

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 June 30, 2022

OR

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:

0-22923

INTERNATIONAL ISOTOPES INC.

(Exact name of registrant as specified in its charter)

Texas

*(State or other jurisdiction of
incorporation or organization)*

74-2763837

(IRS Employer Identification No.)

**4137 Commerce Circle
Idaho Falls, Idaho, 83401**

(Address of principal executive offices, including zip code)

(208) 524-5300

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: None

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

Non-accelerated Filer

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 pursuant to Section 13(a) of the Exchange Act.

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

As of August 3, 2022, the number of shares of common stock, \$0.01 par value, outstanding was 514,779,532.

INTERNATIONAL ISOTOPES INC.
FORM 10-Q
For The Quarter Ended June 30, 2022

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INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES
Consolidated Balance Sheets
(unaudited)

Assets	<u>June 30,</u> <u>2022</u>	<u>December 31,</u> <u>2021</u>
Current assets		
Cash and cash equivalents	\$ 3,025,513	\$ 474,851
Accounts receivable	1,301,822	853,675
Inventories	943,645	924,775
Prepays and other current assets	619,649	1,004,423
Total current assets	<u>5,890,629</u>	<u>3,257,724</u>
Long-term assets		
Restricted cash	831,382	830,752
Property, plant and equipment, net	2,039,703	4,299,937
Capitalized lease disposal costs, net	237,436	246,748
Financing lease right-of-use asset	15,626	18,631
Operating lease right-of-use asset	2,371,382	2,429,622
Goodwill	1,384,255	1,384,255
Patents and other intangibles, net	3,781,651	3,859,473
Total long-term assets	<u>10,661,435</u>	<u>13,069,418</u>
Total assets	<u>\$ 16,552,064</u>	<u>\$ 16,327,142</u>
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable	\$ 560,535	\$ 1,424,028
Accrued liabilities	899,748	1,189,165
Unearned revenue	1,050,084	907,953
Current portion of operating lease right-of-use liability	127,217	121,069
Current portion of financing lease liability	8,411	8,542
Current portion of related party notes payable, net of debt discount	871,868	993,735
Current installments of notes payable	48,973	290,017
Current portion of mandatorily redeemable preferred stock, net of debt discount	4,063,000	—
Total current liabilities	<u>7,629,836</u>	<u>4,934,509</u>
Long-term liabilities		
Accrued long-term liabilities	140,625	—
Related party notes payable, net of current portion and debt discount	620,000	620,000
Notes payable, net of current portion	39,556	57,769
Asset retirement obligation	916,887	892,086
Financing lease liability, net of current portion	4,305	8,346
Operating lease right-of-use liability, net of current portion	2,299,136	2,363,815
Mandatorily redeemable convertible preferred stock, net of current portion and discount	—	4,719,822
Total long-term liabilities	<u>4,020,509</u>	<u>8,661,838</u>
Total liabilities	<u>11,650,345</u>	<u>13,596,347</u>
Stockholders' equity		
Common stock, \$0.01 par value; 750,000,000 shares authorized; 514,726,908 and 502,584,176 shares issued and outstanding respectively	5,147,269	5,025,842
Additional paid in capital	125,535,534	124,469,034
Accumulated deficit	(125,781,084)	(126,764,081)
Total equity	<u>4,901,719</u>	<u>2,730,795</u>
Total liabilities and stockholders' equity	<u>\$ 16,552,064</u>	<u>\$ 16,327,142</u>

See accompanying notes to consolidated financial statements.

INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES
Unaudited Condensed Consolidated Statements of Operations

	Three months ended June 30,		Six months ended June 30,	
	2022	2021	2022	2021
Sale of product	\$ 2,434,808	\$ 2,759,896	\$ 5,242,249	\$ 4,752,408
Cost of product	1,034,278	1,171,968	2,164,976	2,003,322
Gross profit	<u>1,400,530</u>	<u>1,587,928</u>	<u>3,077,273</u>	<u>2,749,086</u>
Operating costs and expenses:				
Salaries and contract labor	801,972	625,428	1,735,221	1,293,948
General, administrative and consulting	863,025	875,799	1,776,148	1,781,728
Research and development	87,642	71,979	294,056	109,216
Total operating expenses	<u>1,752,639</u>	<u>1,573,206</u>	<u>3,805,425</u>	<u>3,184,892</u>
Net operating loss	<u>(352,109)</u>	<u>14,722</u>	<u>(728,152)</u>	<u>(435,806)</u>
Other income (expense):				
Other income	225,768	32,356	2,028,568	175,476
Interest income	680	46	725	81
Interest expense	(146,387)	(211,456)	(318,144)	(409,747)
Total other income (expense)	<u>80,061</u>	<u>(179,054)</u>	<u>1,711,149</u>	<u>(234,190)</u>
Net income (loss)	<u>(272,048)</u>	<u>(164,332)</u>	<u>982,997</u>	<u>(669,996)</u>
Income attributable to noncontrolling interest	<u>—</u>	<u>17,055</u>	<u>—</u>	<u>112,543</u>
Net income (loss) attributable to International Isotopes Inc.	<u>\$ (272,048)</u>	<u>\$ (181,387)</u>	<u>\$ 982,997</u>	<u>\$ (782,539)</u>
Net income per common share - basic:	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>
Net income per common share - diluted:	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>
Weighted average common shares outstanding - basic	<u>510,499,497</u>	<u>460,798,173</u>	<u>506,985,962</u>	<u>457,123,946</u>
Weighted average common shares outstanding - diluted	<u>510,499,497</u>	<u>460,798,173</u>	<u>512,569,114</u>	<u>457,123,946</u>

See accompanying notes to consolidated financial statements.

INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES
Unaudited Condensed Consolidated Statements of Cash Flows

	Six months ended June 30	
	2022	2021
Cash flows from operating activities		
Net income (loss)	\$ 982,997	\$ (669,996)
Adjustments to reconcile net income (loss) to net cash used by operating activities		
Depreciation and amortization	203,551	287,250
Accretion of obligation for lease disposal costs	24,801	19,136
Accretion of beneficial conversion feature and discount	146,311	199,757
Equity based compensation	237,474	49,093
Gain on sale of property, plant and equipment	(1,797,978)	—
Right-of-use asset amortization	(291)	14,532
Changes in operating assets and liabilities:		
Accounts receivable	(448,147)	(272,422)
Inventories	(18,870)	169,006
Prepays and other current assets	384,774	1,098,651
Accounts payable and accrued liabilities	(807,805)	(964,392)
Unearned revenues	142,131	(169,388)
Net cash used in operating activities	<u>(951,052)</u>	<u>(238,773)</u>
Cash flows from investing activities:		
Proceeds from sale of property, plant and equipment	4,000,000	—
Purchase of property, plant and equipment	(55,200)	(191,666)
Net cash provided by (used in) investing activities	<u>3,944,800</u>	<u>(191,666)</u>
Cash flows from financing activities:		
Proceeds from sale of stock and exercise of options and warrants	70,973	8,995
Payments on financing lease	(4,172)	(3,803)
Proceeds from the issuance of notes payable	—	351,250
Principal payments on notes payable	(509,257)	(329,464)
Net cash used in financing activities	<u>(442,456)</u>	<u>26,978</u>
Net increase (decrease) in cash, cash equivalents, and restricted cash	2,551,292	(403,461)
Cash, cash equivalents, and restricted cash at beginning of period	1,305,603	1,751,692
Cash, cash equivalents, and restricted cash at end of period	<u>\$ 3,856,895</u>	<u>\$ 1,348,231</u>
Supplemental disclosure of cash flow activities:		
Cash paid for interest	<u>\$ 46,894</u>	<u>\$ 61,320</u>
Supplemental disclosure of noncash financing and investing transactions		
Decrease in accrued interest and increase in equity for conversion of dividends to stock	<u>\$ 204,480</u>	<u>\$ 207,480</u>
Increase in operating lease right-of-use asset and right-of-use liability for new lease	<u>\$ —</u>	<u>\$ 1,603</u>
Increase in equity and decrease in liability for the conversion of preferred stock	<u>\$ 675,000</u>	<u>\$ 200,000</u>
Non-cash increase of capitalized ARO for increased funding plan	<u>\$ —</u>	<u>\$ 260,715</u>

Reconciliation of cash, cash equivalents, and restricted cash as shown in the condensed consolidated statements of cash flows is presented in the table below:

	June 30, 2022	June 30, 2021
Cash and cash equivalents	\$ 3,025,513	\$ 517,506
Restricted cash included in long-term assets	831,382	830,725
Total cash, cash equivalents, and restricted cash shown in statement of cash flows	<u>\$ 3,856,895</u>	<u>\$ 1,348,231</u>

See accompanying notes to the unaudited condensed consolidated financial statements.

INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES
Reconciliation of Stockholders' (Deficit) Equity
Three and Six Months Ended June 30, 2022
(Unaudited)

	<u>Common stock</u>		<u>Additional Paid-in Capital</u>	<u>Accumulated Deficit</u>	<u>Equity Attributable to Internat'l Isotopes Shareholders</u>	<u>Total (Deficit) Equity</u>
	<u>Shares Outstanding</u>	<u>Common Stock</u>				
Balance, January 1, 2022	502,584,176	\$ 5,025,842	\$ 124,469,034	\$ (126,764,081)	\$ 2,730,795	\$ 2,730,795
Shares issued under employee stock purchase plan	119,910	1,199	7,974	-	9,173	9,173
Stock grant	187,231	1,872	(1,872)	-	-	-
Stock in lieu of dividends on convertible preferred C	2,271,980	22,720	181,760	-	204,480	204,480
Shares issued for exercise of employee stock options	611,111	6,111	(6,111)	-	-	-
Warrant exercise	515,000	5,150	56,650	-	61,800	61,800
Conversion of preferred B stock	8,437,500	84,375	590,625	-	675,000	675,000
Stock based compensation	-	-	237,474	-	237,474	237,474
Net (loss) income	-	-	-	982,997	982,997	982,997
Balance, June 30, 2022	<u>514,726,908</u>	<u>\$ 5,147,269</u>	<u>\$ 125,535,534</u>	<u>\$ (125,781,084)</u>	<u>\$ 4,901,719</u>	<u>\$ 4,901,719</u>

	<u>Common stock</u>		<u>Additional Paid-in Capital</u>	<u>Accumulated Deficit</u>	<u>Equity Attributable to Internat'l Isotopes Shareholders</u>	<u>Total (Deficit) Equity</u>
	<u>Shares Outstanding</u>	<u>Common Stock</u>				
Balance, April 1, 2022	506,237,443	\$ 5,062,374	\$ 124,885,936	\$ (125,509,036)	\$ 4,439,274	\$ 4,439,274
Shares issued under employee stock purchase plan	51,965	520	3,456	-	3,976	3,976
Conversion of preferred B stock	8,437,500	84,375	590,625	-	675,000	675,000
Stock based compensation	-	-	55,517	-	55,517	55,517
Net (loss) income	-	-	-	(272,048)	(272,048)	(272,048)
Balance, June 30, 2022	<u>514,726,908</u>	<u>\$ 5,147,269</u>	<u>\$ 125,535,534</u>	<u>\$ (125,781,084)</u>	<u>\$ 4,901,719</u>	<u>\$ 4,901,719</u>

See accompanying notes to the unaudited condensed consolidated financial statements

INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES
Reconciliation of Stockholders' (Deficit) Equity
Three and Six Months Ended June 30, 2021
(Unaudited)

	Common stock		Additional Paid-in Capital	Accumulated Deficit	Equity Attributable to Internat'l Isotopes Shareholders	Equity Attributable to Noncontrolling Interest	Total (Deficit) Equity
	Shares Outstanding	Common Stock					
Balance, January 1, 2021	424,344,298	\$ 4,243,443	\$ 122,191,837	\$ (125,861,734)	\$ 573,546	\$ 2,313,706	\$ 2,887,252
Shares issued under employee stock purchase plan	211,640	2,117	6,878	-	8,995	-	8,995
Stock grant	118,315	1,183	(1,183)	-	-	-	-
Stock in lieu of dividends on convertible preferred C	1,398,200	13,982	193,498	-	207,480	-	207,480
Shares issued for exercise of employee stock options	1,799,107	17,991	(17,991)	-	-	-	-
Warrant exercise	32,621,409	326,214	(326,214)	-	-	-	-
Conversion of preferred C stock	250,000	2,500	22,500	-	25,000	-	25,000
Conversion of preferred B stock	87,500	875	174,125	-	175,000	-	175,000
Stock based compensation	-	-	49,093	-	49,093	-	49,093
Net (loss) income	-	-	-	(782,539)	(782,539)	112,543	(669,996)
Balance, June 30, 2021	<u>460,830,469</u>	<u>\$ 4,608,305</u>	<u>\$ 122,292,543</u>	<u>\$ (126,644,273)</u>	<u>\$ 256,575</u>	<u>\$ 2,426,249</u>	<u>\$ 2,682,824</u>

	Common stock		Additional Paid-in Capital	Accumulated Deficit	Equity Attributable to Internat'l Isotopes Shareholders	Equity Attributable to Noncontrolling Interest	Total (Deficit) Equity
	Shares Outstanding	Common Stock					
Balance, April 1, 2021	460,636,690	\$ 4,606,367	\$ 122,103,290	\$ (126,462,886)	\$ 246,771	\$ 2,409,194	\$ 2,655,965
Shares issued under employee stock purchase plan	106,279	1,063	3,454	-	4,517	-	4,517
Conversion of preferred B stock	87,500	875	174,125	-	175,000	-	175,000
Stock based compensation	-	-	11,674	-	11,674	-	11,674
Net (loss) income	-	-	-	(181,387)	(181,387)	17,055	(164,332)
Balance, June 30, 2021	<u>460,830,469</u>	<u>\$ 4,608,305</u>	<u>\$ 122,292,543</u>	<u>\$ (126,644,273)</u>	<u>\$ 256,575</u>	<u>\$ 2,426,249</u>	<u>\$ 2,682,824</u>

See accompanying notes to the unaudited condensed consolidated financial statements

INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES
Notes to Unaudited Condensed Consolidated Financial Statements
June 30, 2022

(1) The Company and Basis of Presentation

International Isotopes Inc. (INIS) was incorporated in Texas in November 1995. The accompanying unaudited condensed consolidated financial statements are presented in conformity with accounting principles generally accepted in the United States of America (GAAP) and include all operations and balances of INIS and its wholly owned subsidiaries, including RadQual, LLC (RadQual) and TI Services, LLC (TI Services). TI Services is headquartered in Youngstown, Ohio and was formed with RadQual in December 2010 to distribute products and services for nuclear medicine, nuclear cardiology, and Positron Emission Tomography (PET) imaging. RadQual is a global supplier of molecular imaging quality control and calibration devices, and is headquartered in Idaho Falls, Idaho. In August 2017, affiliates of INIS purchased 75.5% of RadQual and at the time INIS was named as one of the two managing members of RadQual. In July 2021, INIS purchased the remaining interest in RadQual and now owns 100% of RadQual. INIS, its subsidiaries RadQual and TI Services are collectively referred to herein as the “Company,” “we,” “our” or “us.”

Nature of Operations – The Company manufactures a full range of nuclear medicine calibration and reference standards, generic sodium iodide I-131 drug product, cobalt teletherapy sources, and a varied selection of radiochemicals for medical research, and clinical applications. For 2022, the Company’s business consists of four business segments: Nuclear Medicine Standards, Cobalt Products, Radiochemical Products, and Fluorine Products. Due to minimal activity, the Radiological Services business segment has been reorganized into the Company’s Nuclear Medicine Standards segment as of January 1, 2022. The Company’s headquarters and all operations, with the exception of TI Services, are located in Idaho Falls, Idaho.

With the exception of certain unique products, the Company’s normal operating cycle is considered to be one year. Due to the time required to produce some cobalt products, the Company’s operating cycle for those products is considered to be two to three years. Accordingly, preliminary payments received on cobalt contracts, where shipment will not take place for greater than one year, have been recorded as unearned revenue and, depending upon estimated ship dates, classified under either current or long-term liabilities on the Company’s condensed consolidated balance sheets. These unearned revenues are being recognized as revenue in the periods during which the cobalt shipments take place. All assets expected to be realized in cash or sold during the normal operating cycle of business are classified as current assets.

Principles of Consolidation – The accompanying unaudited condensed consolidated financial statements are presented in conformity with GAAP and include all operations and balances of INIS and its wholly-owned subsidiaries. See Note 4 “RadQual Acquisition” for additional information regarding RadQual and TI Services. All significant intercompany accounts and transactions have been eliminated in consolidation.

Interim Financial Information – The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with GAAP for interim financial information and pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (SEC). Accordingly, the accompanying unaudited condensed consolidated financial statements do not include all of the information and notes required by GAAP for complete financial statements. In the opinion of management, all adjustments and reclassifications considered necessary in order to make the financial statements not misleading and for a fair and comparable presentation have been included and are of a normal recurring nature. Operating results for the three or six-month period ended June 30, 2022 are not necessarily indicative of the results that may be expected for the year ending December 31, 2022 or any future periods. The accompanying unaudited condensed consolidated financial statements should be read in conjunction with the Company’s Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on March 31, 2022.

Recent Accounting Pronouncements – In August 2020, the Financial Accounting Standards Board issued ASU 2020-06 Debt – Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging – Contracts in Entity’s Own Equity (Subtopic 815-40). The update simplifies accounting related to convertible debt instruments. The standard is effective for fiscal years beginning after December 15, 2023 including interim periods within those fiscal years. INIS is currently evaluating the effect this standard will have on its financial statements.

(2) Current Developments and Liquidity

Business Condition – Since inception, the Company has incurred substantial losses. During the six months ended June 30, 2022, the Company reported net income of \$982,997, net of non-controlling interest, and net cash used in operating activities of \$951,052. During the six months ended June 30, 2021, the Company reported a net loss of \$782,539, net of non-controlling interest, and net cash used in operating activities of \$238,773.

During the three months ended June 30, 2022, the Company continued its focus on its strongest long-standing core business segments which consist of its radiochemical products, cobalt products, and nuclear medicine standards, and in particular, the pursuit of new business opportunities within those segments.

Additionally, the Company holds a Nuclear Regulatory Commission (NRC) construction and operating license for the depleted uranium facility and a property agreement with, Lea County, New Mexico, where the plant is intended to be constructed. The NRC license for the de-conversion facility is a forty (40) year operating license and is the first commercial license of this type issued in the United States. There are no other companies with a similar license application under review by the NRC. Therefore, the NRC license represents a significant competitive barrier, and the Company considers it a valuable asset.

(3) Net Income (Loss) Per Common Share - Basic and Diluted

For the six months ended June 30, 2022, the Company had 12,700,000 stock options outstanding, and 4,063 outstanding shares of Series C Preferred Stock, each of which were not included in the computation of diluted income per common share because they would be anti-dilutive. The Company used the treasury stock method in calculating weighted average common shares diluted.

For the three months ended June 30, 2022, the Company had 26,134,500 stock options outstanding, and 4,063 outstanding shares of Series C Preferred Stock, each of which were not included in the computation of diluted income (loss) per common share because they would be anti-dilutive. The Company used the treasury stock method in calculating weighted average common shares diluted.

For the three and six months ended June 30, 2021, the Company had 18,252,500 stock options outstanding, 7,065,000 warrants outstanding, 675 outstanding shares of Series B redeemable convertible preferred stock (Series B Preferred Stock), and 4,188 outstanding shares of Series C redeemable convertible preferred stock (Series C Preferred Stock), each of which were not included in the computation of diluted income (loss) per common share because they would be anti-dilutive.

The table below shows the calculation of diluted shares:

	3 Months Ended		6 Months Ended	
	June 30, 2022	June 30, 2021	June 30, 2022	June 30, 2021
Weighted average common shares outstanding - basic	510,499,497	460,798,173	506,985,962	457,123,946
Effects of dilutive shares				
Stock Options	—	—	5,583,152	—
Weighted average common shares outstanding - diluted	510,499,497	460,798,173	512,569,114	457,123,946

The table below summarizes common stock equivalents outstanding at June 30, 2022 and 2021:

	June 30,	
	2022	2021
Stock options	26,134,500	18,252,500
Warrants	—	7,065,000
Shares of Series B redeemable convertible preferred stock	—	337,500
Shares of Series C redeemable convertible preferred stock	40,630,000	41,880,000
	<u>66,764,500</u>	<u>67,535,000</u>

(4) RadQual Acquisition

On July 8, 2021, the Company entered into a Membership Interest Purchase Agreement (the Purchase Agreement) with RadQual and the sellers set forth in the Purchase Agreement, which included the Company's Chairman of the Board, Chief Executive Officer, former Chairman of the Board, and certain other stockholders of the Company (collectively, the "Sellers"). Pursuant to the Purchase Agreement, the Company acquired all of the outstanding membership interests of RadQual not then owned by the Company for an aggregate purchase price of approximately \$4.4 million, payable in shares of the Company's common stock valued at \$0.11 per share (determined by the average trading price of the Company's common stock on the OTC Markets during the 60 trading day period immediately prior to June 2, 2021) (the RadQual Acquisition). The Company issued an aggregate of 40,176,236 shares of its common stock to the Sellers as consideration in the RadQual Acquisition. Prior to the RadQual Acquisition, the Company owned 24.5% of the outstanding membership interests of RadQual, and after acquiring all of the remaining membership interests of RadQual, RadQual became a wholly-owned subsidiary of the Company. The RadQual Acquisition closed on July 8, 2021. As TI Services is a 50/50 joint venture between the Company and RadQual, TI Services also became a wholly-owned subsidiary of the Company as a result of the RadQual Acquisition.

(5) Inventories

At June 30, 2022 and December 31, 2021, the company held inventories of \$943,645 and \$924,775 respectfully.

Inventories consisted of work in process for the following business segments:

	<u>June 30, 2022</u>	<u>December 31, 2021</u>
Radiochemical Products	\$ 47,435	\$ 79,747
Cobalt Products	405,152	441,749
Nuclear Medicine Products	491,058	403,279
	<u>943,645</u>	<u>924,775</u>

When indicators of inventory impairment exist, the Company measures the carrying value of the inventory against its market value, and if the carrying value exceeds the market value, the inventory value is adjusted down accordingly. No impairment was recorded for the six months ended June 30, 2022 and 2021.

The Company has contracted with several customers for the sale of some of this cobalt product material and has collected advance payments for project management, up-front handling, and other production costs from those customers. The advance payments from customers were recorded as unearned revenue which are recognized in the Company's condensed consolidated financial statements as cobalt products are completed and shipped. For the six months ended June 30, 2022 and 2021, the Company recognized approximately \$26,949 and \$157,890, respectively, of revenue in its condensed consolidated statements of operations for customer orders filled during the period under these cobalt contracts. For the three-months ended June 30, 2022 and 2021, the Company recognized approximately \$16,311 and \$150,090, respectively of revenue in its condensed consolidated statements of operations for customer orders filled during the period under these cobalt contracts.

(6) Stockholders' Equity, Options, and Warrants

Employee Stock Purchase Plan

The Company has an employee stock purchase plan pursuant to which employees of the Company may participate to purchase shares of common stock at a discount. During the six months ended June 30, 2022 and 2021, the Company issued 119,910 and 211,640 shares of common stock, respectively, to employees under the employee stock purchase plan for proceeds of \$9,173 and \$8,995, respectively. As of June 30, 2022, 2,666,581 shares of common stock remain available for issuance under the employee stock purchase plan.

Stock-Based Compensation Plans

2015 Incentive Plan - In April 2015, the Company's Board of Directors approved the International Isotopes Inc. 2015 Incentive Plan (as amended, the 2015 Plan), which was subsequently approved by the Company's shareholders in July 2015. The 2015 Plan was amended and restated in July 2018 to increase the number of shares authorized for issuance under the 2015 Plan by an additional 20,000,000 shares. The 2015 Plan provides for the grant of incentive and non-qualified stock options, stock appreciation rights, restricted stock, restricted stock units, performance shares and units, and other stock or cash-based awards. At June 30, 2022, there were 28,297,971 shares available for issuance under the 2015 Plan.

Employee/Director Grants - The Company accounts for issuances of stock-based compensation to employees by recognizing, as compensation expense, the cost of employee services received in exchange for equity awards. The compensation expense is based on the grant date fair value of the award. Stock option compensation expense is recognized over the period during which an employee is required to provide service in exchange for the award (the vesting period).

Non-Employee Grants - The Company accounts for its issuances of stock-based compensation to non-employees by recognizing compensation expense based on the grant date fair value of the award. Stock option compensation expense is recognized over the vesting period for the award.

Option awards outstanding as of June 30, 2022, and changes during the six months ended June 30, 2022, were as follows:

Fixed Options	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value
Outstanding at December 31, 2021	20,777,500	\$ 0.06		
Granted	8,025,000	0.09		
Exercised	(1,000,000)	0.04		
Expired	—	—		
Forfeited	(1,668,000)	0.08		
Outstanding at June 30, 2022	26,134,500	0.06	6.3	\$ 241,645
Exercisable at June 30, 2022	16,992,000	\$ 0.06	4.7	\$ 230,640

The intrinsic value of outstanding and exercisable shares is based on the closing price of the Company's common stock on the OTCQB of \$0.07 per share on June 30, 2022, the last trading day of the quarter.

As of June 30, 2022, there was \$283,895 of unrecognized compensation expense related to stock options that will be recognized over a weighted-average period of 1.91 years.

Total stock-based compensation expense for the six months ended June 30, 2022 and 2021 was \$237,474 and \$49,093 respectively. Total stock-based compensation expense for the three-months ended June 30, 2022 and 2021 was \$55,517 and \$11,674, respectively.

During the six months ended June 30, 2022, the Company granted an employee 1,000,000 qualified stock options with an exercise price of \$0.10 and another 25,000 qualified stock options with an exercise price of \$0.08 to one of its employees. These options vest over a five-year period with the first vesting at the one-year anniversary of the grant and expiration at ten-year anniversary for all grants. On February 21, 2022, the Compensation Committee granted 3,000,000 qualified stock options to its executive officers and 4,000,000 non-qualified stock options to members of the Board. The exercise price for these options was \$0.09. 2,000,000 of the options granted to an executive officer vest one half immediately and one half at the one-year anniversary of the grant. The remaining executive officer and board member options vest one fourth immediately and one fourth each subsequent year. All these granted options expire at the ten-year anniversary of the grant. The options issued during the six months ended June 30, 2022 have a fair value of \$379,581 as estimated on the date of issue using the Black-Scholes options pricing model with the following weighted-average assumptions: risk free interest rate of 1.37% to 3.06%, expected dividend yield rate of 0%, expected volatility of 66.28% to 69.16% and an expected life between 5 and 7.5 years.

In March 2022, 1,000,000 qualified stock options were exercised under a cashless exercise. The company withheld 388,889 shares to satisfy the exercise price and issued 611,111 shares of common stock. The options exercised were granted under the 2015 Plan, and, accordingly, there was not any income tax effect in the accompanying unaudited condensed consolidated financial statements.

Pursuant to an employment agreement with its Chief Executive Officer, the Company awarded 307,692 fully vested shares of common stock to its Chief Executive Officer in February 2022 under the 2015 Plan. The number of shares awarded was based on a \$28,000 stock award using a price of \$0.091 per share. The employment agreement provides that the number of shares issued will be based on the average closing price of common stock for the 20 trading days prior to issue date but not less than \$0.05 per share. Compensation expense recorded pursuant to this stock grant was \$27,692, which was determined by multiplying the number of shares awarded by the closing price of the common stock on February 28, 2021, which was \$0.09 per share. The Company withheld 120,461 shares of common stock to satisfy payroll tax obligations in connection with this issuance. The net shares issued on February 28, 2022 totaled 187,231.

Warrants

As of June 30, 2022, there are no outstanding warrants. On February 14, 2022, 515,000 Class M Warrants were exercised for an exercise price of \$0.12 per share. The Company received \$61,800 of proceeds as a result of the exercise. On February 17, 2022 the 3,625,000 remaining unexercised Class M Warrants expired. On May 12, 2022, the 2,925,000 remaining unexercised Class N Warrants expired.

Warrants outstanding at June 30, 2021, included 4,140,000 Class M Warrants which were immediately exercisable at an exercise price of \$0.12 per share and expired on February 17, 2022 and 2,925,000 Class N Warrants which were immediately exercisable at an exercise price of \$0.10 per share and expired on May 12, 2022.

Preferred Stock

On May 31, 2022, the Company paid with shares of the Company's common stock all 675 outstanding Series B Preferred Stock outstanding with a mandatory redemption date of May 2022 at \$1,000 per share or \$675,000. The May 31, 2022 average price of the Company's common stock was \$0.08 per share. The Company issued 8,437,500 shares of common stock to satisfy the \$675,000 redemption amount.

At June 30, 2022, there were 4,063 shares of the Series C Preferred Stock outstanding with a mandatory redemption date of February 17, 2023 at \$1,000 per share in either cash or shares of common stock, at the option of the holder. Holders of the Series C Preferred Stock do not have any voting rights except as required by law and in connection with certain events as set forth in the Statement of Designation of the Series C Preferred Stock. The Series C Preferred Stock accrues dividends at a rate of 6% per annum, payable annually on February 17th of each year. The Series C Preferred Stock are convertible at the option of the holders at any time into shares of the Company's common stock at an initial conversion price equal to \$0.10 per share, subject to adjustment. If the volume-weighted average closing price of the Company's common stock over a period of 90 consecutive trading days is greater than \$0.25 per share, the Company may redeem all or any portion of the outstanding Series C Preferred Stock at the original purchase price per share plus any accrued and unpaid dividends, payable in shares of common stock.

During the six months ended June 30, 2022 and 2021 dividends paid to holders of the Series C Preferred Stock totaled \$243,780 and \$254,280, respectively. Some holders of the Series C Preferred Stock elected to settle their dividend payments with shares of the Company's common stock in lieu of cash. For the three months ended March 31, 2022 and 2021 the Company issued 2,271,980 and 1,398,200 shares of common stock, respectively, in lieu of a dividend payment of \$204,480 and \$207,480, respectively. The remaining dividend payable was settled with cash of \$39,300 and \$46,800 respectively.

(7) Debt

In December 2013, the Company entered into a promissory note agreement with its then Chairman of the Board and one of our major shareholders, pursuant to which we borrowed \$500,000 (the 2013 Promissory Note). The 2013 Promissory Note is secured and bears interest at 6% per annum and was originally due June 30, 2014. According to the terms of the 2013 Promissory Note, at any time, the lenders may settle any or all of the principal and accrued interest with shares of our common stock. In December 2019, the 2013 Promissory Note was modified to extend the maturity date to December 31, 2021, with all remaining terms unchanged. In January 2022, the 2013 Promissory Note was modified to extend the maturity date to December 31, 2023, with all remaining terms unchanged. At June 30, 2022, the principal balance of the 2013 Promissory Note was \$500,000 and accrued interest payable on the 2013 Promissory Note was \$256,734.

In April 2018, we borrowed \$120,000 from our Chief Executive Officer and Chairman of the Board pursuant to a promissory note (the 2018 Promissory Note). The 2018 Promissory Note accrues interest at 6% per annum, which is payable upon maturity of the 2018 Promissory Note. The 2018 Promissory Note was originally unsecured and originally matured on August 1, 2018. At any time, the holder of the 2018 Promissory Note may elect to have any or all of the principal and accrued interest settled with shares of our common stock based on the average price of the shares over the previous 20 trading days. In June 2018, the 2018 Promissory Note was modified to extend the maturity date to March 31, 2019 with all other provisions remaining unchanged. In February 2019, the 2018 Promissory Note was modified to extend the maturity date to July 31, 2019 with all other provisions remaining unchanged. In July 2019, the 2018 Promissory Note was modified to extend the maturity date to January 31, 2020 with all other provisions remaining unchanged. In December 2019, the 2018 Promissory Note was modified to extend the maturity date to December 31, 2021, the note was also modified to become secured by company assets, with all other provisions remaining unchanged. In December 2021, the 2018 Promissory Note was modified to extend the maturity date to December 31, 2023, with all remaining terms unchanged. At June 30, 2022, accrued interest on the 2018 Promissory Note totaled \$30,170.

In December 2019 and February 2020, the Company borrowed \$1,000,000 from four of the Company's major shareholders pursuant to a promissory note (the 2019 Promissory Note). The 2019 Promissory Note bears an interest rate of 4% annually and is due December 31, 2022. According to the terms of the 2019 Promissory Note, at any time, the lenders may settle any or all of the principal and accrued interest with shares of the Company's common stock based on the average closing price of the Company's common stock for the 20 days preceding the payment. In connection with the 2019 Promissory Note, the lenders were issued warrants totaling 30,000,000 warrants to purchase shares of the Company's common stock at \$0.045 per share (the Class O Warrants). The fair value of these Class O Warrants issued totaled \$446,079 and was recorded as a debt discount and will be amortized over the life of the 2019 Promissory Note. The Company calculated a beneficial conversion feature of \$315,643 which will be accreted to interest expense over the life of the 2019 Promissory Note. At June 30, 2022, the balance of the 2019 Promissory Note was \$1,000,000, The remaining debt discount was \$75,037, the remaining beneficial conversion feature was \$53,096, and the accrued interest on the 2019 Promissory Note totaled \$99,131.

In April 2021, the Company borrowed \$250,000 from its Chief Executive Officer and Chairman of the Board pursuant to a promissory note (the 2021 Promissory Note). The 2021 Promissory Note accrued interest at 6% per annum, which was payable upon maturity of the 2021 Promissory Note. The 2021 Promissory Note was secured and was to mature on December 31, 2022. At any time, the holders of the 2021 Promissory Note were able to elect to have any or all of the principal and accrued interest settled with shares of our common stock at a conversion price of \$0.11 per share. On March 31, 2022, the Company repaid the 2021 Promissory Note in full. The payment included \$250,000 in principal and \$14,500 in interest.

(8) Commitments and Contingencies

Dependence on Third Parties

The production of High Specific Activity Cobalt is dependent upon the Department of Energy (DOE), and its prime operating contractor, which controls the Advanced Test Reactor (ATR) and laboratory operations at the ATR located outside of Idaho Falls, Idaho. In October 2014, the Company signed a ten-year contract with the DOE for the irradiation of cobalt targets for the production of cobalt-60. The Company will be able to purchase cobalt targets for a fixed price per target with an annual 5% escalation in price. The contract term is October 1, 2014, through September 30, 2024, however, the contract may be extended beyond that date. Also, the DOE may end the contract if it determines termination is necessary for the national defense, security or environmental safety of the United States. If this were to occur, all payments made by the Company, for partially irradiated undelivered cobalt material, would be refunded.

Sales of our most predominant radiochemical products are dependent upon a few key suppliers. An interruption in production by any of these individual suppliers could have an immediate negative impact upon radiochemical sales until material could be purchased from alternate suppliers including obtaining regulatory approval to use material from alternative suppliers if necessary.

The Nuclear Medicine Reference and Calibration Standard products sold by the Company are dependent upon certain radioisotopes that are supplied to the Company through agreements with several suppliers. A loss of any of these suppliers could adversely affect operating results by causing a delay in production or a possible loss of sales.

Contingencies

Because all the Company's business segments involve the handling or use of radioactive material, the Company is required to have an operating license from the NRC and specially trained staff to handle these materials. The Company has amended this operating license numerous times to increase the amount of material permitted within the Company's facility. Although this license does not currently restrict the volume of business operations performed or projected to be performed in the upcoming year, additional processing capabilities and license amendments could be implemented that would permit processing of other reactor-produced radioisotopes by the Company. The financial assurance required by the NRC to support this license has been provided for with a surety bond held with North American Specialty Insurance Company which is supported by a restricted money market account held with Merrill Lynch in the amount of \$831,382 at June 30, 2022.

In August 2011, the Company received land from Lea County, New Mexico, pursuant to a Project Participation Agreement (PPA), whereby the land was deeded to the Company for no monetary consideration. In return, the Company committed to construct a uranium de-conversion and Fluorine Extraction Process facility on the land. In order to retain title to the property, the Company was to begin construction of the de-conversion facility no later than December 31, 2014, and complete Phase I of the project and have hired at least 75 persons to operate the facility no later than December 31, 2015, although commercial operations need not have begun by that date. In 2015, the Company negotiated a modification to the PPA that extended the start of construction date to December 31, 2015, and the hiring milestone to December 31, 2016. Those dates were also not met. The Company has been in discussion with commercial companies possibly interested in purchasing rights to this project. Should those discussions come to fruition the Company plans to negotiate a second modification to the PPA agreement to further extend the commitment dates. If the Company is not successful in reaching an amendment to extend the performance dates in the PPA then it may, at its sole option, either purchase or re-convey the property to Lea County, New Mexico. The purchase price of the property would be \$776,078, plus interest at the annual rate of 5.25% from the date of the closing to the date of payment. The Company has not recorded the value of this property as an asset and will not do so until such time that sufficient progress on the project has been made to meet the Company's obligations under the agreements for permanent transfer of the title.

(9) Revenue Recognition

Revenue from Product Sales

The following tables present the Company's revenue disaggregated by business segment and geography, based on management's assessment of available data:

	Three Months Ended June 30, 2022				Three Months Ended June 30, 2021			
	U.S.	Outside U.S.	Total Revenues	% of Total Revenues	U.S.	Outside U.S.	Total Revenues	% of Total Revenues
	Radiochemical Products	\$ 1,266,249	\$ 113,790	\$ 1,380,039	57%	\$ 1,091,114	\$ 137,095	\$ 1,228,209
Cobalt Products	89,946	9,200	99,146	4%	562,744	14,250	576,994	21%
Nuclear Medicine Products	744,154	211,469	955,623	39%	768,349	186,344	954,693	34%
Fluorine Products	—	—	—	0%	—	—	—	0%
	<u>\$ 2,100,349</u>	<u>\$ 334,459</u>	<u>\$ 2,434,808</u>	<u>100%</u>	<u>\$ 2,422,207</u>	<u>\$ 337,689</u>	<u>\$ 2,759,896</u>	<u>100%</u>

	Six Months Ended June 30, 2022				Six Months Ended June 30, 2021			
	U.S.	Outside U.S.	Total Revenues	% of Total Revenues	U.S.	Outside U.S.	Total Revenues	% of Total Revenues
	Radiochemical Products	\$ 2,776,571	\$ 229,391	\$ 3,005,962	57%	\$ 1,637,924	\$ 251,462	\$ 1,889,386
Cobalt Products	256,502	14,550	271,052	5%	676,023	19,344	695,367	15%
Nuclear Medicine Products	1,584,536	380,699	1,965,235	38%	1,712,205	433,437	2,145,642	45%
Fluorine Products	—	—	—	0%	22,013	—	22,013	0%
	<u>\$ 4,617,609</u>	<u>\$ 624,640</u>	<u>\$ 5,242,249</u>	<u>100%</u>	<u>\$ 4,048,165</u>	<u>\$ 704,243</u>	<u>\$ 4,752,408</u>	<u>100%</u>

The Company's revenue consists primarily of calibration and reference standards manufactured for use in the nuclear medicine industry, distribution of radiochemicals including sodium iodide I-131 drug product, and cobalt source manufacturing. With the exception of certain unique products, the Company's normal operating cycle is considered to be one year. Due to the time required to produce some cobalt products, the Company's operating cycle for those products is considered to be two to three years. Accordingly, preliminary payments received on cobalt contracts, where shipment will not take place for greater than one year, have been recorded as unearned revenue on the Company's condensed consolidated balance sheets and classified under current or long-term liabilities, depending upon estimated ship dates. For the six months ended June 30, 2022, the Company reported current unearned revenue of \$1,050,084. For the period ended December 31, 2021, the Company reported current unearned revenue of \$907,953. These unearned revenues will be recognized as revenue in the periods during which the cobalt shipments take place.

Accounts Receivable

The Company records a receivable when it has an unconditional right to receive consideration after the performance obligations are satisfied. As of June 30, 2022, and December 31, 2021, accounts receivable totaled \$1,301,822 and \$853,675, respectively. For the six months ended June 30, 2022, the Company has an allowance for doubtful accounts of approximately \$19,000.

(10) Leases

The Company leases office and warehouse space under operating leases. Right-of-use assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent its obligation to make lease payments under the lease. Operating lease, right-of-use assets, and liabilities are recognized at the lease commencement date based on the present value of lease payments over the reasonably certain lease term. The implicit rates with the Company's operating leases are generally not determinable and the Company uses its incremental borrowing rate at the lease commencement date to determine the present value of its lease payments. The determination of the Company's incremental borrowing rate requires judgement. The company determines its incremental borrowing rate for each lease using its then-current borrowing rate. Certain of the Company's leases include options to extend or terminate the lease. The Company establishes the number of renewal options periods used in determining the operating lease term based upon its assessment at the inception of the operating lease. The option to renew the lease may be automatic, at the option of the Company, or mutually agreed to between the landlord and the Company. Once the facility lease term has begun, the present value of the aggregate future minimum lease payments is recorded as a right-of-use asset. Lease expense is recognized on a straight-line basis over the term of the lease.

	Six Months Ended June 30,	
	2022	2021
Operating lease costs	\$ 141,605	\$ 126,904
Short-term operating lease costs	2,713	7,670
Financing lease expense:		
Amortization of right-of-use assets	4,172	3,005
Interest on lease liabilities	649	1,018
Total financing lease expense	<u>4,821</u>	<u>4,023</u>
Total lease expense	<u>\$ 149,139</u>	<u>\$ 138,597</u>
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ —	\$ 1,603
Right-of-use assets obtained in exchange for new financing lease liabilities	\$ —	\$ —
Weighted-average remaining lease term (years) - operating leases	12.6	13.6
Weighted-average remaining lease term (years) - financing leases	1.8	2.6
Weighted-average discount rate - operating leases	6.75%	6.75%
Weighted-average discount rate - financing leases	8.41%	8.76%

The future minimum payments under these operating lease agreements are as follows:

	Operating	Financing
2022 (excluding the six-months ended June 30, 2022)	\$ 143,554	\$ 4,820
2023	287,108	5,881
2024	287,108	2,929
2025	287,108	—
2026	287,108	—
Thereafter	<u>2,312,301</u>	<u>—</u>
Total minimum operating lease obligations	3,604,287	13,630
Less-amounts representing interest	<u>(1,177,934)</u>	<u>(914)</u>
Present value of minimum operating lease obligations	2,426,353	12,716
Current maturities	<u>(127,217)</u>	<u>(8,411)</u>
Lease obligations, net of current maturities	<u>\$ 2,299,136</u>	<u>\$ 4,305</u>

(11) Segment Information

The Company has four reportable segments which include: Nuclear Medicine Standards, Cobalt Products, Radiochemical Products, and Fluorine Products. The Company had five reportable segments in 2021 which also included Radiological Services. The Radiological Services business segment included field services, gemstone processing, and source disposal. As the Company is no longer engaged in field services and gemstone processing, which made up the substantial portion of activities of this segment, separate reporting of this segment has been discontinued. The Company continues to engage in source disposal activities and has begun reporting these activities under the Nuclear Medicine Standards segment beginning January 1, 2022.

Information regarding the operations and assets of these reportable business segments is contained in the following table:

Sale of Product	Three months ended June 30,		Six months ended June 30,	
	2022	2021	2022	2021
Radiochemical Products	\$ 1,380,039	\$ 1,228,209	\$ 3,005,962	\$ 1,889,386
Cobalt Products	99,146	576,994	271,052	695,367
Nuclear Medicine Standards	955,623	954,693	1,965,235	2,145,642
Fluorine Products	—	—	—	22,013
Total Segments	2,434,808	2,759,896	5,242,249	4,752,408
Corporate revenue	—	—	—	—
Total Consolidated	\$ 2,434,808	\$ 2,759,896	\$ 5,242,249	\$ 4,752,408

Depreciation and Amortization	Three months ended June 30,		Six months ended June 30,	
	2022	2021	2022	2021
Radiochemical Products	\$ 7,415	\$ 78,430	\$ 49,345	\$ 157,977
Cobalt Products	12,140	12,399	24,281	26,038
Nuclear Medicine Standards	28,587	18,120	57,233	34,742
Fluorine Products	26,095	31,158	52,190	57,253
Total Segments	74,237	140,107	183,049	276,010
Corporate depreciation and amortization	10,196	6,941	20,502	11,240
Total Consolidated	\$ 84,433	\$ 147,048	\$ 203,551	\$ 287,250

Segment Income (Loss)	Three months ended June 30,		Six months ended June 30,	
	2022	2021	2022	2021
Radiochemical Products	\$ 505,630	\$ 404,457	\$ 2,976,293	\$ 408,882
Cobalt Products	(42,332)	208,581	(55,407)	178,484
Nuclear Medicine Standards	(26,144)	110,085	11,572	373,403
Fluorine Products	(42,343)	(31,627)	(74,173)	(65,141)
Total Segments	394,811	691,496	2,858,285	895,628
Corporate loss	(666,859)	(872,883)	(1,875,288)	(1,678,167)
Net Income	\$ (272,048)	\$ (181,387)	\$ 982,997	\$ (782,539)

Expenditures for Segment Assets	Three months ended June 30,		Six months ended June 30,	
	2022	2021	2022	2021
Radiochemical Products	\$ —	\$ —	\$ —	\$ 3,103
Cobalt Products	—	—	—	16,592
Nuclear Medicine Standards	—	32,911	51,100	167,911
Fluorine Products	4,100	—	4,100	4,060
Total Segments	4,100	32,911	55,200	191,666
Corporate purchases	—	—	—	—
Total Consolidated	\$ 4,100	\$ 32,911	\$ 55,200	\$ 191,666

Segment Assets	June 30,	December 31,
	2022	2021
Radiochemical Products	\$ 924,131	\$ 2,890,590
Cobalt Products	563,906	597,420
Nuclear Medicine Standards	1,358,491	2,259,759
Fluorine Products	5,205,266	5,258,823
Total Segments	8,051,794	11,006,592
Corporate assets	8,500,270	5,320,550
Total Consolidated	\$ 16,552,064	\$ 16,327,142

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Quarterly Report on Form 10-Q (the "Quarterly Report") contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, including statements regarding industry prospects and future results of operations or financial position, made in this Quarterly Report are forward-looking statements. Words such as "anticipates," "believes," "should," "expects," "future," "intends" and similar expressions identify forward-looking statements. Forward-looking statements reflect management's current expectations, plans or projections, and are inherently uncertain. Actual results could differ materially from management's expectations, plans or projections. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this Quarterly Report. Certain risks and uncertainties that could cause our actual results to differ significantly from management's expectations are described in the risk factors set forth in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 filed with the Securities and Exchange Commission (SEC) on March 31, 2022 and in the other reports we file with the SEC. These factors describe some but not all of the factors that could cause actual results to differ significantly from management's expectations. We undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events, except as required by applicable law. Readers are urged, however, to review the risks and other factors set forth in the reports that we file from time to time with the SEC.

BUSINESS OVERVIEW

International Isotopes Inc., its wholly owned subsidiaries, including RadQual, LLC and TI Services, LLC (collectively, the Company, we, our, or us) manufacture a full range of nuclear medicine calibration and reference standards, manufacture a range of cobalt products, and distribute sodium iodide I-131 as a generic drug. We own 100% interest of RadQual, LLC (RadQual), a global supplier of molecular imaging quality control and calibration devices.

RADQUAL ACQUISITION

On July 8, 2021, we entered into a Membership Interest Purchase Agreement (the Purchase Agreement) with RadQual and the sellers set forth in the Purchase Agreement, which included our Chairman of the Board, Chief Executive Officer, former Chairman of the Board, and certain other stockholders of the Company (collectively, the Sellers). Pursuant to the Purchase Agreement, we acquired all of the outstanding membership interests of RadQual not then-owned by the Company for an aggregate purchase price of approximately \$4.4 million, payable in shares of our common stock valued at \$0.11 per share (determined by the average trading price of our common stock on the OTC Markets during the 60 trading day period immediately prior to June 2, 2021) (the RadQual Acquisition). We issued an aggregate of 40,176,236 shares of its common stock to the Sellers as consideration in the RadQual Acquisition. Prior to the RadQual Acquisition, we owned approximately 24.5% of the outstanding membership interests of RadQual, and after acquiring all of the remaining membership interests of RadQual, RadQual became a wholly-owned subsidiary of the Company. The RadQual Acquisition closed on July 8, 2021.

Our business consists of the following four business segments in 2022 and consisted of five business segments in 2021:

Nuclear Medicine Standards. Our Nuclear Medicine Standards segment consists of the manufacture of sources and standards associated with Single Photon Emission Computed Tomography (SPECT) and Positron Emission Tomography (PET) imaging. These sources are used for indication of patient positioning, SPECT and PET camera operational testing, and calibration of dose measurement equipment. Revenue from nuclear medicine products includes consolidated sales from TI Services, LLC (TI Services), a joint venture that we formed with RadQual in December 2010 to distribute our products. Our nuclear medicine standards products include a host of specially designed items used in the nuclear medicine industry. In addition to the manufacture of these products, we have developed a complete line of specialty packaging for the safe transport and handling of these products. Beginning January 1, 2022, this segment also includes miscellaneous source disposal activities that were previously reported as part of the Radiological Services segment.

Cobalt Products. Our Cobalt Products segment includes the production of bulk cobalt (cobalt-60), fabrication of cobalt capsules for radiation therapy and various industrial applications, and recycling of expended cobalt sources. We are the only company in the U.S. that can provide all these unique services. There has been a significant increase in regulation by the Nuclear Regulatory Commission (NRC) in recent years that has created a significant barrier to new entrants into this market. The Company has a contract in place with the U.S. Department of Energy (DOE) for the production of high specific activity cobalt in the Advanced Test Reactor (ATR) in Idaho. This agreement will be in effect until October 2024.

Radiochemical Products. Our Radiochemical Products segment includes production and distribution and FDA approved generic sodium iodide I-131 drug product for the treatment of hyperthyroidism and carcinoma of the thyroid. We are the only U.S. Company distributing this generic drug product. This segment also includes distribution of certain other radiochemical products and contract manufacturing of radiopharmaceutical products for our customers.

Fluorine Products. We established the Fluorine Products segment in 2004 to support production and sale of the gases that we expected to produce using our Fluorine Extraction Process (FEP) in conjunction with the operation of the proposed depleted uranium de-conversion facility in Lea County, New Mexico. Near the end of 2013, due to changes in the nuclear industry, we placed further engineering work on this project on hold. We continue to hold discussions with potential future customers seeking this type of service, however, further development activity within this segment will be deferred until market and industry conditions change to justify resuming design and construction of the facility. In the meantime, the Company expects to continue to incur some costs associated with the maintenance of licenses and other necessary project investments, and to continue to keep certain agreements in place that will support resumption of project activities at the appropriate time.

Radiological Services. Our Radiological Services segment consisted of a wide variety of miscellaneous services such as decommissioning disused irradiation units, performing sealed source exchanges in irradiation and therapy units, and gemstone processing. The Company has suspended all of its field service activities and has terminated most gemstone processing. Due to decreased activity in this segment, starting January 1, 2022, this segment was reorganized into our Nuclear Medicine Standards segment.

COVID-19 UPDATE

As a result of the COVID-19 pandemic, we experienced a reduction of sales within our nuclear medicine calibration standards segment and radiochemicals segment during 2021. There was no discernable impact from COVID-19 to our cobalt products business segment during the period. The decrease in sales for 2021 for our nuclear medicine calibration standards segment was the result of the temporary closure of many imaging clinics and suspension of elective or non-essential imaging procedures. During the three months ended March 31, 2022, we experienced some global shipping disruption that were partially attributable to the COVID-19 pandemic. The decrease in sales in our nuclear medicine calibration standards segment for the six months ended June 30, 2022, is partially due to these shipping disruptions.

To-date we have not furloughed or terminated any employees as a result of the financial impact of COVID-19. The Company has only seen a limited impact in our raw material supply chain related to the COVID-19, primarily some plastics which have been in strong demand for certain types of personal protective equipment. Alternative sources of raw materials have been obtained without any interruption to production. However, if we are unable to obtain alternative sources of raw materials in the future or if we experience other disruptions from the COVID-19 pandemic, we may experience an adverse impact on our operations, financial results, and cash flow. The Company has seen an increase in costs for many production supplies due to recent cost inflation which have led to increases to costs of goods sold and operating expenses.

RESULTS OF OPERATIONS

Three Months Ended June 30, 2022 Compared to Three Months Ended June 30, 2021

Revenue for the three months ended June 30, 2022 was \$2,434,808 as compared to \$2,759,896 for the same period in 2021, an overall decrease of \$325,088, or approximately 12%. This decrease in revenue was the result of decreased revenue in our cobalt segment offset by increased revenue in our Radiochemical and Nuclear Medicine Standards segments, as discussed in detail below.

The following table presents a period-to-period comparison of total revenue by segment for the three months ended June 30, 2022 and 2021:

Sale of Product	For the three- months ended June 30, 2022	For the three- months ended June 30, 2021	\$ change	% change
Radiochemical Products	\$ 1,380,039	\$ 1,228,209	\$ 151,830	12%
Cobalt Products	99,146	576,994	(477,848)	-83%
Nuclear Medicine Standards	955,623	954,693	930	0%
Fluorine Products	-	-	-	0%
Total Consolidated	\$ 2,434,808	\$ 2,759,896	\$ (325,088)	-12%

Cost of sales decreased to \$1,034,278 for the three months ended June 30, 2022 from \$1,171,968 for the same period in 2021. This is a decrease of \$137,690, or approximately 12%. The decrease in cost of sales in the three-month comparison was primarily due to the decreased sales activity in our Cobalt segment, as discussed in detail below. Gross profit for the three months ended June 30, 2022 was \$1,400,530, compared to \$1,587,928 for the same period in 2021. This represents a decrease in gross profit of \$187,398, or approximately 12%.

The following table presents cost of sales and gross profit data for each of our business segments for the three months ended June 30, 2022 and 2021:

	For the three- months ended June 30, 2022	% of Total Sales 2022	For the three- months ended June 30, 2021	% of Total Sales 2021
Total Sales	\$ 2,434,808		\$ 2,759,896	
Cost of Sales				
Radiochemical Products	\$ 506,522	50%	\$ 487,126	18%
Cobalt Products	26,014	1%	263,948	10%
Nuclear Medicine Standards	501,742	21%	420,894	14%
Fluorine Products	-	0%	-	0%
Total Segments	<u>1,034,278</u>	<u>72%</u>	<u>1,171,968</u>	<u>42%</u>
Gross Profit	\$ 1,400,530		\$ 1,587,928	
Gross Profit %	58%		58%	

Operating expense increased approximately 11% to \$1,752,639 for the three months ended June 30, 2022, from \$1,573,206 for the same period in 2021. This increase of \$179,433, is primarily due to an approximate 28% increase in Salaries and Contract Labor costs and a 22% increase in Research and Development costs. The increase in Salaries and Contract Labor costs is a result of an increased number of employees and increases to labor rates incurred during the three months ended June 30, 2022, as compared to the same period in 2021. The 22% increase in Research and Development cost is due to increased activity in product development during the three months ended June 30, 2022, as compared to the same period in 2021.

The following table presents a comparison of total operating expense for the three months ended June 30, 2022 and 2021:

	For the three- months ended June 30, 2022	For the three- months ended June 30, 2021	% change	\$ change
<u>Operating Costs and Expenses:</u>				
Salaries and Contract Labor	\$ 801,972	\$ 625,428	28%	\$ 176,544
General, Administrative and Consulting	863,025	875,799	-1%	(12,774)
Research and Development	87,642	71,979	22%	15,663
Total operating expenses	<u>\$ 1,752,639</u>	<u>\$ 1,573,206</u>	11%	<u>\$ 179,433</u>

Other income was \$225,768 for the three months ended June 30, 2022, as compared to \$32,356 for the same period in 2021. This is an increase of \$193,412, or approximately 598%, primarily due to \$200,000 in income from a sublease of our facility. In February 2022, we entered into an Asset Purchase Agreement with Pharmalogic Idaho, LLC, pursuant to which we sold certain assets for \$4.0 million in cash. The Assets consisted primarily of manufacturing equipment and a sublease acquired by the Company in connection with the previously announced termination of the manufacturing and supply agreement with another company. As part of this sublease agreement, we received \$200,000 once relocation and build-out costs were completed.

Interest expense for the three months ended June 30, 2022 was \$146,387, compared to \$211,456 for the same period in 2021. This is a decrease of \$65,069, or approximately 31%. Interest expense includes dividends accrued on our Series C Redeemable Convertible Preferred Stock (Series C Preferred Stock). As discussed below, we issued Series C Preferred Stock in February 2017 and May 2017. For the three months ended June 30, 2022, we accrued dividends payable of \$60,945, which have been recorded as interest expense. Additionally, non-cash interest expense in the amount of \$26,548 for the accretion of the beneficial conversion feature of the 2019 Promissory Note (as defined below) and \$37,518 for the issuance of warrants in conjunction with the 2019 Promissory Note were recorded for the three months ended June 30, 2022. See Note 7 "Debt" to our unaudited consolidated financial statements in this Quarterly Report for additional information about our indebtedness and the associated interest expense.

Our net loss for the three months ended June 30, 2022, was \$272,048, compared to net loss of \$181,387, for the same period in 2021. This is an increase in loss of \$90,661 is largely the result of the decrease in revenue in our Cobalt product segments offset by the increase in revenue in our Radiochemical products segment. The increase in loss is also due to the increase in operating expense from salaries and contract labor and expenses from research and development for the three months ended June 30, 2022, as compared to the same period in 2021, but offset somewhat by the increase in other income.

Radiochemical Products. Revenue from the sale of Radiochemical Products for the three months ended June 30, 2022 was \$1,380,039, compared to \$1,228,209 for the same period in 2021. This is an increase of \$151,830, or approximately 12% during the three months ended June 30, 2022. The increase is the result of increased sales of our generic sodium iodide I-131 drug product. We expect continued sales growth for our Radiochemical products going forward.

Cost of sales for Radiochemical Products increased to \$506,522 for the three months ended June 30, 2022, as compared to \$487,126 for the same period in 2021. This is an increase of \$19,396, or approximately 4%, and was primarily the result of increased sales of product. Gross profit of radiochemical products for the three months ended June 30, 2022 was \$873,517, compared to \$741,083, for the same period in 2021, and gross profit percentages were approximately 63% and 60% for the three months ended June 30, 2022 and 2021, respectively. This increased gross profit percentage is a result of increased sales of our new generic sodium iodine I-131 drug product, which carries a higher gross margin, and continued improvements of utilization of raw materials. Operating expense for this segment increased to \$367,887 for the three months ended June 30, 2022, compared to \$336,627 for the same period in 2021. This increase in operating expense of \$31,260, or approximately 9%, was primarily due to increased costs for labor costs, production supplies, and advertising expense. This segment reported net income of \$505,630 for the three months ended June 30, 2022, as compared to net income of \$404,457 for the same period in 2021. The increase in net income of \$101,173 is the result of the increase in revenue.

Cobalt Products. Revenue from the sale of Cobalt Products for the three months ended June 30, 2022 was \$99,146, compared to \$576,994, for the same period in 2021. This represents a decrease of \$477,848, or approximately 83%. The decrease was primarily due to the timing of cobalt sealed source manufacturing sales. Large value sales of high activity cobalt sources occur at somewhat random times throughout the year. Frequently the timing of these sales can have a significant impact on period comparisons.

In October 2014, we entered into a ten-year agreement with the DOE for the irradiation of cobalt targets. It takes many years to irradiate these cobalt targets to the desired level of activity and we anticipated having high specific activity cobalt available for our customers in 2020. However, the material had lower than expected activity and further receipt of material was delayed until about June 2021. At that point the material still had lower than expected activity, and we reached an agreement with the DOE to purchase the material at a discounted rate. Periodically we have been able to acquire recycled material that can be used to manufacture sealed sources for customers, and in some instances, our customers have supplied their own cobalt material for source fabrication. We also have access to additional low specific activity material produced by the DOE and expect to obtain, process, and sell additional cobalt products as a result during the remainder of 2022.

We have entered into cobalt purchase agreements with several customers. Pursuant to these contracts, we will supply some bulk cobalt-60 and provide sealed source manufacturing for the customers. The terms of these cobalt contracts require some advance progress payments from each customer. The funding received under these contracts has been recorded as unearned revenue under short- and long-term liabilities in our consolidated financial statements. For the three months ended June 30, 2022 and 2021, we recognized approximately \$16,311 and \$150,090, respectively when we fulfilled contract performance objectives by supplying sealed sources manufactured with cobalt from the ATR or alternate suppliers.

Cost of sales for the three months ended June 30, 2022, was \$26,014, as compared to \$263,948, for the same period in 2021. Gross profit for cobalt products for the three months ended June 30, 2022, was \$73,132 compared to \$313,046 for the same period in 2021. This is a decrease of \$239,914, or approximately 77% and is attributable to a decrease in source manufacturing for the three months ended June 30, 2022, as compared to the same period in 2021. Our gross profit percentages were approximately 74% and 54% for the three-month periods ended June 30, 2022 and 2021, respectively. The increase in the gross profit percentage for the three months ended June 30, 2022 is primarily due to decreased costs of raw material used in the manufacture of sealed sources. Operating expense in this segment increased to \$115,464 for the three months ended June 30, 2022, from \$104,465 for the same period in 2021. This is an increase of \$10,999, or approximately 11%. This increase in operating expenses for the three months ended June 30, 2022 is due to increased equipment expenses and labor expenses. Our net loss for Cobalt Products was \$42,332 for the three months ended June 30, 2022, as compared to a net income of \$208,581 for the same period in 2021. The decrease in income of \$250,913, or approximately 120%, was attributable to the decrease in revenue from cobalt sealed source manufacturing.

Nuclear Medicine Standards. Revenue from Nuclear Medicine Standards for the three months ended June 30, 2022, was \$955,623, compared to \$954,693 for the same period in 2021. This represents an increase in revenue of \$930, or less than 1%.

Cost of sales for our Nuclear Medicine Standards segment for the three months ended June 30, 2022, was \$501,742, as compared to \$420,894 for the same period in 2021. The increase in cost of sales in the period-to-period comparison of \$80,848, or 19%, was due to increased costs for supplies and raw materials during the three-month period ended June 30, 2022, as compared to the same period in 2021. Gross profit for our nuclear medicine standards segment for the three months ended June 30, 2022 was \$453,881 compared to \$533,799 for the same period in 2021, and gross profit percentages were approximately 47% and 56% for the three months ended June 30, 2022 and 2021, respectively. This is a decrease in gross profit of \$79,918, or approximately 15%. The decrease in gross profit in the period-to-period comparison is primarily the result of increased costs for supplies and raw materials attributable to cost inflation. We expect these increased costs to continue going forward.

Operating expense for this segment for the three months ended June 30, 2022 increased to \$480,025, from \$423,714 for the same period in 2021. This is an increase of 56,311, or approximately 13%, and is the result of increased research and development costs in the three months ended June 30, 2022. Operating expenses includes non-controlling member interest expense attributable to RadQual and TI Services of \$0 for the three months ended June 30, 2022 compared with \$17,055 for the three months ended June 30, 2021. In July 2021, we purchased the remaining 75.5% interest in RadQual; this resulted in RadQual and TI Services becoming our fully owned subsidiaries. Net loss for this segment for the three months ended June 30, 2022 was \$26,144, compared to net income \$110,085 for the same period in 2021. This decrease in net income of \$136,229, or approximately 123% and is primarily the result of increased cost of sales and increased operating expenses.

Radiological Services. Starting in 2022, due to drastically decreased activity in the segment, all remaining activities in our Radiological Services is reported in our Nuclear Medicine Standards segment.

In January 2020, we notified our gemstone processing customer that the service contract with them was being terminated because the volume of gemstones sent for processing did not meet contract minimums. The termination activities and wrap up of this service substantially occurred in 2021 and the Company saw a steady decline in revenue from this service as production was wrapped up. In the first half of 2022, we converted the spaces in the facility that were previously used to perform this contract work into expanded Nuclear Medicine new product manufacturing. The loss in revenue expected from termination of the gemstone processing agreement is expected to be more than compensated for by the expansion of new nuclear medicine source products.

Revenue from field service work for the DOE had accounted for the majority of revenue in this segment. However, Radiological Field Services work was terminated in 2020 and we did not generate any Radiological Field Services revenue in 2021 or 2022. We have removed this type of activity from our NRC license and do not expect to perform this in future years.

Fluorine Products. For the three months ended June 30, 2022 and June 30, 2021, we had no revenue for our Fluorine Products segment. During the three months ended June 30, 2022, we incurred \$42,343 of expense related to items in support of future planning and design for the proposed de-conversion facility, as compared to \$31,627 for the same three-month period in 2021. This is an increase of 34% in the period-to-period comparison and is the result of increased professional services costs related to exploring options for possible renewal of work on this project.

We established the Fluorine Products segment in 2004 to support production and sale of the gases produced using our FEP. The project has been placed on hold since 2013 and we will continue to limit our expenditures to essential items such as maintenance of the NRC license, land use agreements, communication with our prospective FEP product customers, and interface with the State of New Mexico and Lea County officials until such time that we decide to resume the project.

Six Months Ended June 30, 2022 Compared to Six Months Ended June 30, 2021

Revenue for the six-month period ended June 30, 2022 was \$5,242,249, as compared to \$4,752,408 for the same period in 2021, an increase of \$489,841, or approximately 10%. The performance of all our business segments for the six-month period is discussed in further detail below.

The following table presents a period-to-period comparison of total revenue by segment for the six months ended June 30, 2022 and June 30, 2021:

	For the six- months ended June 30, 2022	For the six- months ended June 30, 2021	\$ change	% change
Sale of Product				
Radiochemical Products	\$ 3,005,962	\$ 1,889,386	\$ 1,116,576	59%
Cobalt Products	271,052	695,367	(424,315)	-61%
Nuclear Medicine Standards	1,965,235	2,145,642	(180,407)	-8%
Fluorine Products	-	22,013	(22,013)	-100%
Total Consolidated	<u>\$ 5,242,249</u>	<u>\$ 4,752,408</u>	<u>\$ 489,841</u>	<u>10%</u>

Gross profit for the six-month period ended June 30, 2022 was \$3,077,273, compared to \$2,749,086, for the same period in 2021. This represents an increase of \$328,187 or approximately 12%.

The following table presents cost of sales and gross profit data for each of our business segments for the six months ended June 30, 2022 and 2021:

	For the six- months ended June 30, 2022	% of Total Sales 2022	For the six- months ended June 30, 2021	% of Total Sales 2021
Total Sales	\$ 5,242,249		\$ 4,752,408	
Cost of Sales				
Radiochemical Products	\$ 1,068,887	20%	\$ 792,609	17%
Cobalt Products	82,525	2%	307,201	6%
Nuclear Medicine Standards	1,013,564	19%	903,512	19%
Fluorine Products	-	0%	-	0%
Total Segments	2,164,976	41%	2,003,322	42%
Gross Profit	\$ 3,077,273		\$ 2,749,086	
Gross Profit %	59%		58%	

Operating expenses were \$3,805,425 for the six-month period ended June 30, 2022, compared to \$3,184,892 for the same period in 2021. This represents an increase of \$620,533, or approximately 19%. This increase is primarily due to an approximate 34% increase in Salaries and Contract Labor costs and a 169% increase in Research and Development costs. The increase in Salaries and Contract Labor costs is a result of increased equity-based compensation and increases to labor rates incurred during the six months ended June 30, 2022, as compared to the same period in 2021. The increase in Research and Development cost is due to increased activity in product development during the six months ended June 30, 2022, as compared to the same period in 2021.

The following table shows total operating expenses for the six-month period ended June 30, 2022 and 2021:

<u>Operating Costs and Expenses:</u>	For the six- months ended June 30, 2022	For the six- months ended June 30, 2021	% change	\$ change
Salaries and Contract Labor	\$ 1,735,221	\$ 1,293,948	34%	\$ 441,273
General, Administrative and Consulting	1,776,148	1,781,728	0%	(5,580)
Research and Development	294,056	109,216	169%	184,840
Total operating expenses	\$ 3,805,425	\$ 3,184,892	19%	\$ 620,533

Other income was \$2,028,568 for the six months ended June 30, 2022, as compared to \$175,476 for the same period in 2021. This is an increase of \$1,853,092, or approximately 1056%, primarily due to a \$1,797,978 gain on sale of assets to Pharmedica Idaho, LLC. In February 2022, we entered into an Asset Purchase Agreement with Pharmedica Idaho, LLC, pursuant to which we sold certain assets for \$4.0 million in cash. The Assets consisted primarily of manufacturing equipment and a sublease acquired by the Company in connection with the previously announced termination of the manufacturing and supply agreement with another company.

Interest expense for the six months ended June 30, 2022 was \$318,144, compared to \$409,747 for the same period in 2021. This is a decrease of \$91,603, or approximately 22%. Interest expense includes dividends accrued on our Series C Preferred Stock. For the six months ended June 30, 2022, we accrued dividends payable of \$121,890 which have been recorded as interest expense. Additionally, non-cash interest expense in the amount of \$53,096 for the accretion of the beneficial conversion feature of the 2019 Promissory Note and \$75,037 for the issuance of warrants in conjunction with the 2019 Promissory Note were recorded for the six months ended June 30, 2022. See Note 7 "Debt" to our unaudited consolidated financial statements in this Quarterly Report for additional information about our indebtedness and the associated interest expense.

Our net income for the six months ended June 30, 2022, was \$982,997, compared to net loss of \$782,539, for the same period in 2021. This is an increase in income of \$1,765,536 is largely the result of the approximate \$1.8 million gain on sale of assets. Additionally the increase in income is the result of the increase in revenue in our Radiochemical Products segment offset by the increase in operating expense from salaries and contract labor and expenses from research and development for the six months ended June 30, 2022, as compared to the same period in 2021.

Radiochemical Products. Revenue from the sale of Radiochemical Products for the six-month period ended June 30, 2022, was \$3,005,962 compared to \$1,889,386 for the same period in 2021. This is an increase of \$1,116,576, or approximately 59%. The increase is the result of increased sales to most of our customers and further enhanced by a reduction in sales by our competitor in the first quarter of 2022. The reduction in sales by our competitor resulted from a short-term shutdown of a European reactor facility that normally

supplied their sodium iodide I-131 during the first quarter of 2022. The increase is also the result of increased sales of our new generic sodium iodide I-131 drug product. We expect continued sales growth for our Radiochemical Products going forward.

Cost of sales was \$1,068,887 for the six-month period ended June 30, 2022, and \$792,609 for the same period in 2021. This is an increase of \$276,278, or approximately 35%. This increase is primarily the result increased sales for the period.

Gross profit percentages for our Radiochemical Products for the six months ended June 30, 2022 and 2021 were approximately 64% and 58%, respectively. This increased gross profit percentage is a result of increased sales of our new generic sodium iodine I-131 drug product, which carries a higher gross margin, and continued improvements of utilization of raw materials. Operating expense for this segment for the six-month period ended June 30, 2022 was \$758,760, compared to \$687,895 for the same period in 2021. This is an increase of \$70,865, or approximately 10%, and is primarily due to increased costs for labor costs, production supplies, advertising expense, and professional services. As discussed above, other income from the Radiochemical Products segment included a \$1,797,978 gain on sale of manufacturing equipment and a sublease acquired by the Company in connection with the previously announced termination of the manufacturing and supply agreement with another company. Net income for this segment increased to \$2,976,293 for the six-month period ended June 30, 2022, from \$408,882 for the same period in 2021. This increase of \$2,567,411, or approximately 628%, is the result of the gain on sale of assets and the 59% increase in revenue

Cobalt Products. Revenues from the sale of Cobalt Products for the six-month period ended June 30, 2022 were \$271,052, compared to \$695,367 for the same period in 2021. This is a decrease of \$424,315, or approximately 61%, and is the result of decreased cobalt sealed source manufacturing and cobalt recycling. The decrease was primarily due to the timing of cobalt sealed source manufacturing sales. Large value sales of high activity cobalt sources occur at somewhat random times throughout the year. Frequently the timing of these sales can have a significant impact on period comparisons.

During 2015, we entered into cobalt-60 supply agreements with several customers. The terms of the agreements required pre-payments to secure cobalt material in future years. Those prepayments were recorded as unearned revenue on our condensed consolidated balance sheet.

Cost of sales for the six months ended June 30, 2022, was \$82,525, as compared to \$307,201, for the same period in 2021. Gross profit for cobalt products for the six months ended June 30, 2022 was \$188,527 compared to \$388,166 for the same period in 2021. This is a decrease of \$199,639, or 51%. Our gross profit percentages were approximately 70% and 56% for the six-month periods ended June 30, 2022 and 2021, respectively. Operating expense in this segment increased to \$243,934 for the six months ended June 30, 2022, from \$209,683 for the same period in 2021. This is an increase of \$34,251, or approximately 16% is a result of increased labor expenses and production supply costs in the six months ended June 30, 2022 as compared to the same period in 2021. Our net loss for Cobalt Products was \$55,407 for the six months ended June 30, 2022, as compared to a net income of \$178,484 for the same period in 2021. The decrease in net income of \$233,891 or approximately 131%, was attributable to the decreased cobalt sealed source manufacturing sales for the six months ended June 30, 2022, as compared to the same period in 2021.

Nuclear Medicine Standards. Revenue from Nuclear Medicine Standards for the six-month period ended June 30, 2022 was \$1,965,235 compared to \$2,145,642 for the same period in 2021. This represents a decrease in revenue attributable to this segment of \$180,407, or approximately 8%. The decrease in sales for the period ended June 30, 2022 was due to continued slow demand of nuclear medicine imaging products resulting from the continued adverse impact of COVID-19 upon our customers and clinics during the six months ended June 30, 2022.

Gross profit for the six-month period ended June 30, 2022 was \$951,671, as compared to \$1,242,130 for the same period in 2021, a decrease of \$290,459, or approximately 23%. Operating expense for this segment for the six-month period ended June 30, 2022 increased to \$940,099, from \$868,727 for the same period in 2021. This is an increase of \$71,372 or approximately 8% and is the result of increased research and development costs in the six months ended June 30, 2022. Operating expenses include consolidated non-controlling member interest expense of \$0 for the six months ended June 30, 2022, compared to \$112,541, for the six months ended June 30, 2021. Net income for this segment for the six-month period ended June 30, 2022, decreased to \$11,572, approximately 97%, from \$373,403 for the same six-month period in 2021. This decrease is due to decreased sales.

Radiological Services. Starting in 2022, due to drastically decreased activity in the segment, all remaining activities in our Radiological Services is reported in our Nuclear Medicine Standards segment.

In January 2020, we notified our gemstone processing customer that the service contract with them was being terminated because the volume of gemstones sent for processing did not meet contract minimums. The termination activities and wrap up of this service substantially occurred in 2021 and the Company saw a steady decline in revenue from this service as production was wrapped up. In the first half of 2022, we have converted the spaces in the facility that had been used to perform this contract work into expanded Nuclear Medicine new product manufacturing. The loss in revenue expected from termination of the gemstone processing agreement is expected to be more than compensated for by the expansion of new nuclear medicine source products.

Revenue from field service work for the DOE had accounted for the majority of revenue in this segment. However, Radiological Field Services did not generate any Radiological Services segment sales in 2022 or 2021. This was the result the removal of this activity from our NRC license.

Fluorine Products. For the six months ended June 30, 2022, we had no revenue related to Fluorine Products compared to \$22,013, for the same period in 2021. These revenues were related to an agreement to provide engineering and technical assistance services related to our fluorine products intellectual property. During the six months ended June 30, 2022, we incurred \$74,173 of expense related to items in support of future planning and design for the proposed de-conversion facility, as compared to \$87,153 for the same six-month period in 2021. This is a decrease of 13% in the period-to-period comparison.

We established the Fluorine Products segment in 2004 to support production and sale of the gases produced using our Fluorine Extraction Process (“FEP”). We will continue to limit our expenditures to essential items such as maintenance of the NRC license, land use agreements, communication with our prospective FEP product customers, and interface with the State of New Mexico and Lea County officials.

LIQUIDITY AND CAPITAL RESOURCES

At June 30, 2022, we had cash and cash equivalents of \$3,025,513 as compared to \$474,851 at December 31, 2021. This is an increase of \$2,550,662 or approximately 537%. For the six months ended June 30, 2022, net cash used in operating activities was \$951,052 and for the six months ended June 30, 2021, net cash used in operating activities was \$238,773. The increase in cash used in operating activities was a result of increased accounts receivable due to increased revenue and a reduction in accounts payable and accrued liabilities. The increase in cash and cash equivalents at period end in the period-to-period comparison is the result of increased net income.

Inventories at June 30, 2022 totaled \$943,645, and inventories at December 31, 2021 totaled \$924,775. Our inventory consists of work in process material for our Radiochemical Products, Cobalt Products, and Nuclear Medicine Products segments.

Cash provided by investing activities was \$3,944,800 for the six months ended June 30, 2022, and cash used in investing activities was \$191,666 for the same period in 2021. The cash provided in the six months ended June 30, 2022 was for the sale of assets for \$4,000,000. In February 2022, we entered into an Asset Purchase Agreement with Pharmalogic Idaho, LLC, pursuant to which we sold certain assets for \$4,000,000 in cash. The Assets consisted primarily of manufacturing equipment and a sublease acquired by the Company in connection with the previously announced termination of the manufacturing and supply agreement with another company. The cash used in the six months ended June 30, 2021 was for purchase of equipment.

Financing activities used cash of \$442,456, during the six months ended June 30, 2022, and cash provided by financing activities for the same period in 2021 was \$26,978. During the six months ended June 30, 2022, cash paid for interest was \$46,894 and during the same six-month period in 2021, cash paid for interest was \$61,320. Additionally, during the six months ended June 30, 2022, we received \$9,173 in proceeds from the sale of our common stock through our Employee Stock Purchase Plan and \$61,800 for exercise of warrants, as compared to \$8,995 in proceeds from the sale of our common stock through our Employee Stock Purchase Plan for the same period in 2021. During the six months ended June 30, 2022, principal payments on notes payable was \$509,257, as compared to \$329,464 for the same period in 2021. This increase in principal payments was largely due to payment in full of the 2021 Promissory Note as described below.

In February 2022, the Company paid its third annual dividend on the Series C Preferred Stock. Dividends payable totaled \$243,780. Some holders of the Series C Preferred Stock elected to settle their dividend payments with shares of the Company’s common stock in lieu of cash. The Company issued 2,271,980 shares of common stock in lieu of a dividend payment of \$204,480. The remaining \$39,300 of dividend payable was settled with cash.

Total increase in cash for the six-month period ended June 30, 2022, was \$2,551,292 compared to a cash decrease of \$403,461 for the same period in 2021.

We expect that cash from operations, cash raised via equity financing, and our current cash balance will be sufficient to fund operations for the next twelve months. Our future liquidity and capital funding requirements will depend on numerous factors, including, contract manufacturing agreements, commercial relationships, technological developments, market factors, available credit, and voluntary warrant redemption by shareholders. There is no assurance that additional capital and financing will be available on acceptable terms to the Company or at all.

At June 30, 2022, there were no outstanding warrants to purchase our common stock.

Debt

In December 2013, we entered into a promissory note agreement with our then Chairman of the Board and one of our major shareholders, pursuant to which we borrowed \$500,000 (the 2013 Promissory Note). The 2013 Promissory Note is secured and bears interest at 6% per annum and was originally due June 30, 2014. According to the terms of the 2013 Promissory Note, at any time, the lenders may settle any or all of the principal and accrued interest with shares of our common stock. In June 2014, pursuant to a modification, the maturity date was extended to December 31, 2017. In February 2017, the 2013 Promissory Note was further modified to extend the maturity date to December 31, 2020, with all remaining terms unchanged. In December 2019, the 2013 Promissory Note was further modified to extend the maturity date to December 31, 2021, with all remaining terms unchanged. In January 2022, the 2013 Promissory Note was modified to extend the maturity date to December 31, 2023, with all remaining terms unchanged. At June 30, 2022, accrued interest payable on the 2013 Promissory Note totaled \$256,734.

In April 2018, we borrowed \$120,000 from our Chief Executive Officer and Chairman of the Board pursuant to a promissory note (the 2018 Promissory Note). The 2018 Promissory Note accrues interest at 6% per annum, which is payable upon maturity of the 2018 Promissory Note. The 2018 Promissory Note was originally unsecured and originally matured on August 1, 2018. At any time, the holder of the 2018 Promissory Note may elect to have any or all of the principal and accrued interest settled with shares of our common stock based on the average price of the shares over the previous 20 trading days. Pursuant to an amendment to the 2018 Promissory Note in June 2018, the maturity date was extended to March 31, 2019 with all other provisions remaining unchanged. Pursuant to a second amendment to the 2018 Promissory Note in February 2019, the maturity date was extended to July 31, 2019 with all other provisions remaining unchanged. Pursuant to a third amendment to the 2018 Promissory Note in July 2019, the maturity date was extended to January 31, 2020 with all other provisions remaining unchanged. Pursuant to a fourth amendment to the 2018 Promissory Note in December 2019, the maturity date was extended to December 31, 2021, the note was modified to become secured by company assets, with all other provisions remaining unchanged. In December 2021, the 2018 Promissory Note was modified to extend the maturity date to December 31, 2023, with all remaining terms unchanged. At June 30, 2022, accrued interest on the 2018 Promissory Note totaled \$30,170.

In December 2019 and February 2020, we borrowed \$1,000,000 from our Chief Executive Officer, Chairman of the Board, former Chairman of the Board, and one of our major shareholders pursuant to a promissory note (the 2019 Promissory Note). The 2019 Promissory Note bears an interest rate of 4% annually and is due December 31, 2022. According to the terms of the 2019 Promissory Note, at any time, the lenders may settle any or all of the principal and accrued interest with shares of the Company's common stock based on the average closing price of the Company's common stock for the 20 days preceding the payment. At June 30, 2022, the balance of the 2019 Promissory Note was \$1,000,000, The remaining debt discount was \$75,037, the remaining beneficial conversion feature was \$53,096, and the accrued interest on the 2019 Promissory Note totaled \$99,131.

In April 2021, we borrowed \$250,000 from its Chief Executive Officer and Chairman of the Board pursuant to a promissory note (the 2021 Promissory Note). The 2021 Promissory Note accrued interest at 6% per annum, which was payable upon maturity of the 2021 Promissory Note. The 2021 Promissory Note was originally secured and was to mature on December 31, 2022. At any time, the holders of the 2021 Promissory Note were able to elect to have any or all of the principal and accrued interest settled with shares of our common stock at a conversion price of \$0.11 per share. On March 31, 2022, the Company repaid the 2021 Promissory Note in full. The payment included \$250,000 in principal and \$14,500 in interest.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

From time-to-time, management reviews and evaluates certain accounting policies and estimates that are considered to be significant in determining our results of operations and financial position.

A description of the Company's critical accounting policies and estimates that affect the preparation of the Company's financial statements is set forth in the Company's Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on March 31, 2022.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act), that are designed to ensure that material information relating to us is made known to the officers who certify our financial reports and to other members of senior management and the Board of Directors. These disclosure controls and procedures are designed to ensure that information required to be disclosed in our reports that are filed or submitted under the Exchange Act are recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure.

Management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness, as of June 30, 2022, of our disclosure controls and procedures. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of June 30, 2022.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended June 30, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

A discussion of legal matters is found in Note 8, "Commitments and Contingencies", in the accompanying notes to the unaudited condensed consolidated financial statements included in Part I - Item 1. Financial Statements of this Quarterly Report.

ITEM 1A. RISK FACTORS

There have been no material changes or updates to the risk factors previously disclosed in Item 1A. "Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2021.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 6. EXHIBITS

Exhibit No.	Description
3.1	Restated Certificate of Formation, as amended (incorporated by reference to Exhibit 3.1 of the Company's Quarterly Report on Form 10-Q for quarter ended June 30, 2010).
3.2	Statement of Designation of the Series C Convertible Redeemable Preferred Stock of International Isotopes Inc. (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed on February 24, 2017).
3.3	Certificate of Amendment to Statement of Designation of the Series C Convertible Redeemable Preferred Stock International Isotopes Inc., dated February 16, 2022 (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed on February 22, 2022).
3.4	Bylaws (incorporated by reference to Exhibit 3.2 of the Company's Registration Statement on Form SB-2 filed on May 1, 1997 (Registration No. 333-26269)).
31.1*	Certification by the Chief Executive Officer under Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification by the Chief Financial Officer under Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification by the Chief Executive Officer furnished pursuant to 18 U.S.C. Section 1350 adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification by the Chief Financial Officer furnished pursuant to 18 U.S.C. Section 1350 adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL 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 and contained in Exhibit 101).

* Filed herewith.

** Furnished herewith.

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.

Date: August 15, 2022

International Isotopes Inc.

By: /s/ Steve T. Laflin

Steve T. Laflin

President and Chief Executive Officer

By: /s/ W. Matthew Cox

W. Matthew Cox

Chief Financial Officer