent of the other party if such settlement would require such other Party to be subject to an injunction or to make a monetary payment, or would adversely affect such other Party's rights under this Agreement.

(c) **Damages**. Purchaser shall retain any damages or other monetary awards that it recovers pursuant to any action under this Section 8.4(a).

8.5 **Right to not Manufacture**.

(a) **Situations Related to Specific Product**. On a Product-by-Product and country-by-country basis, Supplier shall not be required to Manufacture or otherwise be involved in the distribution of a Product to which:

(i) any Person (that is not an Affiliate of Supplier) claims the Manufacturing or distribution of such Product infringes or otherwise violates any third party

Intellectual Property right unless Purchaser confirms its applicable indemnification obligations hereunder with respect to same (such limitation only applicable in the country or region of the Territory in which the third party Intellectual Property is claimed); or

(ii) any Governmental Authority alleges such Manufacturing or distribution of such Product violates any applicable Law (such limitation only applicable in the country or region of the Territory in which the Governmental Authority has jurisdiction). Each Party shall provide prompt written notice of any claim of any Governmental Authority to the other Party in this regard and the Parties shall reasonably work together as contemplated by Section 2.3 and will split any applicable costs as set forth in Section 3.8(c).

(b) **Situations Related to All Products**. With respect to all Products, Supplier shall not be required to Manufacture or otherwise be involved in the distribution of such Products to which:

(i) to the extent of new Purchase Orders received from Purchaser after Supplier has sent a valid notice of material breach in accordance with Section 10.2(a) hereof until Purchaser cures such breach.

(c) **Reimbursement**. Purchaser shall promptly reimburse Supplier for all of Supplier's costs and expenses (including without limitation reasonable attorney's fees and expenses) incurred as a result of any actions or allegations described in this Section 8.5 and shall defend, indemnify and hold Supplier, its Affiliates and the officers, directors, employees, agents, representatives and shareholders of each and hold Supplier harmless in connection therewith, to the extent not otherwise payable by Purchaser pursuant to this Agreement.

8.6 **Nondisclosure and **** Obligations**.

(a) During the Term of this Agreement and for a period of **** thereafter, both Parties shall maintain in confidence (i.e., not disclose to any third party) and use only for purposes specifically authorized under this Agreement information and data received from or on behalf of the other Party, including under the Prior Agreements, whether such information is contained in a written or electronic document, whether it is oral or whether it is disclosed by means of inspection.

(b) For purposes of this Section 8.6, information and data described in clause (a) shall be referred to as "Information." For purposes of clarity, Supplier acknowledges and agrees that Purchaser's Information includes, without limitation, the Product-related information and **** developed by Supplier specifically for Purchaser, including Product Development, (provided such Information shall not include information developed independently by Supplier without reference to Purchaser's pre-existing Intellectual Property and Technology or other Information). Purchaser shall not use the format of Supplier's underlying forms provided to it other than for the Product, and the same shall be Supplier's Information. To the extent it is reasonably necessary or appropriate to fulfill its obligations or exercise its rights under this Agreement, a Party may disclose Information it is otherwise obligated under this Section not to disclose, to its Affiliates, employees, officers, directors, lenders, sublicensees, consultants, outside contractors and clinical investigators on a need-to-know basis and on condition that such entities or persons agree in writing to only use such Information for purposes specifically authorized under this Agreement and to keep the Information confidential for the same time periods and to the same extent as such Party is required to keep the Information confidential; notwithstanding the foregoing the Party so disclosing Information will be liable to the other Party hereunder for any misuse or improper disclosure of any such Information by any such firms or individuals. A Party or its sublicensees may disclose such Information to government or other regulatory authorities to the extent that such disclosure is reasonably necessary to obtain patents or authorizations to conduct clinical trials of, and to commercially market, the Product on

behalf of Purchaser. The obligation not to disclose Information shall not apply to any part of such Information that (i) is or becomes part of the public domain other than by unauthorized acts of the Party obligated not to disclose such Information or its Affiliates or sublicensees, (ii) can be shown by written documents to have been disclosed to the receiving Party or its Affiliates or sublicensees by a third party, provided such Information was not obtained by such third party directly or indirectly from the other Party under this Agreement pursuant to a confidentiality agreement, (iii) prior to disclosure under this Agreement can be shown by written documents to have been already in the possession of the receiving Party or its Affiliates or sublicensees, provided such Information was not obtained directly or indirectly from the other Party under this Agreement pursuant to a confidentiality agreement, or (iv) can be shown by written documents to have been independently developed outside of this Agreement by the receiving Party or its Affiliates without breach of any of the provisions of this Agreement or any Prior Agreement. The Party asserting the applicability of one of the exclusions set forth in the immediately preceding sentence shall have the burden of proving the applicability of any such exclusion in any particular circumstance. If a receiving Party is required to disclose Information of the other Party pursuant to interrogatories, requests for information or documents, subpoena, civil investigative demand of a court or governmental agency, it shall use commercially reasonable efforts to do so, at the disclosing Party's reasonable cost and expense, on a confidential basis (and use reasonable efforts to provide that the receiving Party furnishes only that portion of the Information which is legally required), and, in any event, it shall provide the other Party prompt notice after receipt of any such official requests to enable the other Party to seek a protective order or similar relief.

(c) Supplier understands and acknowledges that Purchaser's Information, Intellectual Property, and Technology related to the Products has been developed or obtained by the investment of significant time, effort and expense by Purchaser, and that such Information, Intellectual Property, and Technology is a valuable, special and unique asset of Purchaser which provides Purchaser with a significant commercial advantage, and needs to be protected from improper use and disclosure (including, but not limited to, any improper use by Supplier or its Affiliates). Supplier will not disclose the Purchaser's Intellectual Property or Technology to its Affiliates or otherwise use the Purchaser's Information, Intellectual Property or Technology for the benefit of such Affiliates. Supplier further recognizes that **** and, as a result, Supplier agrees and agrees to cause **** for the Term of the Agreement and for ****. For purposes of clarity, an **** shall include **** or **** as applicable. Supplier agrees that there may be no adequate remedy at law for any such breach and, upon any such breach or any threat thereof, Purchaser shall be entitled to appropriate equitable relief in courts located in Delaware, including injunctive relief, in addition to whatever other remedies it might be entitled. In addition, in order to protect against the disclosure of Purchaser's Information, upon termination or expiration of this Agreement, or as otherwise requested by Purchaser, Supplier will promptly deliver to Purchaser or, at the request of Purchaser, destroy all copies of Purchaser's Information in its possession; provided, in each case, that Supplier may retain, in a secure location, a copy of such documents and records for purposes of defending any legal proceedings or as is required to be maintained in order to satisfy any law, rule, or regulation to which Supplier is subject.

(d) **Injunctive Relief**. The Parties hereto understand and agree that remedies at law may be inadequate to protect against any breach of any of the provisions of this Section 8.6 by a Party or its employees, agents, officers or directors or any other person acting in concert with it or on its behalf. Accordingly, each Party shall be entitled to seek injunctive relief or any other equitable relief appropriate under the circumstances by a court of competent jurisdiction against or with respect to any action that constitutes any such breach of this Section 8.6.

Article IX - INDEMNITIES

9.1 **Indemnity of Supplier**.

Subject to the limitations provided for in Section 9.4 hereof, Purchaser shall defend, indemnify and hold Supplier, its Affiliates, and their officers, directors, employees, and agents harmless from and against any and all Losses suffered, incurred or sustained by any of them or to which any of them becomes subject at any time by reason of any third party Proceeding to the extent arising out of or resulting from:

(a) the use, manufacture, processing, testing, packaging, labelling or storage of or any other dealing with any or all of the Products, but only to the extent that such liability does not arise as a result of Supplier's negligent act or omission, breach of representation or warranty or failure to perform a covenant under this Agreement or the Quality Agreement;

(b) any Recall Event, subject to Section 5.3;

(c) any claim from a third party that a Product under this Agreement or its sale, distribution, marketing, promotion or use actually or allegedly infringes such party's Intellectual Property, or any actual or alleged infringement by Purchaser of third party intellectual property rights; or

(d) the breach by Purchaser of any of the terms of the Quality Agreement or this Agreement including, without limitation, the Purchaser representations and warranties provided for in Section 7.2 hereof.

9.2 **Indemnity of Purchaser.**

Subject to the limitations provided for in Section 9.4 hereof, Supplier shall defend, indemnify and hold Purchaser, its Affiliates, and their officers, directors, employees, and agents harmless from and against any and all Losses suffered, incurred or sustained by any of them or to which any of them becomes subject at any time by reason of any third party Proceeding to the extent arising out of or resulting from:

(a) the negligence or willful misconduct of Supplier in performing its obligations under this Agreement;

(b) a breach by Supplier of any of the terms of the Quality Agreement or this Agreement including, without limitation, the Supplier representations and warranties provided for in Section 7.1 hereof;

(c) any Recall Event, subject to Section 5.3; or

(d) any claim made against Purchaser for the actual or alleged infringement by the Supplier of a third party's Intellectual Property except to the extent arising from use by the Supplier of any Purchaser Intellectual Property or Technology.

9.3 **Indemnity Proceedings**.

(a) **Notice of Claim**. If a claim by a third party is made against an Indemnitee, and if the Indemnitee intends to seek indemnity with respect thereto under this Agreement, the Indemnitee shall promptly (and in any case within thirty (30) days of such claim being made) notify the Indemnitor of such claim with reasonable particulars. The Indemnitor shall have **** days after receipt of such notice to undertake, conduct and control, through counsel of its own choosing (reasonably acceptable to Indemnitee) and at their own expense, the settlement or defense thereof, and the Indemnitee shall reasonably cooperate with them in connection therewith, except that with respect to settlements entered into by the Indemnitor: (i) the consent of the Indemnitee shall be required if the settlement provides for equitable relief against the Indemnitee or an admission of liability, which consent shall not be unreasonably withheld or delay; and (ii) the Indemnitor shall obtain the release of the Indemnitee.

(b) **Conduct of Proceedings**. If the Indemnitor undertakes, conducts and controls the settlement or defense of such claim, (i) the Indemnitor shall permit the Indemnitee to participate in such settlement or defense through counsel chosen by the Indemnitee, provided that the fees and expenses of such counsel shall be borne by the Indemnitee; provided, however, that to the extent that joint legal representation presents a conflict of interest, the Indemnitee will have the right to select its own counsel at the Indemnitor's expense; and (ii) the Indemnitor shall promptly reimburse the Indemnitee for the full amount of any loss resulting from any claim and all related expenses (other than the fees and expenses of counsel as aforesaid) incurred by the Indemnitee. The Indemnitee shall not pay or settle any claim so long as the Indemnitor is reasonably contesting any such claim in good faith on a timely basis. Notwithstanding the two immediately preceding sentences, the Indemnitee shall have the right to pay or settle any such claim, provided that in such event it shall waive any right to indemnity therefor by the Indemnitor.

(c) **Indemnitee Rights**. With respect to third party claims, if the Indemnitor does not notify the Indemnitee within **** days after the receipt of the Indemnitee's notice of a claim of indemnity hereunder that it elects to undertake the defense thereof, the Indemnitee shall have the right, but not the obligation, to contest, settle or compromise the claim in the exercise of its reasonable judgement using counsel of its choice at the reasonable expense of the Indemnitor.

(d) **Employee Assistance**. In the event of any claim by a third party against an Indemnitee, the defense of which is being undertaken and controlled by the Indemnitor, the Indemnitee will use all reasonable efforts to make available to the Indemnitor those employees whose assistance, testimony or presence is necessary to assist the Indemnitor in evaluation and in defending any such claim; provided that the Indemnitor shall be responsible for the expense associated with any employees made available by the Indemnitee to the Indemnitor hereunder, which expense shall be equal to an amount to be mutually agreed upon per person per hour or per day or each day or portion thereof that such employees are assisting, and which shall not exceed the actual cost to the Indemnitee associated with such employees.

9.4 **Limitation of Liability**.

(a) **Indirect Damages**. Notwithstanding the provisions of this Agreement which might otherwise be to the contrary, neither Party shall be liable to the other, or have any obligation to indemnify any Indemnitee, as the case may be, for any indirect, special, consequential, exemplary or punitive damages or Losses, including any loss of profits or revenue arising from this Agreement whether it has been advised of the possibility of such damages or Losses suffered by either Party however caused and on any theory of liability; except to the extent necessary to satisfy a third party claim under this Article IX or to the extent such liability arises from Supplier's willful misconduct, fraud or grossly negligent acts or omissions or a Party's breach of Sections 8.1 (Ownership), 8.2 (Reproduction of and Right to Use Trademarks) and 8.6 (Nondisclosure and **** Obligations).

(b) **Aggregate Liability**. Supplier's aggregate liability under this Agreement shall not exceed **** dollars****, except to the extent such liability arises from Supplier's willful misconduct, fraud or grossly negligent acts or omissions or breach of Sections 8.1 (Ownership), 8.2 (Reproduction of and Right to Use Trademarks) and 8.6 (Nondisclosure and **** Obligations), in which case Supplier's liability will be uncapped.

Article X - TERM AND TERMINATION

10.1 **Term of Agreement**.

(a) **Initial Term**. This Agreement is effective as of January 1st, 2022 until December 31st, 2027 ("**Initial Term**") unless earlier terminated in accordance with the terms of the Agreement. Thereafter, this Agreement may be renewed for additional periods of time (each, a

"**Renewal Term**") by the mutual consent of both Parties. The Parties agree to discuss the renewal of this Agreement at least twelve (12) months before the end of the Initial Term and any Renewal Term of at least twenty-four (24) months. The Initial Term and every Renewal Term shall collectively be referred to as the "**Term**".

10.2 **Termination of Agreement**.

(a) **Termination for Breach**. Either Party may terminate this Agreement, in whole or on a Product-by-Product basis, at the terminating Party's discretion, with written notice to the other Party, if the other Party defaults or breaches in a material respect in the performance or observance of any of its obligations under this Agreement and such default or breach continues, unremedied, for a period of sixty (60) Business Days following written notice of such default to the defaulting Party. Such cure period shall be reduced to thirty (30) Business Days in the event of a payment default by Purchaser.

(b) **Bankruptcy, etc**. Either Party may terminate this Agreement upon notice to the other Party, if the other Party makes an assignment for the benefit of its creditors, is adjudged bankrupt, becomes insolvent, ceases or threatens to cease to carry on business, files or consents to the filing of a petition in bankruptcy, seeks to take advantage of any legislation relating to insolvency, arrangement or relief of debtors, winds-up or liquidates, or if any receiver, trustee, liquidator or similar official is appointed of such other Party or any of its property.

(c) **Under Section 8.5**: In addition to Supplier's right to not Manufacture under Section 8.5(a)(i), Supplier may also, at its sole discretion, terminate this Agreement on a Product-by-Product and country-by-country basis, based on the Product(s) and country(ies) affected by the actual or alleged infringement if Purchaser has not confirmed its applicable indemnification obligations hereunder in accordance with Article IX with respect to same.

(d) **Effect of Termination**.

Following termination or expiration of this Agreement for any reason:

(i) Purchaser shall purchase from Supplier all remaining Materials, including without limitation Long Lead Time Materials, purchased in accordance with the terms of this Agreement and all of the finished Products (including those finished after termination pursuant to (v) below);

(ii) Purchaser will have access to any Manufacturing Records and Batch retention samples relating to the Manufacturing of the Products under this Agreement for the period during which the Manufacturing Records and Batch retention sample must be kept by Supplier in accordance with this Agreement or the Quality Agreement;

(iii) Supplier shall provide to Purchaser the originals of all Specifications; provided, however, that a copy of such document may be retained by Supplier for archival purposes, as means of determining any continuing obligation or confidentiality, but for no other purpose; and

(iv) Purchaser shall, within **** days of the date of termination of this Agreement, pay to Supplier any outstanding payments to be made pursuant to this Agreement, including without limitation, any and all payment due pursuant to this Section 10.2(d) or Section 3.2 hereof; and

(v) Orders in Progress. In the event of any termination or expiration of this Agreement, Supplier shall, unless such termination has occurred because of a material uncured breach or default by Purchaser under this Agreement, or Purchaser's insolvency, notwithstanding the effective date of any termination or expiration, upon written request of Purchaser, complete any purchase orders for Product that were placed by

Purchaser and accepted by Supplier prior to such date and Purchaser shall pay Supplier for any Product produced in accordance with such purchase orders at the applicable price as set forth in this Agreement; and

(vi) Terminal Supply; Post-Termination or Expiration Acceptance of Orders. If this Agreement has not been renewed pursuant to Section 10.1(a), then upon Purchaser's request, Supplier shall use commercially reasonable efforts to provide Purchaser with a terminal supply of Products for a period of ****.

Article XI - MISCELLANEOUS

11.1 **Relationship of the Parties**.

The relationship between Supplier and Purchaser created pursuant to this Agreement is intended to be and shall be solely that of independent contractors. Neither Party, nor its employees, agents or representatives shall under any circumstances be considered employees, agents, partners, joint venturers or representatives of the other Party. Neither Party, nor its employees, agents or representative shall act or attempt to act, or represent themselves, directly or by implication, as an employee, agent, joint venturer, partner or representative of the other Party or in any manner assume or create, or attempt to assume or create, any obligation or liability of any kind, express or implied, on behalf of or in the name of the other Party. No person other than Supplier or Purchaser may rely on or enforce any provision of this Agreement.

11.2 **Force Majeure**.

(a) **Defined**. In this Agreement, "Force Majeure" means an event or occurrence beyond the reasonable control of a Party which by the exercise of reasonable diligence and maintenance could not be overcome, including, but not limited to, strikes, lock-outs, labour disruptions, acts of God, changes in the law, restraints of governments, riots, arrests of people, acts of war, civil disturbances, terrorist actions, rebellion or sabotage, severe breakage of or accidents to machinery, plant or equipment, pipeline or pipe failure, failure of fuel or water supply or transportation, fire, flood, ice, lightning, epidemic, explosion, hydro electric power failures, defaults by third party suppliers, including Designated Suppliers, not caused by the act or omission of the Party or any delay or failure by a Governmental Authority to issue any relevant permit or order not caused by the act or omission of the Party.

(b) **Non-Default**. A Party shall be deemed not to be in default with respect to non-performance of any of its obligations under this Agreement, if and so long as such non-performance is due in whole or in some material way to an event of Force Majeure and that Party has used commercially reasonable efforts to remove the event of Force Majeure and to perform its obligations under the Agreement. If an event of Force Majeure occurs, the Party affected shall promptly notify the other Party of the occurrence of the event, its extent and probable duration.

(c) **Cessation of Force Majeure**. Subject to Section 11.2(b) hereof, if Supplier is unable to supply Purchaser with its requirements of Products by reason of Force Majeure, Force Majeure shall excuse Supplier's performance until the Force Majeure has ceased and for a reasonable period of time thereafter, to allow Supplier to restore itself to the position it was in with respect to the Manufacturing of Products immediately prior to the Force Majeure. Within thirty (30) days of notification by Supplier that it is able to resume the necessary supply of the Products to Purchaser, Purchaser shall resume obtaining its requirements of Products from Supplier pursuant to the terms of this Agreement. Supplier shall suffer no penalty or incur any liability for its inability to perform hereunder by reason of Force Majeure.

(d) **Termination**. If a Party fails to perform any of its obligations under this Agreement by reason of Force Majeure and such non-performance continues for a period of ninety (90) days from the first occurrence of the event of Force Majeure, the other Party may, if itself is

not in default under the Agreement, terminate this Agreement by providing written notice to that effect to the non-performing Party. In the event of such termination, both Parties' respective rights and obligations under this Agreement shall terminate except for any amounts previously due and owing by one Party to the other and except for any other obligations which this Agreement expressly provides shall survive termination.

11.3 **Further Assurances**.

Each Party will at any time and from time to time, upon the request of the other Party, execute and deliver such further documents and do such further acts and things as the other Party may reasonably request to evidence, carry out and give full effect to the terms, conditions, intent and meaning of this Agreement.

11.4 **Intentionally omitted**.

11.5 **Notices**.

Any notice or other communication made under this Agreement (other than routine business communication) shall be in writing and shall be properly given: (i) when delivered if sent by personal delivery; (ii) when transmitted if sent by facsimile with confirmation of transmission; (iii) the next day if sent by recognized overnight courier; or (iv) three days after being posted if sent by registered mail return receipt requested, addressed:

(a) if to Supplier, to it at: Jubilant HollisterStier LLC
3525 N Regal St, Spokane, WA 99207, United States
Attn: President

with a copy to: Jubilant HollisterStier General Partnership
16751 Trans Canada Highway
Kirkland, Québec, Canada H9H 4J4
Attn: Legal Department

(b) if to Purchaser, to it at:

Lantheus Medical Imaging, Inc.
331 Treble Cove Road
North Billerica, MA 01862
United States of America
Attention: VP of Manufacturing Supply Chain

With a copy at the same address to:

Attention: General Counsel

A Party may change its address for notice by notifying the other Party at any time in accordance with the provisions of this Agreement.

11.6 **Entire Agreement**.

This Agreement, together with the Quality Agreement, and any and all Schedules attached hereto and thereto, supersede any prior agreements between the Parties with respect to the subject matter of the Agreement and the Quality Agreement, whether oral or in writing, and contains the entire understanding between the Parties with respect to the subject matter of the Agreement. The Prior Agreements are each hereby terminated and superseded by this Agreement, provided,

however, such termination is without prejudice to any rights or remedies that have accrued to the benefit of any Party prior to such termination.

11.7 **Waiver**.

No delay or failure on the part of a Party in exercising any rights under this Agreement shall affect any of such Party's rights.

11.8 **Amendment**.

This Agreement may not be modified or amended except by further written statement signed by both Parties.

11.9 **Severability**.

Any provision of this Agreement that is held to be inoperative, unenforceable or invalid in any jurisdiction shall be inoperative, unenforceable or invalid in that jurisdiction without affecting any other provision hereof in that jurisdiction or the operation, enforceability or validity of that provision in any other jurisdiction, and to this end the provisions hereof are declared to be severable.

11.10 **Enurement**.

This Agreement is binding on and enures to the benefit of each Party and its successors and permitted assigns.

11.11 **Assignment**.

Neither Purchaser nor Supplier shall assign or otherwise transfer any rights under or interest in this Agreement without the other Party's prior written consent, such consent not to be unreasonably withheld or delayed. Notwithstanding the foregoing, either Party (a) may assign this Agreement without the consent of the other Party in whole or in part to any Affiliate of such Party, it being agreed that no such assignment to a Party's Affiliate shall release the assigning Party from its obligations hereunder, and (b) will assign this Agreement in connection with the direct or indirect (x) transfer and sale of all or substantially all of the assets or business of such Party or any of its Affiliates; provided, however, that Purchaser may assign this Agreement in whole or in part (or may bifurcate this Agreement by Product) in connection with the transfer and sale of all or substantially all of the assets or business of the specific business line, division or unit of Purchaser or any of its Affiliates to which this Agreement or Products manufactured under this Agreement relate; and provided further that with respect to any assignment by Supplier, all Manufacturing remains at the Facility.

11.12 **Counterparts**.

This Agreement may be executed in counterparts and by facsimile transmission, each of which shall be deemed to be an original and which together shall constitute one and the same agreement.

11.13 **Contra Proferentum**.

This Agreement is the result of mutual negotiations between the Parties, and each Party agrees that no part of this Agreement shall be interpreted against the other Party on the grounds that particular language was drafted by such Party.

11.14 **Subcontracting**.

Supplier may be permitted to subcontract in whole or in part its obligations under this Agreement upon the consent of Purchaser, such consent not to be unreasonably withheld or delayed.

11.15 **Governing Law**.

This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware applicable to agreements made and to be performed entirely in such state, without giving effect to any conflict of law principles. Any disputes arising between the Parties relating to this Agreement shall be subject to the exclusive jurisdiction and venue of the state and federal courts located in the State of Delaware, and the Parties hereby waive any objection which they may have now or hereafter to the laying of venue or jurisdiction of any proceedings in said courts and to any claim that such proceedings have been brought in an inconvenient forum, and further irrevocably agree that a judgment or order in any such proceedings shall be conclusive and binding upon each of them and may be enforced in the courts of any other jurisdiction. EACH PARTY, TO THE EXTENT PERMITTED BY APPLICABLE LAW, KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVES ITS RIGHT TO A TRIAL BY JURY IN ANY ACTION OR OTHER LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT AND THE TRANSACTIONS IT CONTEMPLATES. THIS WAIVER APPLIES TO ANY ACTION OR LEGAL PROCEEDING, WHETHER SOUNDING IN CONTRACT, TORT, OR OTHERWISE.

11.16 **Non-Solicitation**.

Neither Supplier nor Purchaser shall solicit (either directly or indirectly) for employment or employ any of each other's employees during the Term of this Agreement; provided, however, the foregoing will not prohibit a Party from soliciting (but not hiring) any such employee through general solicitations or through services of a recruiting firm that has not been provided with the names of, or instructed to target, any such employee. In the event Supplier or Purchaser desire to solicit for employment or employ one of such Supplier's employees or Purchaser's employees, as the case may be, then Supplier must obtain Purchaser's prior written approval of such solicitation or employment and vice versa.

11.17 **Survival**.

The following provisions shall survive the expiration or termination of this Agreement: Sections 8.1, 8.3, 8.6, 9, 10, 11.5, 11.15 and 11.17.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date written above, by their authorized officers, who by signing confirm their authority and intention to bind the Party they represent.

JUBILANT HOLLISTERSTIER LLC

Per: /s/Amit Arora
Amit Arora
President

LANTHEUS MEDICAL IMAGING, INC.

Per: /s/ Mary Anne Heino
Name: Mary Anne Heino
Title: Chief Executive Officer and President

SCHEDULE “A”

SPECIFICATIONS

****

SCHEDULE "B"

QUALITY AGREEMENT

The Quality Agreement is attached herein by reference, as last amended on September 25, 2019.

Jubilant HollisterStier LLC Approval:

Signed: _____ **Date:** 25SEP2019

Kimberly Yanke
Director, Quality Assurance
Jubilant Hollister-Steir LLC,
Spokane, Washington

Lantheus Medical Imaging Approval:

Signed: _____ **Date:** 25 Sep 2019

Carol Walker
Sr. Vice President Quality
Lantheus Medical Imaging,
North Billerica, MA

SCHEDULE "C"

PRICES

The Prices per unit set forth below are only for the markets identified below. If the Products are to be sold in other markets, Supplier will provide prices upon request.

Prices For **:**

Product(s)	****	**Price in USD**
DEFINITY 160L	****	****
DEFINITY 260L	****	****
Cardiolite	****	****
Neurolite Ligand	****	****
Neurolite Buffer	****	****
EVAC	****	****

SCHEDULE "D"

DEFINITIONS AND LIST OF MATERIALS

DEFINITY means "DEFINITY® (perflutren lipid microsphere) Injectable Suspension (and all other USAN or trade names Purchaser may choose to use in Territory) is the final dosage form manufactured pursuant to the DEFINITY NDA and suitable for distribution in commerce in the Territory. For clarity, DEFINTY does not include DEFINITY RT."

****

SCHEDULE "E"

LIST OF COUNTRIES/REGIONS

****

Lantheus Holdings, Inc.
2015 Equity Incentive Plan

Restricted Stock Unit Award Agreement
(*Employee Time-Based Vesting*)

This Restricted Stock Unit Award Agreement (this "*Agreement*") is made by and between Lantheus Holdings, Inc., a Delaware corporation (the "*Company*"), and [●] (the "*Participant*"), effective as of [●] (the "*Date of Grant*").

RECITALS

WHEREAS, the Company has adopted the Lantheus Holdings, Inc. 2015 Equity Incentive Plan (as the same may be amended and/or amended and restated from time to time, the "*Plan*"), which Plan is incorporated herein by reference and made a part of this Agreement, and capitalized terms not otherwise defined in this Agreement will have the meanings ascribed to those terms in the Plan; and

WHEREAS, the Committee has authorized and approved the grant of an Award to the Participant of Restricted Stock Units, subject to the terms and conditions set forth in the Plan and this Agreement.

NOW THEREFORE, in consideration of the premises and the mutual covenants set forth in this Agreement, the parties agree as follows:

1. Grant of RSUs. The Company has granted to the Participant, effective as of the Date of Grant, [●] Restricted Stock Units (the "*RSUs*"), giving the Participant the conditional right to receive, on the terms and conditions set forth in the Plan and this Agreement, one share of Common Stock with respect to each RSU subject to this Award, subject to adjustment as set forth in the Plan.

2. Vesting of RSUs. Subject to the terms and conditions set forth in the Plan and this Agreement, the RSUs will vest as follows:

   (a) General. Except as otherwise provided in Section 2(b) below, one-third (1/3) of the RSUs will vest on each of the first three (3) anniversaries of the Date of Grant, subject to the Participant's continued Service through the applicable vesting date, with the number of RSUs that vest on the first two vesting dates rounded down to the nearest whole RSU and with 100% of the remaining RSUs becoming vested on the third (3rd) anniversary of the Date of Grant.

   (b) Change in Control. Subject to the Participant's continued Service through the date of a Change in Control (except as otherwise provided in this Section 2(b)(ii)):

      (i) If (x) the consideration paid in connection with that Change in Control is all cash or (y) the then-outstanding RSUs are not assumed, continued or substituted for by the acquirer in that Change in Control, then all then-outstanding RSUs will become fully vested as of immediately prior to the consummation of that Change in Control; or

      (ii) If (x) the consideration paid in connection with that Change in Control is not all cash, and (y) the then-outstanding RSUs are assumed,

continued or substituted for by the acquirer in that Change in Control, and (z) the Participant's Service is terminated (1) by the Company without Cause or, (2) to the extent the Participant is then party to an employment letter or agreement with the Company or any Subsidiary that defines "Good Reason" (or any similar term), by the Participant for Good Reason, then in either case, within twelve (12) months following that Change in Control, all then-outstanding RSUs will become fully vested as of immediately prior to that termination of Service.

3. Forfeiture. Except as set forth in Section 2(b)(ii) above, all unvested RSUs and Dividend Equivalents (whether or not earned) will be forfeited automatically and without consideration immediately upon a termination of the Participant's Service for any reason. All shares of Common Stock received in respect of the RSUs and any Dividend Equivalents (and resulting proceeds thereof) are and will continue to be subject to Section 13 of the Plan, regardless of whether a termination of the Participant's Service has occurred.

4. Adjustments. In the event of any change with respect to the outstanding shares of Common Stock contemplated by Section 4.5 of the Plan, this Award may be adjusted in accordance with Section 4.5 of the Plan.

5. Delivery of Shares and Dividend Equivalents. The Company will, as soon as practicable following the vesting of any RSUs subject to this Award (but in no event later than thirty (30) days following the date on which such RSUs vest), effect delivery of shares of Common Stock with respect to such vested RSUs (and any Dividend Equivalents credited with respect to such RSUs payable in Common Stock or, with respect to Dividend Equivalents credited with respect to such RSUs payable in cash, make a cash payment in respect thereof) to the Participant (or, in the event of the Participant's death, to the person described in Section 15.3 of the Plan).

6. Tax Withholding. As a condition to the grant, vesting and settlement of the RSUs and any Dividend Equivalents, the Participant will make such arrangements as the Committee may require for the satisfaction of any federal, state, local or foreign withholding tax obligations that may arise in connection with the RSUs and any Dividend Equivalents, which arrangements may include entering into a 10b5-1 trading plan to implement any sell-to-cover arrangements intended to satisfy those tax withholding obligations. Unless the Participant otherwise elects to satisfy his or her tax withholding obligations in cash by notifying the Company in writing at least ninety (90) days prior to the applicable vesting date, the Company will automatically satisfy those tax withholding obligations:

   (a) with respect to the RSUs and any Dividend Equivalents payable in shares of Common Stock, by either (i) withholding from the shares of Common Stock otherwise deliverable in connection with that vesting date, a number of shares of Common Stock having a Fair Market Value equal to the minimum statutory amount required to be withheld to satisfy such those withholding obligations (or any higher amount properly and timely specified by the Participant) and/or (ii) causing that number of shares of Common Stock to be sold in accordance with a sell-to-cover arrangement; and

   (b) with respect to any Dividend Equivalents payable in cash, by withholding an amount in cash from such Dividend Equivalents equal to the minimum statutory amount required to be withheld to satisfy such tax withholding obligations (or any higher amount properly and timely specified by the Participant).

7. Shareholder Rights. The Participant will not have any rights of a stockholder with respect to the RSUs unless and until shares of Common Stock are actually delivered in respect of the RSUs; provided that the Participant will be entitled to receive Dividend Equivalents with respect to unvested RSUs in accordance with this Section 7. In connection with (x) any regular dividend declared on shares of Common Stock that is payable in cash or (y) any regular dividend declared on shares of Common Stock that is payable in shares of Common Stock, for each share of Common Stock deliverable in respect of an unvested RSU, the Participant will receive a dividend equivalent (a "*Dividend Equivalent*"). Any such Dividend Equivalents will entitle the Participant to receive, subject to the terms of this Agreement, a payment of cash or issuance of shares of Common Stock equal to the amount or number of shares that the Participant would have received as a regular dividend had the Participant held the shares of Common Stock deliverable in respect of such unvested RSUs at the time such dividend was paid. Any Dividend Equivalents will be subject to the same vesting and other terms and conditions as the unvested RSUs to which they relate and will be paid, if at all, in cash, in the case of a cash dividend or Common Stock in the case of a distribution of shares of Common Stock, in either case, in accordance with Section 5 of this Agreement.

8. Miscellaneous Provisions

(a) Non-transferability. Any shares of Common Stock delivered hereunder will be subject to such stop transfer orders and other restrictions as the Committee may deem advisable under the Plan or the rules, regulations and other requirements of the Securities and Exchange Commission, any stock exchange upon which such shares are listed, any applicable federal or state laws, and any agreement with, or policy of, the Company or the Committee to which the Participant is a party or subject, and the Committee may cause orders or designations to be placed upon any certificate(s) or other document(s) delivered to the Participant, or on the books and records of the Company's transfer agent, to make appropriate reference to such restrictions.

(b) No Right to Continued Service. Nothing in this Agreement or the Plan confers upon the Participant any right to continue in Service for any period of specific duration or interferes with or otherwise restricts in any way the rights of the Company (or any Subsidiary employing or retaining the Participant) or of the Participant, which rights are hereby expressly reserved by each, to terminate his or her Service at any time and for any reason, with or without Cause.

(c) Entire Agreement. This Agreement and the Plan constitute the entire agreement between the parties hereto with regard to the subject matter of this Agreement. This Agreement and the Plan supersede any other agreements, representations or understandings (whether oral or written and whether express or implied) that relate to the subject matter of this Agreement (including any letter or other notice notifying the Participant of this Award).

(d) Waiver. No waiver of any breach or condition of this Agreement will be deemed to be a waiver of any other or subsequent breach or condition whether of like or different nature.

(e) Successors and Assigns. The provisions of this Agreement will inure to the benefit of, and be binding upon, the Company and its successors and assigns and upon the Participant, the Participant's executor, personal representative(s), distributees, administrator, permitted transferees, assignees, beneficiaries, and legatee(s), as applicable, whether or not any such person will have become a party

to this Agreement and have agreed in writing to be joined herein and be bound by the terms hereof.

(f) Severability. The provisions of this Agreement are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, then the remaining provisions will nevertheless be binding and enforceable.

(g) Amendment. Except as otherwise provided in the Plan, this Agreement will not be amended unless the amendment is agreed to in writing by both the Participant and the Company.

(h) Choice of Law; Jurisdiction. This Agreement and all claims, causes of action or proceedings (whether in contract, in tort, at law or otherwise) that may be based upon, arise out of or relate to this Agreement will be governed by the internal laws of the State of Delaware, excluding any conflicts or choice-of-law rule or principle that might otherwise refer construction or interpretation of this Agreement to the substantive law of another jurisdiction. The Participant (or his or her beneficiary, legatee, executor, personal representative or distribute, as applicable) and the Company agree that he, she or it will bring all claims, causes of action and proceedings (whether in contract, in tort, at law or otherwise) that may be based upon, arise out of or be related to the Plan or this Agreement, exclusively in the Delaware Court of Chancery or, in the event (but only in the event) that such court does not have subject matter jurisdiction over such claim, cause of action or proceeding, exclusively in the United States District Court for the District of Delaware (either of the foregoing, the "*Chosen Court*"), and hereby (i) irrevocably submit to the exclusive jurisdiction of the Chosen Court, (ii) waive any objection to laying venue in any such proceeding in the Chosen Court, (iii) waive any objection that the Chosen Court is an inconvenient forum or does not have jurisdiction over any party and (iv) agree that service of process upon such party in any such claim or cause of action will be effective if notice is given in accordance with this Agreement.

(i) Signature in Counterparts. This Agreement may be signed in counterparts, manually or electronically, and each of which will be an original, with the same effect as if the signatures to each were upon the same instrument.

(j) Acceptance. The Participant hereby acknowledges receipt of a copy of the Plan and this Agreement. The Participant has read and understands the terms and provisions of the Plan and this Agreement, and accepts this Award subject to all of the terms and conditions of the Plan and this Agreement. In the event of a conflict between any term or provision contained in this Agreement and a term or provision of the Plan, the applicable term and provision of the Plan will govern and prevail.

IN WITNESS WHEREOF, the Company and the Participant have executed this Agreement as of the Date of Grant.

Lantheus Holdings, Inc.

By:_____

_____

Participant

Lantheus Holdings, Inc. 2015 Equity Incentive Plan

Restricted Stock Unit Award Agreement
(*Relative Total Shareholder Return Performance-Based Vesting*)

This Restricted Stock Unit Award Agreement including Exhibits A and B hereto (this "*Agreement*") is made by and between Lantheus Holdings, Inc., a Delaware corporation (the "*Company*"), and [●] (the "*Participant*"), effective as of [●] (the "*Date of Grant*").

RECITALS

WHEREAS, the Company has adopted the Lantheus Holdings, Inc. 2015 Equity Incentive Plan (as the same may be amended and/or amended and restated from time to time, the "*Plan*"), which Plan is incorporated herein by reference and made a part of this Agreement, and capitalized terms not otherwise defined in this Agreement will have the meanings ascribed to those terms in the Plan; and

WHEREAS, the Committee has authorized and approved the grant of an Award to the Participant of Restricted Stock Units, subject to the terms and conditions set forth in the Plan and this Agreement.

NOW THEREFORE, in consideration of the premises and the mutual covenants set forth in this Agreement, the parties agree as follows:

1. Grant of Performance-Based RSUs. The Company has granted to the Participant, effective as of the Date of Grant, performance-based Restricted Stock Units (the "*RSUs*"), giving the Participant the conditional right to receive, on the terms and conditions set forth in the Plan and this Agreement, one share of Common Stock with respect to each RSU subject to this Award. Subject to adjustment as set forth in the Plan, the target number of RSUs subject to this Award is [●] ("*Target RSUs*") and the maximum number of RSUs subject to this Award is 200% of the Target RSUs.

2. Vesting of RSUs.

   (a) General. Subject to the terms and conditions set forth in the Plan and this Agreement, all or a portion of the RSUs subject to this Award will vest, if at all, on the third (3rd) anniversary of the Date of Grant (the "*Cliff Vesting Date*"), to the extent earned based on the achievement of the performance criteria set forth on Exhibit A (the "*Performance Criteria*"), and, except as otherwise provided in Section 2(b) or Section 2(c) below, subject to the Participant's continued Service through the Cliff Vesting Date. The number of RSUs that are earned based on the achievement of the Performance Criteria and are eligible to vest hereunder are referred to in this Agreement as the "*Earned RSUs.*"

(b) Qualified Retirement. Notwithstanding Section 2(a) and Section 3 of the Agreement, in the case of a Participant whose Service terminates due to a Qualified Retirement (as defined below) (a "*Qualified Retiree*"), the Participant's RSUs and Dividend Equivalents (as defined below) will continue to vest (subject to pro-ration as provided in Exhibit A (Determinations)), except as specifically provided in Section 2(c), until the earlier of (a) the Cliff Vesting Date and (b) the date on which the Participant violates any restrictive covenant or other continuing obligation to the Company on or after the Participant's Qualified Retirement Date (as defined below) (the "*Qualified Retirement Vesting Period*"). Upon the expiration of the Qualified Retirement Vesting Period, any unvested RSUs or Dividend Equivalents will be immediately and automatically forfeited without consideration in the manner contemplated in Section 3. As used herein, "*Qualified Retirement*" means that, as of the date Participant ceases to provide Services to the Company due to voluntary retirement (and not a termination by the Company with or without Cause) (the "*Qualified Retirement Date*"), (i) Participant is at least fifty-five (55) years of age and (ii) Participant has provided Services to the Company or any Subsidiary for at least ten (10) years.

(c) Change in Control. In the event of a Change in Control, subject to the Participant's continued Service through the date of a Change in Control (except as otherwise provided in this Sections 2(b)(ii), (iv), (v) and (vii)):

(i) Except in the case of a Qualified Retiree, if, prior to the Performance Period End Date (as defined in Exhibit A), a Change in Control occurs, to the extent the RSUs have not been forfeited under Section 3 below prior to that Change in Control, then the Committee will determine the extent to which the Performance Criteria has been achieved as of the date of that Change in Control as if the Performance Period End Date were the date of that Change in Control and will determine the number of Earned RSUs, if any.

(ii) In the case of a Qualified Retiree, in the event of a Change in Control during the Qualified Retirement Vesting Period but prior to the Performance Period End Date (as defined in Exhibit A), to the extent RSUs have not been forfeited under Section 3 below prior to the Change in Control, then the Committee will determine the extent to which the Performance Criteria for such RSUs has been achieved as of the date of that Change in Control as if the Performance Period End Date were the date of that Change in Control and will determine the number of Earned RSUs, if any, subject to the pro-ration provided in Exhibit A (Determinations).

(iii) Except in the case of a Qualified Retiree or as otherwise provided in Sections 2(b)(iv) through 2(b)(viii), the number of Earned RSUs, if any, will continue to vest based solely on time and will vest in full on the Cliff Vesting Date, subject to the Participant's continued Service through the Cliff Vesting Date.

(iv) Except in the case of a Qualified Retiree, if, (A) in connection with a Change in Control described in subsection (i) above, the Earned RSUs are assumed or continued, or a new award is substituted for the Earned RSUs by the surviving company or its parent in accordance with the provisions of Section 12 of the Plan, (B) the Participant remains in continued Service through the date of that Change in Control and, (C) within the twelve (12) month period following the date of that Change in Control and prior to the

Cliff Vesting Date, the Participant's Service is terminated by the Company without Cause or, if the Participant is party to an effective employment letter or agreement with the Company or any Subsidiary that defines "Good Reason" (or any similar term), by the Participant for Good Reason, then the Earned RSUs (or the new award substituted for the Earned RSUs) will vest in full upon such termination of Service.

(v) In the case of a Qualified Retiree, if, (A) in connection with a Change in Control described in subsection (ii) above, the Earned RSUs are assumed or continued, or a new award is substituted for the Earned RSUs by the surviving company or its parent in accordance with the provisions of Section 12 of the Plan, then the Earned RSUs (or the new award substituted for the Earned RSUs will continue to vest through the Cliff Vesting Date, subject to pro-ration as provided in Exhibit A (Determinations).

(vi) Except in the case of a Qualified Retiree, if, in connection with a Change in Control described in subsection (i) above, the Earned RSUs are not assumed or continued, or a new award is not substituted for the Earned RSUs by the surviving company or its parent in accordance with the provisions of Section 12 of the Plan, then the Earned RSUs will vest in full as of immediately prior to the Change in Control.

(vii) In the case of a Qualified Retiree, if, in connection with a Change in Control described in subsection (ii) above, the Earned RSUs are not assumed or continued, or a new award is not substituted for the Earned RSUs by the surviving company or its parent in accordance with the provisions of Section 12 of the Plan, then the Earned RSUs will vest in full as of immediately prior to the Change in Control, subject to pro-ration as provided in Exhibit A (Determinations).

(viii) If a Change in Control occurs following the Performance Period End Date but on or before the Cliff Vesting Date, then the Earned RSUs, to the extent they have not been forfeited under Section 3 below as of immediately prior to the Change in Control, will vest in full as of immediately prior to such Change in Control, subject, in the case RSUs earned by a Qualified Retiree, to pro-ration as provided in Exhibit A (Determinations).

3. Forfeiture. Except as set forth in Section 2(b) and Section 2(c) above, all unvested RSUs and Dividend Equivalents (whether or not earned) will be forfeited, automatically and without consideration immediately upon (a) termination of the Participant's Service for any reason other than a Qualified Retirement prior to the Cliff Vesting Date and, (b) in the case of a Qualified Retiree, expiration of the Qualified Retirement Vesting Period prior to the Cliff Vesting Date. All shares of Common Stock received in respect of the RSUs and any Dividend Equivalents (and resulting proceeds thereof) are and will continue to be subject to Section 13 of the Plan, regardless of whether a termination of the Participant's Service has occurred.

4. Adjustments. In the event of any change with respect to the outstanding shares of Common Stock contemplated by Section 4.5 of the Plan, this Award may be adjusted in accordance with Section 4.5 of the Plan.

5. Delivery of Shares and Dividend Equivalents. The Company will, as soon as practicable following the vesting of any RSUs subject to this Award (but in no event later than thirty

(30) days following the date on which such RSUs vest), effect delivery of shares of Common Stock with respect to such vested RSUs (and any Dividend Equivalents credited with respect to such RSUs payable in Common Stock or, with respect to Dividend Equivalents credited with respect to such RSUs payable in cash, make a cash payment in respect thereof) to the Participant (or, in the event of the Participant's death, to the person described in Section 15.3 of the Plan).

6. Tax Withholding. As a condition to the grant, vesting and settlement of the RSUs and any Dividend Equivalents, the Participant will make such arrangements as the Committee may require for the satisfaction of any federal, state, local or foreign withholding tax obligations that may arise in connection with the RSUs and any Dividend Equivalents, which arrangements may include entering into a 10b5-1 trading plan to implement any sell-to-cover arrangements intended to satisfy those tax withholding obligations. Unless the Participant otherwise elects to satisfy his or her tax withholding obligations in cash by notifying the Company in writing at least ninety (90) days prior to the applicable vesting date, the Company will automatically satisfy those tax withholding obligations:

   (a) with respect to the RSUs and any Dividend Equivalents payable in shares of Common Stock, by either (i) withholding from the shares of Common Stock otherwise deliverable in connection with that vesting date, a number of shares of Common Stock having a Fair Market Value equal to the minimum statutory amount required to be withheld to satisfy such those withholding obligations (or any higher amount properly and timely specified by the Participant) and/or (ii) causing that number of shares of Common Stock to be sold in accordance with a sell-to-cover arrangement; and

   (b) with respect to any Dividend Equivalents payable in cash, by withholding an amount in cash from such Dividend Equivalents equal to the minimum statutory amount required to be withheld to satisfy such tax withholding obligations (or any higher amount properly and timely specified by the Participant).

7. Shareholder Rights. The Participant will not have any rights of a stockholder with respect to the RSUs unless and until shares of Common Stock are actually delivered in respect of the RSUs; provided that the Participant will be entitled to receive Dividend Equivalents with respect to unvested RSUs in accordance with this Section 7. In connection with (x) any regular dividend declared on shares of Common Stock that is payable in cash or (y) any regular dividend declared on shares of Common Stock that is payable in shares of Common Stock, for each share of Common Stock deliverable in respect of an unvested RSU, the Participant will receive a dividend equivalent (a "*Dividend Equivalent*"). Any such Dividend Equivalents will

   entitle the Participant to receive, subject to the terms of this Agreement, a payment of cash or issuance of shares of Common Stock equal to the amount or number of shares that the Participant would have received as a regular dividend had the Participant held the shares of Common Stock deliverable in respect of such unvested RSUs at the time such dividend was paid. Any Dividend Equivalents will be subject to the same vesting and other terms and conditions as the unvested RSUs to which they relate and will be paid, if at all, in cash, in the case of a cash dividend or Common Stock in the case of a distribution of shares of Common Stock, in either case, in accordance with Section 5 of this Agreement.

8. Miscellaneous Provisions

   (a) Non-transferability. Any shares of Common Stock delivered hereunder will be subject to such stop transfer orders and other restrictions as the Committee may deem advisable under the Plan or the rules, regulations and other requirements of

the Securities and Exchange Commission, any stock exchange upon which such shares are listed, any applicable federal or state laws, and any agreement with, or policy of, the Company or the Committee to which the Participant is a party or subject, and the Committee may cause orders or designations to be placed upon any certificate(s) or other document(s) delivered to the Participant, or on the books and records of the Company's transfer agent, to make appropriate reference to such restrictions.

(b) No Right to Continued Service. Nothing in this Agreement or the Plan confers upon the Participant any right to continue in Service for any period of specific duration or interferes with or otherwise restricts in any way the rights of the Company (or any Subsidiary employing or retaining the Participant) or of the Participant, which rights are hereby expressly reserved by each, to terminate his or her Service at any time and for any reason, with or without Cause.

(c) Entire Agreement. This Agreement and the Plan constitute the entire agreement between the parties hereto with regard to the subject matter of this Agreement. This Agreement and the Plan supersede any other agreements, representations or understandings (whether oral or written and whether express or implied) that relate to the subject matter of this Agreement (including any letter or other notice notifying the Participant of this Award).

(d) Waiver. No waiver of any breach or condition of this Agreement will be deemed to be a waiver of any other or subsequent breach or condition whether of like or different nature.

(e) Successors and Assigns. The provisions of this Agreement will inure to the benefit of, and be binding upon, the Company and its successors and assigns and upon the Participant, the Participant's executor, personal representative(s), distributees, administrator, permitted transferees, assignees, beneficiaries, and legatee(s), as applicable, whether or not any such person will have become a party to this Agreement and have agreed in writing to be joined herein and be bound by the terms hereof.

(f) Severability. The provisions of this Agreement are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, then the remaining provisions will nevertheless be binding and enforceable.

(g) Amendment. Except as otherwise provided in the Plan, this Agreement will not be amended unless the amendment is agreed to in writing by both the Participant and the Company.

(h) Choice of Law; Jurisdiction. This Agreement and all claims, causes of action or proceedings (whether in contract, in tort, at law or otherwise) that may be based upon, arise out of or relate to this Agreement will be governed by the internal laws of the State of Delaware, excluding any conflicts or choice-of-law rule or principle that might otherwise refer construction or interpretation of this Agreement to the substantive law of another jurisdiction. The Participant (or his or her beneficiary, legatee, executor, personal representative or distribute, as applicable) and the Company agree that he, she or it will bring all claims, causes of action and proceedings (whether in contract, in tort, at law or otherwise) that may be based upon, arise out of or be related to the Plan or this Agreement, exclusively in the Delaware Court of Chancery or, in the event (but only in the event) that such court does not have subject matter jurisdiction over such claim, cause of action or proceeding, exclusively in the United States District Court for

the District of Delaware (either of the foregoing, the "Chosen Court"), and hereby (i) irrevocably submit to the exclusive jurisdiction of the Chosen Court, (ii) waive any objection to laying venue in any such proceeding in the Chosen Court, (iii) waive any objection that the Chosen Court is an inconvenient forum or does not have jurisdiction over any party and (iv) agree that service of process upon such party in any such claim or cause of action will be effective if notice is given in accordance with this Agreement.

(i) Signature in Counterparts. This Agreement may be signed in counterparts, manually or electronically, and each of which will be an original, with the same effect as if the signatures to each were upon the same instrument.

(j) Acceptance. The Participant hereby acknowledges receipt of a copy of the Plan and this Agreement. The Participant has read and understands the terms and provisions of the Plan and this Agreement, and accepts this Award subject to all of the terms and conditions of the Plan and this Agreement. In the event of a conflict between any term or provision contained in this Agreement and a term or provision of the Plan, the applicable term and provision of the Plan will govern and prevail.

[*Signature Page Follows.*]

IN WITNESS WHEREOF, the Company and the Participant have executed this Agreement as of the Date of Grant.

Lantheus Holdings, Inc.

By:

_____Participant

EXHIBIT A

This Exhibit A describes the terms and conditions upon which the RSUs will become earned and eligible to vest as set forth in Section 2 of the Restricted Stock Unit Award Agreement of which this Exhibit A is a part (the "*Agreement*"). All capitalized terms used in this Exhibit A, unless separately defined, have the meanings set forth in the Agreement.

1. General. The RSUs will be eligible to be earned under the Agreement subject to the terms and conditions of Section 3 of this Exhibit A based on the Total Shareholder Return of the Company as compared to the Total Shareholder Return of the Specified Companies (as measured by rTSR Percentile Rank). Total Shareholder Return (as measured by rTSR Percentile Rank) will be the Performance Criteria under the Award.

2. Definitions. The terms set forth below, as used in this Exhibit A, will have the following meanings:

   (a) "*Performance Period*" will mean the period beginning on the Performance Period Start Date and ending on (i) the Performance Period End Date, or, if earlier, (ii) the date on which a Change in Control is consummated.

   (b) "*Performance Period End Date*" will mean December 31, 2024 (or, if earlier, the date on which a Change in Control is consummated).

   (c) "*Performance Period Start Date*" will mean January 1, 2022.

   (d) "*rTSR Percentile Rank*" will mean the percentage of Total Shareholder Return values among the Specified Companies at the Performance Period End Date (or, if earlier, the date of a Change in Control) that are equal to or lower than the Company's Total Shareholder Return at the Performance Period End Date (or, if earlier, the date of a Change in Control), expressed as a percentage and calculated as follows:

   rTSR Percentile Rank = ((N – R) / (N – 1)) * 100 where:

   "*N*" is the aggregate number of Specified Companies plus one (1); and

   "*R*" is the number of Specified Companies with a Total Shareholder Return that is higher than the Company's Total Shareholder Return at the Performance Period End Date (or, if earlier, the date of a Change in Control) plus one (1).

   (e) "*Specified Companies*" will mean each of the companies included in the S&P SmallCap 600 Health Care of the Performance Period Start Date, excluding the Company itself. If a company in such index ceases to be publicly traded during the Performance Period, or if it publicly announced

that any such company will be acquired, whether or not such acquisition occurs during the Performance Period, such company will not be treated as a Specified Company for purposes of the determinations herein and such company's Total Shareholder Return will not be included for purposes of the calculations herein.

(f) "*Total Shareholder Return*" will mean, with respect to any company, the change in value expressed as a percentage of a given dollar amount invested in a company's most widely publicly traded stock over the Performance Period, taking into account both stock price appreciation (or depreciation) and the reinvestment of dividends (including the cash value of non-cash dividends) in such stock of the company. The thirty (30) trading-day average closing price of shares of Common Stock and of the most widely publicly traded stock of the Specified Companies, as applicable, (i) beginning on and including the Performance Period Start Date, and (ii) except as set forth in the proviso below, ending on and including the Performance Period End Date, will be used to value shares of Common Stock and such stock of the Specified Companies, as applicable; *provided that*, in the event that a Change in Control is consummated during the Performance Period, the fair value of the actual consideration received by holders of Common Stock in that Change in Control (as determined by the Committee in its sole discretion) will be used in calculating the Company's Total Shareholder Return in lieu of the thirty (30) trading-day average closing price described in clause (ii) above. Dividend reinvestment will be calculated using the closing price of a share of Common Stock or the stock of the applicable Specified Company, as applicable, on the ex-dividend date or, if no trades were reported on such date, the latest preceding date for which a trade was reported.

3. Earning of RSUs. No RSUs will become earned unless the rTSR Percentile Rank is at or above the 25th percentile. If the rTSR Percentile Rank is at or above the 25th percentile, the aggregate number of RSUs that will become earned will be equal to the Target RSUs, multiplied by the "Applicable Percentage" set forth in the table below. In the event that rTSR Percentile Rank falls between two of the percentiles listed in the table below, the Applicable Percentage will be interpolated on a straight-line basis and the number of RSUs earned will be based on such interpolated percentage.

rTSR Percentile Rank	Applicable Percentage of Target RSUs
≥ 75th Percentile	200%
50th Percentile	100%
≥ 25th Percentile	50%

4. Determinations. At the end of the Performance Period, the Committee will determine the extent to which, if any, the Performance Criteria has been achieved and the number of

RSUs that become Earned RSUs; provided, however, in the event of a Qualified Retirement, the Earned RSUs will be pro-rated by multiplying the Earned RSUs by an amount equal to the number of days Participant renders Services to the Company during the Performance Period, divided by the total number of days in the Performance Period. For clarity, in the case of a Change in Control under Section 2(c), when calculating pro-ration with respect to a Qualified Retiree, the Change in Control Date shall be deemed the end of the Performance Period.

Any RSUs that do not become Earned RSUs (after determination and pro-ration) hereunder, and any related Dividend Equivalents, will be automatically forfeited. No RSUs or any related Dividend Equivalents will be earned and/or vest until the Committee certifies the extent to which the Performance Criteria been achieved. The Committee will make such determination and certification not later than March 15th following the end of the Performance Period. Earned RSUs will vest as set forth in Section 2 of this Agreement. Any Earned RSUs will be rounded down to the nearest whole number of RSUs and any fractional Earned RSUs will be disregarded. All determinations under the Agreement, including this Exhibit A, will be made by the Committee and will be final and binding on the Participant.

Lantheus Holdings, Inc.
2015 Equity Incentive Plan

Stock Option Award Agreement
(*Time Vesting*)

This Stock Option Award Agreement (this "*Agreement*") is made by and between Lantheus Holdings, Inc., a Delaware corporation (the "*Company*"), and [●] (the "*Participant*"), effective as of [●] (the "*Date of Grant*").

RECITALS

WHEREAS, the Company has adopted the Lantheus Holdings, Inc. 2015 Equity Incentive Plan (as the same may be amended and/or amended and restated from time to time, the "*Plan*"), which Plan is incorporated herein by reference and made a part of this Agreement, and capitalized terms not otherwise defined in this Agreement will have the meanings ascribed to those terms in the Plan; and

WHEREAS, the Committee has authorized and approved the grant of an Award to the Participant of a Stock Option to purchase shares of Common Stock ("*Shares*"), subject to the terms and conditions set forth in the Plan and this Agreement.

NOW THEREFORE, in consideration of the premises and mutual covenants set forth in this Agreement, the parties agree as follows:

1. Grant of Stock Option Award. The Company has granted to the Participant, effective as of the Date of Grant, the right and option to purchase, on the terms and conditions set forth in the Plan and this Agreement, all or any part of an aggregate of [●] Shares, subject to adjustment as set forth in the Plan (the "*Option*"). The Option is intended to be a Nonqualified Stock Option.

2. Exercise Price. The exercise price of the Option is [●] per Share, subject to adjustment as set forth in the Plan (the "*Exercise Price*").

3. Vesting of Option. Subject to the terms and conditions set forth in the Plan and this Agreement, the Option will vest as follows:

(a) General. Except as otherwise provided in Sections 3(b) and 4, the Option will vest on each of the first three (3) anniversaries of the Date of Grant, subject to the Participant's continued Service through each applicable vesting date, except as set forth in Section 3(b) below, with the number of Shares that vest on the first two vesting dates rounded down to the nearest whole Share and with 100% of the remaining Shares becoming vested on the third (3rd) anniversary of the Date of Grant.

(b) Change in Control. Subject to the Participant's continued Service through the date of a Change in Control:

(i) if the consideration paid in connection with that Change in Control for the same class of the Company's equity securities underlying the then-outstanding portion of the Option is all cash, then the Option will become

fully vested immediately prior the consummation of that Change in Control;

(ii) if (x) the consideration paid in connection with that Change in Control for the same class of the Company's equity securities underlying the then outstanding portion of the Option is all equity securities, or part cash and part equity securities, (y) the then-outstanding portion of the Option is assumed or substituted by the acquirer in that Change in Control for awards with substantially the same or comparable terms (including with respect to the then-current economic value) and (z) the Participant's Service is terminated (1) without Cause or, (2) to the extent the Participant is party to an employment letter or agreement with the Company or any of its Subsidiaries that defines "Good Reason" (or any similar term), by the Participant for Good Reason, then within twelve (12) months following that Change in Control, the unvested portion of the Option will become fully vested upon that termination of Service.

(iii) For clarity, in the case of a Qualified Retiree (as defined below), no additional vesting shall occur in the case of a Change in Control.

4. Forfeiture; Expiration.

(a) Termination of Service. Except as set forth in Section 3(b)(ii) above, any unvested portion of the Option will be forfeited immediately, automatically and without consideration upon termination of the Participant's Service for any reason. Without limiting the generality of the foregoing, the Option and the Shares (and any resulting proceeds) will continue to be subject to Section 13 of the Plan.

(b) Expiration. Any unexercised portion of the Option will expire on the tenth (10th) anniversary of the Date of Grant (the "*Expiration Date*"), or earlier as provided in this Agreement or the Plan.

5. Period of Exercise. Subject to the provisions of the Plan and this Agreement, the Participant may exercise all or any part of the vested portion of the Option at any time prior to the earliest to occur of:

(a) the first trading day on or after the Expiration Date;

(b) the first trading day on or after the date that is one (1) year following termination of the Participant's Service due to death or Disability;

(c) the first trading day on or after the date that is sixty (60) days following termination of the Participant's Service without Cause or, to the extent applicable, for Good Reason (except as provided in Section 5(e) as relates to Qualified Retirement (as defined below));

(d) the first trading day on or after the date of termination of the Participant's Service for Cause;

(e) notwithstanding Section 5(c) of the Agreement, for a Participant whose Service terminates due to a Qualified Retirement (a "*Qualified Retiree*"), with respect to any options of Participant that vested pursuant to Section 3(a) prior to the Qualified Retirement Date (as defined below) (the "*Vested Options*"), the last

trading day of the earliest to occur of (i) the third anniversary of the Qualified Retirement Date; (ii) the date on which the Participant violates any restrictive covenant or other continuing obligation to the Company on or after such Qualified Retirement Date; and (iii) the Expiration Date (the "*Qualified Retirement Exercise Period*"); provided that, upon the expiration of the Qualified Retirement Exercise Period, all Options will be immediately and automatically forfeited without consideration in the manner contemplated in Section 4; or

(f) the first trading day on or after the date that is forty-five (45) days following the termination of the Participant's Service for any reason other than pursuant to Sections 5(b), 5(c), 5(d) or 5(e) above.

As used herein, "Qualified Retirement" means that, as of the date Participant ceases to provide Services to the Company due to a voluntary retirement (and not a termination by the Company with or without Cause) (the "Qualified Retirement Date"), (i) Participant is at least fifty-five (55) years of age and (ii) Participant has provided Services to the Company or any Subsidiary for at least ten (10) years.

For clarity, in the event any date specified above is not on a trading day, then the date provided above shall be the first trading day following such date specified above.

6. Exercise of Option

(a) Exercise Process. Subject to Section 4 and 5, the Participant or, in the case of the Participant's death or Disability, the Participant's representative may exercise all or any part of the vested portion of the Option by following such procedures as are required by the Company's equity administrator. In the event that the Option is being exercised by the Participant's representative, the Participant's representative will provide proof (satisfactory to the Committee) of the representative's right to exercise the Option. The Participant or the Participant's representative will deliver to the Committee, at the time of requesting to exercise such Options, payment in a form permissible under Section 7 for the full amount of the Purchase Price and applicable withholding taxes as provided below.

(b) Issuance of Common Stock. After satisfying all requirements with respect to the exercise of the Option, the Committee will cause to be issued the Shares as to which the Option has been exercised (or, in the Committee's discretion, in un-certificated form, upon the books of the Company's transfer agent), registered in the name of the person exercising the Option (or in the names of such person and his or her spouse as community property or as joint tenants with right of survivorship). Neither the Company nor the Committee will be liable to the Participant or any other Person for damages relating to any delays in issuing the Shares or any mistakes or errors in the issuance of the Shares.

(c) Withholding Requirements. The Company will have the power and the right to deduct or withhold automatically from any Shares deliverable under this Agreement, or to require the Participant or the Participant's representative to remit to the Company, the minimum statutory amount necessary to satisfy federal, state and local taxes, domestic or foreign, required by law or regulation to be withheld with respect to any taxable event arising as a result of this Agreement (collectively, "*Withheld Taxes*"); provided that any obligations to pay Withheld Taxes may be satisfied in the manner in which the Purchase Price is permitted to be paid under Section 7 or any other manner permitted by the Plan.

7. Payment for Shares. The "*Purchase Price*" will be the Exercise Price multiplied by the number of Shares with respect to which the Option is being exercised. All or part of the Purchase Price and any Withheld Taxes may be paid as follows:

(a) Cash or Check. In cash or by bank certified check.

(b) Brokered Cashless Exercise. To the extent permitted by applicable law and unless otherwise provided by the Committee, from the proceeds of a sale through a broker on the date of exercise of some or all of the Shares to which the exercise relates. In that case, the Participant will follow all such procedures as required by the Company's equity administrator including, without limitation, providing a copy of irrevocable instructions to a broker to deliver promptly to the Company the amount of sale proceeds to pay the aggregate purchase price or Withheld Taxes, as applicable. To facilitate the foregoing, the Company may, to the extent permitted by applicable law, enter into agreements or coordinate procedures with one or more brokerage firms.

(c) Net Exercise. By reducing the number of Shares otherwise deliverable upon the exercise of the Option by the number of Shares having a Fair Market Value equal to the amount of the Purchase Price and/or Withheld Taxes, as applicable.

(d) Surrender of Stock. In each instance, at the sole discretion of the Committee, by surrendering, or attesting to the ownership of, Shares that are already owned by the Participant free and clear of any restriction or limitation, unless the Committee specifically agrees to accept such Shares subject to such restriction or limitation. Such Shares will be surrendered to the Company in good form for transfer and will be valued by the Company at their Fair Market Value on the date of the applicable exercise of the Option, or to the extent applicable, on the date the Withheld Taxes is to be determined. The Participant will not surrender, or attest to the ownership of, Shares in payment of the Purchase Price (or Withheld Taxes) if such action would cause the Company to recognize compensation expense (or additional compensation expense) with respect to this Option for financial reporting purposes that otherwise would not have occurred.

8. Adjustment to Option. In the event of any change with respect to the outstanding shares of Common Stock contemplated by Section 4.5 of the Plan, the Option may be adjusted in accordance with Section 4.5 of the Plan.

9. Miscellaneous Provisions

(a) Securities Laws Requirements. No Shares will be issued or transferred pursuant to this Agreement unless and until all then applicable requirements imposed by Federal and state securities and other laws, rules and regulations and by any regulatory agencies having jurisdiction, and by any exchanges upon which the Shares may be listed, have been fully met. As a condition precedent to the issuance of Shares pursuant to this Agreement, the Company may require the Participant to take any reasonable action to meet those requirements. The Committee may impose such conditions on any Shares issuable pursuant to this Agreement as it may deem advisable, including, without limitation, restrictions under the Securities Act of 1933, as amended, under the requirements of any exchange upon which shares of the same class are then listed and under any blue sky or other securities laws applicable to those Shares.

(b) Rights of a Shareholder of the Company. Neither the Participant nor the Participant's representative will have any rights as a shareholder of the Company with respect to any Shares subject to the Option until the Participant or the Participant's representative becomes entitled to receive those Shares by (i) following all such procedures as required by the Company's equity administrator, (ii) paying the Purchase Price and Withheld Taxes as provided in this Agreement, and the Company actually receiving those amounts, (iii) the Company issuing those Shares and entering the name of the Participant in the register of shareholders of the Company as the registered holder of those Shares and (iv) satisfying any other conditions as the Committee reasonably requires.

(c) Transfer Restrictions. The Shares purchased by exercise of the Option will be subject to such stop transfer orders and other restrictions as the Committee may deem advisable under the Plan or the rules, regulations and other requirements of the Securities and Exchange Commission, any stock exchange upon which such shares are listed, and any applicable Federal or state laws, and any agreement with, or policy of, the Company or the Committee to which the Participant is a party or subject, and the Committee may cause orders or designations to be placed upon any certificate(s) or other document(s) delivered to the Participant, or on the books and records of the Company's transfer agent to make appropriate reference to such restrictions.

(d) No Right to Continued Service. Nothing in this Agreement or the Plan confers upon the Participant any right to continue in Service for any period of specific duration or interferes with or otherwise restricts in any way the rights of the Company (or any Subsidiary employing or retaining the Participant) or of the Participant, which rights are hereby expressly reserved by each, to terminate his or her Service at any time and for any reason, with or without Cause.

(e) Notification. Any notification required by the terms of this Agreement will be given by the Participant (i) in a writing addressed to the Company at its principal executive office and will be deemed effective upon actual receipt when delivered by personal delivery or by registered or certified mail, with postage and fees prepaid, or (ii) by electronic transmission to the Company's e-mail address of the Company's General Counsel and will be deemed effective upon actual receipt. Any notification required by the terms of this Agreement will be given by the Company (i) in a writing addressed to the address that the Participant most recently provided to the Company and will be deemed effective upon personal delivery or within three (3) days of deposit with the United States Postal Service, by registered or certified mail, with postage and fees prepaid, or (ii) by facsimile or electronic transmission to the Participant's primary work fax number or e-mail address (as applicable) and will be deemed effective upon confirmation of receipt by the sender of such transmission.

(f) Entire Agreement. This Agreement and the Plan constitute the entire agreement between the parties hereto with regard to the subject matter of this Agreement. This Agreement and the Plan supersede any other agreements, representations or understandings (whether oral or written and whether express or implied) that relate to the subject matter of this Agreement.

(g) Waiver. No waiver of any breach or condition of this Agreement will be deemed to be a waiver of any other or subsequent breach or condition whether of like or different nature.

(h) Successors and Assigns. The provisions of this Agreement will inure to the benefit of, and be binding upon, the Company and its successors and assigns and upon the Participant, the Participant's executor, personal representative(s), distributees, administrator, permitted transferees, assignees, beneficiaries, and legatee(s), as applicable, whether or not any such person will have become a party to this Agreement and have agreed in writing to be joined herein and be bound by the terms hereof.

(i) Severability. The provisions of this Agreement are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, then the remaining provisions will nevertheless be binding and enforceable.

(j) Amendment. Except as otherwise provided in the Plan, this Agreement will not be amended unless the amendment is agreed to in writing by both the Participant and the Company.

(k) Choice of Law; Jurisdiction. This Agreement and all claims, causes of action or proceedings (whether in contract, in tort, at law or otherwise) that may be based upon, arise out of or relate to this Agreement will be governed by the internal laws of the State of Delaware, excluding any conflicts or choice-of-law rule or principle that might otherwise refer construction or interpretation of this Agreement to the substantive law of another jurisdiction. The Participant (or her or his beneficiary, legatee, executor, personal representative or distributee, as applicable) and each party to this Agreement agrees that it will bring all claims, causes of action and proceedings (whether in contract, in tort, at law or otherwise) that may be based upon, arise out of or be related to the Plan or this Agreement exclusively in the Delaware Court of Chancery or, in the event (but only in the event) that such court does not have subject matter jurisdiction over such claim, cause of action or proceeding, exclusively in the United States District Court for the District of Delaware (either of the foregoing, the "*Chosen Court*"), and hereby (i) irrevocably submits to the exclusive jurisdiction of the Chosen Court, (ii) waives any objection to laying venue in any such proceeding in the Chosen Court, (iii) waives any objection that the Chosen Court is an inconvenient forum or does not have jurisdiction over any party and (iv) agrees that service of process upon such party in any such claim or cause of action will be effective if notice is given in accordance with this Agreement.

(l) Signature in Counterparts. This Agreement may be signed in counterparts, manually or electronically, and each of which will be an original, with the same effect as if the signatures to each were upon the same instrument.

(m) Acceptance. The Participant hereby acknowledges receipt of a copy of the Plan and this Agreement. The Participant has read and understands the terms and provisions of the Plan and this Agreement, and accepts the Option subject to all of the terms and conditions of the Plan and this Agreement. In the event of a conflict between any term or provision contained in this Agreement and a term or provision of the Plan, the applicable term and provision of the Plan will govern and prevail.

[*Signature page follows.*]

IN WITNESS WHEREOF, the Company and the Participant have executed this Stock Option Award Agreement as of the date first written above.

PARTICIPANT **LANTHEUS HOLDINGS, INC.**

_____ By: _____

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Mary Anne Heino, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Lantheus Holdings, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 29, 2022

/s/ MARY ANNE HEINO

Name: Mary Anne Heino

Title: *President and Chief Executive Officer*
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Robert J. Marshall, Jr., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Lantheus Holdings, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 29, 2022

/s/ ROBERT J. MARSHALL, JR.

Name: Robert J. Marshall, Jr.

Title: *Chief Financial Officer and Treasurer*
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, Mary Anne Heino, the Chief Executive Officer, and Robert J. Marshall, Jr., the Chief Financial Officer, of Lantheus Holdings, Inc. (the "Company"), hereby certify, that, to their knowledge:

1. The Quarterly Report on Form 10-Q for the period ended March 31, 2022 (the "Report") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 29, 2022

/s/ MARY ANNE HEINO
Name: Mary Anne Heino
Title: *President and Chief Executive Officer*
(Principal Executive Officer)

Date: April 29, 2022

/s/ ROBERT J. MARSHALL, JR.
Name: Robert J. Marshall, Jr.
Title: *Chief Financial Officer and Treasurer*
(Principal Financial Officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.