

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, 2020

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 14, 2020, the number of shares of common stock, \$0.01 par value, outstanding was 423,855,991.

INTERNATIONAL ISOTOPES INC.
FORM 10-Q
For The Quarter Ended June 30, 2020

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Part I. Financial Information
Item I. Financial Statements

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

Assets	June 30, 2020	December 31, 2019
Current assets		
Cash and cash equivalents	\$ 831,359	\$ 575,422
Accounts receivable	1,301,248	875,914
Inventories	1,298,668	3,423,420
Prepays and other current assets	787,577	1,444,593
Total current assets	<u>4,218,852</u>	<u>6,319,349</u>
Long-term assets		
Restricted cash	638,562	635,498
Property, plant and equipment, net	1,938,332	2,003,887
Financing lease right-of-use asset	27,647	13,302
Operating lease right-of-use asset	2,596,983	709,883
Goodwill	1,384,255	1,384,255
Patents and other intangibles, net	4,108,951	4,190,621
Total long-term assets	<u>10,694,730</u>	<u>8,937,446</u>
Total assets	<u>\$ 14,913,582</u>	<u>\$ 15,256,795</u>
Liabilities and Stockholders' Equity (Deficit)		
Current liabilities		
Accounts payable	\$ 2,195,665	\$ 4,229,128
Accrued liabilities	1,007,884	1,096,090
Unearned revenue	1,375,948	1,240,205
Current portion of operating lease right-of-use liability	83,098	100,777
Current portion of financing lease liability	7,434	2,367
Current installments of notes payable	1,002,260	1,519,496
Total current liabilities	<u>5,672,289</u>	<u>8,188,063</u>
Long-term liabilities		
Obligation for lease disposal costs	566,957	546,570
Related party notes payable, net of debt discount	959,221	1,216,874
Notes payable, net of current portion	7,801	12,276
Financing lease liability, net of current portion	20,871	10,970
Operating lease right-of-use liability, net of current portion	2,528,334	609,106
Mandatorily redeemable convertible preferred stock, net of discount	4,849,254	4,785,086
Total long-term liabilities	<u>8,932,438</u>	<u>7,180,882</u>
Total liabilities	<u>14,604,727</u>	<u>15,368,945</u>
Commitments and contingencies (Note 8)		
Stockholders' (deficit) equity		
Common stock, \$0.01 par value; 750,000,000 shares authorized; 423,794,088 and 419,842,256 shares issued and outstanding respectively	4,237,941	4,198,423
Additional paid in capital	122,171,489	121,680,163
Accumulated deficit	(128,257,551)	(128,064,385)
Deficit attributable to International Isotopes Inc. stockholders	(1,848,121)	(2,185,799)
Equity attributable to noncontrolling interest	2,156,976	2,073,649
Total equity (deficit)	<u>308,855</u>	<u>(112,150)</u>
Total liabilities and stockholders' equity (deficit)	<u>\$ 14,913,582</u>	<u>\$ 15,256,795</u>

See accompanying notes to the unaudited condensed consolidated financial statements.

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

	<u>Three months ended June 30,</u>		<u>Six months ended June 30,</u>	
	<u>2020</u>	<u>2019</u>	<u>2020</u>	<u>2019</u>
Sale of product	\$ 2,159,559	\$ 2,135,839	\$ 4,495,345	\$ 4,663,691
Cost of product	<u>903,909</u>	<u>971,384</u>	<u>1,872,434</u>	<u>2,059,812</u>
Gross profit	1,255,650	1,164,455	2,622,911	2,603,879
Operating costs and expenses				
Salaries and contract labor	736,539	596,045	1,477,744	1,219,744
General, administrative and consulting	573,747	600,580	1,362,185	1,227,443
Research and development	<u>41,465</u>	<u>50,354</u>	<u>88,393</u>	<u>96,658</u>
Total operating expenses	<u>1,351,751</u>	<u>1,246,979</u>	<u>2,928,322</u>	<u>2,543,845</u>
Net operating (loss) income	<u>(96,101)</u>	<u>(82,524)</u>	<u>(305,411)</u>	<u>60,034</u>
Other income (expense):				
Other income	559,895	(867,660)	583,713	(843,028)
Interest income	748	3,611	3,083	7,033
Interest expense	<u>(196,344)</u>	<u>(136,842)</u>	<u>(391,224)</u>	<u>(250,919)</u>
Total other income (expense)	<u>364,299</u>	<u>(1,000,891)</u>	<u>195,572</u>	<u>(1,086,914)</u>
Net (loss) income	268,198	(1,083,415)	(109,839)	(1,026,880)
Less income attributable to noncontrolling interest	<u>38,870</u>	<u>73,779</u>	<u>83,327</u>	<u>182,271</u>
Net income (loss) attributable to International Isotopes Inc.	<u>\$ 229,328</u>	<u>\$ (1,157,194)</u>	<u>\$ (193,166)</u>	<u>\$ (1,209,151)</u>
Net income (loss) per common share - basic:	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>
Net income (loss) per common share - diluted:	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>
Weighted average common shares outstanding - basic:	<u>423,751,657</u>	<u>419,230,535</u>	<u>422,211,840</u>	<u>416,568,617</u>
Weighted average common shares outstanding - diluted:	<u>432,629,537</u>	<u>419,230,535</u>	<u>422,211,840</u>	<u>416,568,617</u>

See accompanying notes to the unaudited condensed consolidated financial statements.

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

	Six months ended June 30,	
	2020	2019
Cash flows from operating activities		
Net loss	\$ (109,839)	\$ (1,026,880)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities		
Depreciation and amortization	150,969	130,445
Accretion of obligation for lease disposal costs	20,387	18,947
Accretion of beneficial conversion feature and discount	191,933	77,578
Equity based compensation	68,531	92,540
Gain on sale of property, plant and equipment	—	(1,700)
Right-of-use asset amortization	14,448	—
Forgiveness of Paycheck Protection Program Loan	(495,500)	
Changes in operating assets and liabilities:		
Accounts receivable	(425,334)	(582,523)
Inventories	992,742	(454,212)
Prepays and other current assets	657,016	4,422
Accounts payable and accrued liabilities	(785,178)	1,666,419
Unearned revenues	135,743	(39,941)
Net cash provided by (used in) operating activities	<u>415,918</u>	<u>(114,905)</u>
Cash flows from investing activities:		
Proceeds from sale of property, plant and equipment	—	1,700
Purchase of property, plant and equipment	(1,565)	(24,877)
Net cash used in investing activities	<u>(1,565)</u>	<u>(23,177)</u>
Cash flows from financing activities:		
Proceeds from sale of stock and exercise of options	10,273	87,438
Payments on financing lease	(1,556)	—
Distributions to non-controlling interest	—	(6,200)
Proceeds from issuance of notes payable	871,100	—
Principal payments on notes payable	(1,035,169)	(320,867)
Net cash used in financing activities	<u>(155,352)</u>	<u>(239,629)</u>
Net increase (decrease) in cash, cash equivalents, and restricted cash	259,001	(377,711)
Cash, cash equivalents, and restricted cash at beginning of period	1,210,920	1,450,467
Cash, cash equivalents, and restricted cash at end of period	<u>\$ 1,469,921</u>	<u>\$ 1,072,756</u>
Supplemental disclosure of cash flow activities:		
Cash paid for interest	<u>\$ 65,536</u>	<u>\$ 86,388</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>\$ 205,980</u>
Increase in operating lease right-of-use asset and right-of-use liability for new lease	<u>\$ 2,649,070</u>	<u>\$ —</u>
Decrease in operating lease right-of-use asset and right-of-use liability for disposal of old lease	<u>\$ 697,009</u>	<u>\$ —</u>
Increase in financing lease right-of-use asset and right-of-use liability for new lease	<u>\$ 16,524</u>	<u>\$ —</u>
Decrease in inventory and decrease in accounts payable for cancellation of DOE contract	<u>\$ 1,132,010</u>	<u>\$ —</u>
Decrease in related party notes payable and increase in equity for amounts allocated to warrants and beneficial conversion feature	<u>\$ 247,560</u>	<u>\$ —</u>
Decrease in unearned revenue and increase in notes payable for repayment plan	<u>\$ —</u>	<u>\$ 2,182,142</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, 2020	June 30, 2019
Cash and cash equivalents	\$ 831,359	\$ 443,310
Restricted cash included in long-term assets	638,562	629,446
Total cash, cash equivalents, and restricted cash shown in statement of cash flows	<u>\$ 1,469,921</u>	<u>\$ 1,072,756</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, 2020
(Unaudited)

	<u>Common stock</u>			Additional Paid-in Capital	Accumulated Deficit	Deficit	Equity	Total (Deficit) Equity
	Shares	Common	Isotopes			Attributable	Attributable	
	Outstanding	Stock				Shareholders	to Internat'l Shareholders	
Balance, January 1, 2020	419,842,256	\$ 4,198,423	\$ 121,680,163	\$ (128,064,385)	\$ (2,185,799)	\$ 2,073,649	\$ (112,150)	
Shares issued under employee stock purchase plan	241,707	2,417	7,856	—	10,273	—	10,273	
Stock grant	302,125	3,021	(3,021)	—	—	—	—	
Stock in lieu of dividends on convertible preferred C	3,408,000	34,080	170,400	—	204,480	—	204,480	
Convertible debentures beneficial conversion feature	—	—	102,584	—	102,584	—	102,584	
Warrants issued with convertible debentures	—	—	144,976	—	144,976	—	144,976	
Stock based compensation	—	—	68,531	—	68,531	—	68,531	
Net (loss) income	—	—	—	(193,166)	(193,166)	83,327	(109,839)	
Balance, June 30, 2020	<u>423,794,088</u>	<u>\$ 4,237,941</u>	<u>\$ 122,171,489</u>	<u>\$ (128,257,551)</u>	<u>\$ (1,848,121)</u>	<u>\$ 2,156,976</u>	<u>\$ 308,855</u>	

	<u>Common stock</u>			Additional Paid-in Capital	Accumulated Deficit	Deficit	Equity	Total (Deficit) Equity
	Shares	Common	Isotopes			Attributable	Attributable	
	Outstanding	Stock				Shareholders	to Internat'l Shareholders	
Balance, April 1, 2020	423,709,226	\$ 4,237,092	\$ 122,151,722	\$ (128,486,879)	\$ (2,098,065)	\$ 2,118,106	\$ 20,041	
Shares issued under employee stock purchase plan	84,862	849	2,758	—	3,607	—	3,607	
Stock based compensation	—	—	17,009	—	17,009	—	17,009	
Net (loss) income	—	—	—	229,328	229,328	38,870	268,198	
Balance, June 30, 2020	<u>423,794,088</u>	<u>\$ 4,237,941</u>	<u>\$ 122,171,489</u>	<u>\$ (128,257,551)</u>	<u>\$ (1,848,121)</u>	<u>\$ 2,156,976</u>	<u>\$ 308,855</u>	

INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES
Reconciliation of Stockholders' (Deficit) Equity
Three and Six Months Ended June 30, 2019
(Unaudited)

	<u>Common stock</u>			Additional Paid-in Capital	Accumulated Deficit	Deficit	Equity	Total (Deficit) Equity
	Shares	Common	Isotopes			Attributable	Attributable	
	Outstanding	Stock				Shareholders	to Internat'l Shareholders	
Balance, January 1, 2019	413,168,301	\$ 4,131,683	\$ 120,805,997	\$ (126,541,421)	\$ (1,603,741)	\$ 1,757,875	\$ 154,134	
Shares issued under employee stock purchase plan	68,037	680	2,758	—	3,438	—	3,438	
Stock grant	279,767	2,798	(2,798)	—	—	—	—	
Stock in lieu of dividends on convertible preferred C	3,433,000	34,330	171,650	—	205,980	—	205,980	
Shares issued for exercise of employee stock options	2,825,000	28,250	55,750	—	84,000	—	84,000	
Distribution to non-controlling interest	—	—	—	—	—	(6,200)	(6,200)	
Stock based compensation	—	—	92,540	—	92,540	—	92,540	
Net (loss) income	—	—	—	(1,209,151)	(1,209,151)	182,271	(1,026,880)	
Balance, June 30, 2019	<u>419,774,105</u>	<u>\$ 4,197,741</u>	<u>\$ 121,125,897</u>	<u>\$ (127,750,572)</u>	<u>\$ (2,426,934)</u>	<u>\$ 1,933,946</u>	<u>\$ (492,988)</u>	

	<u>Common stock</u>			Additional Paid-in Capital	Accumulated Deficit	Deficit	Equity	Total (Deficit) Equity
	Shares	Common	Isotopes			Attributable	Attributable	
	Outstanding	Stock				Shareholders	to Internat'l Shareholders	
Balance, April 1, 2019	416,912,686	\$ 4,169,127	\$ 121,039,851	\$ (126,593,378)	\$ (1,384,400)	\$ 1,866,367	\$ 481,966	
Shares issued under employee stock purchase plan	36,419	364	1,493	—	1,857	—	1,857	
Shares issued for exercise of employee stock options	2,825,000	28,250	55,750	—	84,000	—	84,000	
Distribution to non-controlling interest	—	—	—	—	—	(6,200)	(6,200)	
Stock based compensation	—	—	28,803	—	28,803	—	28,803	
Net (loss) income	—	—	—	(1,157,194)	(1,157,194)	73,779	(1,083,415)	
Balance, June 30, 2019	<u>419,774,105</u>	<u>\$ 4,197,741</u>	<u>\$ 121,125,897</u>	<u>\$ (127,750,572)</u>	<u>\$ (2,426,934)</u>	<u>\$ 1,933,946</u>	<u>\$ (492,989)</u>	

See accompanying notes to the unaudited condensed consolidated financial statements

INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES
Notes to Unaudited Condensed Consolidated Financial Statements
For the Quarter Ended June 30, 2020

(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. The unaudited condensed consolidated financial statements also include the accounts of INIS's 50% owned joint venture, TI Services, LLC (TI Services), and the accounts of INIS's 24.5% interest in RadQual, LLC (RadQual). 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. As a result of this ownership change, INIS has significant influence in management decisions with regard to RadQual's business operations. INIS, its wholly owned subsidiaries, TI Services, and RadQual are collectively referred to herein as the "Company," "we," "our" or "us."

Nature of Operations – INIS and its subsidiaries, TI Services and RadQual, manufacture 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. The Company also offers contract manufacturing services for certain pharmaceutical products. The Company's business consists of five business segments: Nuclear Medicine Standards, Cobalt Products, Radiochemical Products, Fluorine Products, and Radiological Services. 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. The Company also consolidates the accounts of RadQual into the accompanying unaudited condensed consolidated financial statements. See Note 4 "Investment and Business Consolidation" for additional information regarding RadQual. 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, 2020 are not necessarily indicative of the results that may be expected for the year ending December 31, 2020 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, 2019 filed with the SEC on March 30, 2020.

(2) Current Developments and Liquidity

Business Condition – Since inception, the Company has incurred substantial losses. During the six-months ended June 30, 2020, the Company reported a net loss of \$193,166, net of non-controlling interest, and net cash provided by operating activities of \$415,918. During the six-months ended June 30, 2019, the Company reported net loss of \$1,209,151, net of non-controlling interest, and net cash used in operating activities of \$114,905.

During the six-months ended June 30, 2020, the Company continued its focus on its long-standing core business segments which consist of its radiochemical products, cobalt products, nuclear medicine standards, and radiological services, and in particular, the pursuit of new business opportunities within those segments. During this period the Company received approval from the U.S. Food and Drug Administration (FDA) for a generic sodium iodide I-131 drug product. This product is approved for use in treatment of hyperthyroidism and carcinoma of the thyroid and is the first generic sodium iodide I-131 product approved by the FDA in the US.

Additionally, the Company holds a Nuclear Regulatory Commission (NRC) construction and operating license for the depleted uranium facility in, as well as the 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.

The Company expects that cash from operations, cash raised through equity or debt financing and its current cash balance will be sufficient to fund operations for the next twelve months. 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.

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

For the six-months ended June 30, 2020, the Company had 24,605,000 stock options outstanding, 50,090,000 warrants outstanding, 4,213 outstanding shares of Series C redeemable convertible preferred stock (Series C Preferred Stock), and 850 outstanding shares of Series B redeemable convertible preferred stock (Series B 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 months ended June 30, 2020, the Company had 14,005,000 stock options outstanding, 20,090,000 warrants outstanding, 4,213 outstanding shares of Series C redeemable convertible preferred stock, and 850 outstanding shares of Series B redeemable convertible 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, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Weighted average common shares outstanding - basic	423,751,657	419,230,535	422,211,840	416,568,617
Effects of dilutive shares				
Stock Options	3,177,880	—	—	—
Warrants	5,700,000	—	—	—
Series B redeemable convertible preferred stock	—	—	—	—
Series C redeemable convertible preferred stock	—	—	—	—
Weighted average common shares outstanding - diluted	432,629,537	419,230,535	422,211,840	416,568,617

For the six-months ended June 30, 2019, the Company had 23,488,000 stock options outstanding, 20,090,000 warrants outstanding, 4,213 outstanding shares of Series C Preferred Stock, and 850 outstanding shares of Series B Preferred Stock, each of which were not included in the computation of diluted income per common share because they would be anti-dilutive.

The table below summarizes common stock equivalents outstanding at June 30, 2020 and 2019:

	June 30,	
	2020	2019
Stock options	24,605,000	23,488,000
Warrants	50,090,000	20,090,000
850 Shares of Series B redeemable convertible preferred stock	425,000	425,000
4,213 Shares of Series C redeemable convertible preferred stock	42,130,000	42,130,000
	<u>117,250,000</u>	<u>86,133,000</u>

(4) Investment and Business Consolidation

The Company owns a 24.5% interest in RadQual, with which the Company has an exclusive manufacturing agreement for nuclear medicine products. In August 2017, affiliates of the Company, including the Company's Chairman of the Board and the Chief Executive Officer, acquired the remaining 75.5% interest in RadQual. The Company's Chairman of the Board and its Chief Executive Officer also each serve as the managing members of RadQual. As a result of this change in ownership, and other factors, the Company determined that it gained the ability to exercise significant management control over the operations of RadQual. Because of this increased management control, and pursuant to GAAP, the Company has consolidated the accounts of RadQual into its financial statements.

(5) Inventories

Inventories consisted of the following at June 30, 2020 and December 31, 2019:

	<u>June 30, 2020</u>	<u>December 31, 2019</u>
Raw materials	\$ 33,609	\$ 40,648
Work in process	1,261,839	3,379,943
Finished goods	3,220	2,829
	<u>\$ 1,298,668</u>	<u>\$ 3,423,420</u>

Work in process includes cobalt-60 targets that are located in the U.S. Department of Energy's (DOE) Advanced Test Reactor (ATR) located outside of Idaho Falls, Idaho. These targets are owned by the Company and contain cobalt-60 material at various stages of irradiation. The carrying value of the targets is based on accumulated irradiation and handling costs which have been allocated to each target based on the length of time the targets have been held and processed at the ATR. At June 30, 2020, and at December 31, 2019, this cobalt target inventory had a carrying value of \$179,625 and \$201,349, respectively.

Work in process also includes costs to irradiate cobalt-60 material under a contract with the DOE. This material has been placed in the ATR and the Company made progress payments to purchase this material. During the second quarter of 2020, the Company modified its agreement with the DOE due to delays in delivery of Cobalt material. As a result, the DOE refunded certain payments made by INIS in relation to this material and INIS stopped paying the scheduled payments for the inventory. During the six months ended June 30, 2020 work in process was reduced by \$2,050,100 from a \$918,090 cash refund from the DOE and a reduction of accounts payable of \$1,132,010.

The Company has contracted with several customers for the sale of some of this 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, 2020 and 2019, the Company recognized approximately \$22,000 and \$102,500, 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, 2020 and 2019, the Company recognized approximately \$11,500 and \$8,000, 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, 2020 and 2019, the Company issued 241,707 and 68,037 shares of common stock, respectively, to employees under the employee stock purchase plan for proceeds of \$10,273 and \$3,438, respectively. As of June 30, 2020, 233,454 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. The 2015 Plan amended and restated the Company's Amended and Restated 2006 Equity Incentive Plan (2006 Plan). The 2015 Plan authorizes the issuance of up to 80,000,000 shares of common stock, plus 11,089,967 shares authorized, but not issued under the 2006 Plan. At June 30, 2020, there were 33,185,593 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 measuring the value of any awards that were vested and non-forfeitable at their date of issuance based on the grant date fair value of the award. The non-vested portion of awards that are subject to the future performance of the counterparty are adjusted at each reporting date to their fair values based upon the then current market value of the Company's stock and other assumptions that management believes are reasonable.

Option awards outstanding as of June 30, 2020, and changes during the six-months ended June 30, 2020, were as follows:

Fixed Options	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value
Outstanding at December 31, 2019	23,655,000	\$ 0.05		
Granted	1,200,000	\$ 0.05		
Exercised	—	\$ —		
Expired	—	\$ —		
Forfeited	(250,000)	\$ 0.06		
Outstanding at June 30, 2020	<u>24,605,000</u>	<u>\$ 0.05</u>	<u>6.0</u>	<u>\$ 246,600</u>
Exercisable at June 30, 2020	<u>18,086,500</u>	<u>\$ 0.05</u>	<u>5.4</u>	<u>\$ 235,000</u>

The intrinsic value of outstanding and exercisable shares is based on the closing price of the Company's common stock on the OTCQB of \$0.06 per share on June 30, 2020, the last trading day of the quarter.

As of June 30, 2020, there was \$62,250 of unrecognized compensation expense related to stock options that will be recognized over a weighted-average period of 2.11 years.

During the three months ended June 30, 2020, the Company granted an aggregate of 1,200,000 qualified stock options to several of its employees. All options vest over a five-year period with the first vesting at one year anniversary for all grants and expiration at ten year anniversary for all grants. The weighted average exercise price for these options was \$0.05 per share. The options have a fair value of \$32,582 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 0.36% to 0.63%, expected dividend yield rate of 0%, expected volatility of 56.18% to 58.75% and an expected life between 5.5 and 7.5 years.

Total stock-based compensation expense for the six-months ended June 30, 2020 and 2019 was \$68,531 and \$92,540 respectively. Total stock-based compensation expense for the three-months ended June 30, 2020 and 2019 was \$17,009 and \$28,803, respectively. At June 30, 2020, the remaining compensation expense was \$62,250 and will be recognized over 2.11 years.

Pursuant to an employment agreement with its Chief Executive Officer, the Company awarded 500,000 fully vested shares of common stock to its Chief Executive Officer in February 2020 under the 2015 Plan. The number of shares awarded was based on a \$28,000 stock award using a price of \$0.056 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 \$18,128, which was determined by multiplying the number of shares awarded by the closing price of the common stock on February 28, 2020, which was \$0.06 per share. The Company withheld 197,875 shares of common stock to satisfy the employee's payroll tax obligations in connection with this issuance. The net shares issued on February 28, 2020 totaled 302,125.

Warrants

Warrants outstanding at June 30, 2020, included 17,165,000 Class M Warrants which are immediately exercisable at an exercise price of \$0.12 per share and expire on February 17, 2022; 2,925,000 Class N Warrants which are immediately exercisable at an exercise price of \$0.10 per share and expire on May 12, 2022; and 30,000,000 Class O Warrants which are immediately exercisable at an exercise price of \$0.045 per share and expire December 30, 2024.

Warrants outstanding at June 30, 2019, included 17,165,000 Class M Warrants which are immediately exercisable at an exercise price of \$0.12 per share and expire on February 17, 2022 and 2,925,000 Class N Warrants which are immediately exercisable at an exercise price of \$0.10 per share and expire on May 12, 2022.

Preferred Stock

At June 30, 2020, there were 850 shares of the Series B Preferred Stock outstanding with a mandatory redemption date of May 2022 at \$1,000 per share or \$850,000. The shares of Series B Preferred Stock are also convertible into 425,000 shares of the Company's common stock at a conversion price of \$2.00 per share. These shares of Series B Preferred Stock do not carry any dividend preferences. Due to the mandatory redemption provision, the Series B Preferred Stock has been classified as a liability in the accompanying condensed consolidated balance sheets.

At June 30, 2020, there were 4,213 shares of the Series C Preferred Stock outstanding with a mandatory redemption date of February 2022 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, 2020 and 2019 dividends paid to holders of the Series C Preferred Stock totaled \$251,280 and \$252,780, 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 six-months June 30, 2020 and 2019 the Company issued 3,408,000 and 3,433,000 shares of common stock, respectively, in lieu of a dividend payment of \$204,480 and \$205,980, respectively. The remaining \$46,800 of dividend payable was settled with cash.

(7) 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 connection with the 2013 Promissory Note, each of the two lenders was issued 5,000,000 Class L warrants to purchase shares of our common stock at an exercise price of \$0.06 per share. The warrants were immediately exercisable. In June 2014, we renegotiated the terms of the 2013 Promissory Note. Pursuant to the modification, the maturity date was extended to December 31, 2017 and each lender was granted an additional 7,500,000 Class L warrants to purchase shares of our common stock at an exercise price of \$0.06 per share. The warrants were immediately exercisable. In February 2017, the 2013 Promissory Note was further modified to extend the maturity date to December 31, 2020, with all remaining terms unchanged. On December 23, 2018, all 25,000,000 Class L warrants expired. In December 2019, the 2013 Promissory Note was further modified to extend the maturity date to December 31, 2021, with all remaining terms unchanged.

At June 30, 2020, the principal balance of the 2013 Promissory Note was \$500,000 and accrued interest payable on the 2013 Promissory Note was \$196,734. Interest expense recorded for the six-months ended June 30, 2020, was \$15,000.

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.

At June 30, 2020, accrued interest on the 2018 Promissory Note totaled \$15,770.

In April 2019, one of the prepaid revenue customers requested a refund of the amounts paid. The Company entered into a note agreement to repay \$2,182,142 over the next 12 months. The modification was necessary to address the delays to cobalt delivery in 2019 caused by changes to the ATR operating schedule and also to accommodate this customer's request to reduce their cobalt purchase obligations in future years. The modifications require that the Company refund approximately \$1,050,000, of payments received for prior year undelivered material, plus interest at 12% per year, payable over a one-year period on a portion of that amount. The Company has also agreed with this customer to refund approximately \$1,100,000 paid for material that was to have been delivered in later years. There will be no interest charge on this refund. In December 2019, this agreement was modified further allowing the Company to delay the original payments by 3 months and refund an additional \$462,258 with no interest charge.

On December 20, 2019, the Company entered into a promissory note agreement with four of the Company's major shareholders (the 2019 Promissory Note). The 2019 Promissory Note authorizes the Company to borrow up to \$1,000,000. As of December 31, 2019, the Company had borrowed \$675,000 under the 2019 promissory note. In February 2020, the Company borrowed an additional \$325,000. 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 fair value of these 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, 2020 accrued interest on the 2019 Promissory Note totaled \$19,131.

On April 23, 2020, the Company, through its wholly-owned subsidiary entered into a Loan Agreement and Promissory Note (collectively the "SBA Loan") with KeyBank National Association pursuant to the Paycheck Protection Program (the "PPP") under the recently enacted Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") administered by the U.S. Small Business Administration (the "SBA"). The Company received total proceeds of \$495,500 from the SBA Loan. The SBA Loan is scheduled to mature on April 22, 2022 and has a 1.00% interest rate and is subject to the terms and conditions applicable to loans administered by the SBA under the CARES Act. The SBA Loan may be prepaid at any time prior to maturity with no prepayment penalties.

The SBA Loan contains customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. Subject to certain conditions, the SBA Loan may be forgiven in whole or in part by applying for forgiveness pursuant to the CARES Act and the PPP. The amount of loan proceeds eligible for forgiveness is based on a formula based on a number of factors, including the amount of loan proceeds used by the Company during the twenty-four week period after the loan origination for certain purposes, including payroll costs, interest on certain mortgage obligations, rent payments on certain leases, and certain qualified utility payments, provided that, among other things, at least 60% of the loan amount is used for eligible payroll costs, the employer maintaining or rehiring employees and maintaining salaries at certain level.

As of June 30, 2020, the Company has used the entire loan proceeds to fund qualifying expenses. As a result, the Company believes that it has met the PPP eligibility criteria for forgiveness and has concluded that the loan represents, in substance, a government grant that is expected to be forgiven. As such, the Company has recognized the entire loan amount as Other Income at June 30, 2020.

The Company does not anticipate taking any action that would cause any portion of the loan to be ineligible for forgiveness. However, to the extent that any amount is deemed unforfeitable, such amount is payable over two to five years at an interest rate of 1%, with a deferral of payments for the first six months.

(8) Commitments and Contingencies

Dependence on Third Parties

The production of High Specific Activity Cobalt is dependent upon the DOE, and its prime operating contractor, which controls the 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.

Nuclear Medicine Reference and Calibration Standard manufacturing is conducted under an exclusive contract with RadQual, which in turn has an agreement in place with several companies for distributing the products. The radiochemical product sold by the Company is supplied to the Company through agreements with several suppliers. A loss of any of these customers or 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 \$638,562.

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 is 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.

On May 2, 2019, the Company's radiological services team was involved in a contamination event involving a breached cesium-137 source at an off-site location in the State of Washington. This work was being performed under a contract with the DOE. The Company supported the initial onsite contamination clean-up operations at that location and completed removal of the cesium source Company equipment. The Company has reviewed the results of the DOE investigation into this event and has implemented appropriate corrective actions. Since August 2019 the DOE has assumed full control of the ongoing cleanup operations and has assumed all of the financial obligations associated with the contractors hired to carry out all of the facility recovery operations. Under the terms of the contract the Company believes it should be indemnified from financial liability for this event by the DOE under the Price Anderson Amendments Act (PAAA) and the Company has formally requested the DOE to provide indemnification under the PAAA. While the DOE's review of the request is still underway the Company believes that a determination of indemnification under the PAAA is probable. Such indemnification would allow the Company to recoup all its costs associated with this contamination event. During 2019, the Company incurred \$2,384,255 in expenses related to the contamination and its cleanup. During the six months ended June 30, 2020, the Company incurred an additional \$58,208 in expenses related to the contamination and its cleanup. During 2019, the Company received \$964,958 in reimbursements from its insurance company for expenses related to the contamination and its cleanup. During the six months ended June 30, 2020, the DOE paid \$576,732 on behalf of the Company for expenses related to the contamination and its cleanup. The Company has determined that an additional \$694,320 of its incurred expenses related to the contamination and its cleanup are probable for recovery pursuant to ASC 410-30.

The Washington Department of Health (DOH) issued a Notice of Violation to the Company in May 2020 citing two violations of the Company's reciprocity license in the State of Washington. Also, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of the Company's radiological safety program and issued a Notice of Violation in June 2020 citing two different violations of the Company's NRC materials license. The Company has requested and completed Predecisional Enforcement Conferences with the Washington DOH and the NRC and has provided the agencies with information on all corrective actions completed by the Company to prevent reoccurrence. The Company is awaiting the results of deliberations by Washington DOH and NRC on these matters and their respective decisions for any further actions or the imposition of a civil penalty against the Company. In addition to the costs and expenses identified above, in the event the Washington DOH Notice of Violation results in the imposition of a civil penalty against the Company, based upon consultation with legal counsel, the Company reasonably believes such civil penalty falls within the parameters for indemnification of the Company under the PAAA. It is not possible at this time to predict the timing or outcome of these matters or to estimate a potential amount of loss, if any.

(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, 2020				Three Months Ended June 30, 2019			
	U.S.	Outside U.S.	Total Revenues	% of Total Revenues	U.S.	Outside U.S.	Total Revenues	% of Total Revenues
	Radiochemical Products	\$ 988,952	\$ 124,101	\$ 1,113,053	52%	\$ 774,107	\$ —	\$ 774,107
Cobalt Products	217,433	7,233	224,666	10%	213,239	—	213,239	10%
Nuclear Medicine Products	592,170	185,703	777,873	36%	744,612	186,084	930,696	44%
Radiological Services	43,967	—	43,967	2%	217,797	—	217,797	10%
Fluorine Products	—	—	—	0%	—	—	—	0%
	<u>\$1,842,522</u>	<u>\$317,037</u>	<u>\$2,159,559</u>	<u>100%</u>	<u>\$1,949,755</u>	<u>\$186,084</u>	<u>\$2,135,839</u>	<u>100%</u>

	Six Months Ended June 30, 2020				Six Months Ended June 30, 2019			
	U.S.	Outside U.S.	Total Revenues	% of Total Revenues	U.S.	Outside U.S.	Total Revenues	% of Total Revenues
	Radiochemical Products	\$ 1,657,543	\$ 210,731	\$ 1,868,274	42%	\$ 1,233,714	\$ 3,625	\$ 1,237,339
Cobalt Products	522,428	7,858	530,286	12%	549,328	40,000	589,328	13%
Nuclear Medicine Products	1,459,773	360,224	1,819,997	40%	1,578,120	453,498	2,031,618	45%
Radiological Services	116,288	—	116,288	3%	805,406	—	805,406	18%
Fluorine Products	160,500	—	160,500	4%	—	—	—	0%
	<u>\$3,916,532</u>	<u>\$578,813</u>	<u>\$4,495,345</u>	<u>100%</u>	<u>\$4,166,568</u>	<u>\$497,123</u>	<u>\$4,663,691</u>	<u>100%</u>

The Company's revenue consists primarily of products manufactured for use in the nuclear medicine industry, distribution of radiochemicals including sodium iodide I-131 drug product, cobalt source manufacturing, and providing contract manufacturing of drug products for customers. 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, 2020, the Company reported current unearned revenue of \$1,375,948. For the period ended December 31, 2019, the Company reported current unearned revenue of \$1,240,205. These unearned revenues will be recognized as revenue in the periods during which the cobalt shipments take place.

Contract Balances

The Company records a receivable when it has an unconditional right to receive consideration after the performance obligations are satisfied. As of June 30, 2020, and December 31, 2019, accounts receivable totaled \$1,301,248 and \$875,914, respectively. For the six-months ended June 30, 2020, the Company did not incur material impairment losses with respect to its receivables.

(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,	
	2020	2019
Operating lease costs	\$ 130,378	\$ 73,706
Short-term operating lease costs	19,928	3,039
Financing lease expense:		
Amortization of right-of-use assets	2,179	—
Interest on lease liabilities	579	—
Total financing lease expense	2,758	—
Total lease expense	\$ 153,064	\$ 76,745
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ 2,649,070	\$ 810,367
Right-of-use assets obtained in exchange for new financing lease liabilities	\$ 16,524	\$ —
Weighted-average remaining lease term (years) - operating leases	14.6	7.0
Weighted-average remaining lease term (years) - financing leases	3.6	
Weighted-average discount rate - operating leases	6.75%	6.75%
Weighted-average discount rate - financing leases	8.82%	

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

	Operating	Financing
2020 (excluding the six months ended June 30, 2020)	\$ 128,127	\$ 4,821
2021	257,383	9,641
2022	284,631	9,641
2023	287,108	5,880
2024	287,108	2,929
Thereafter	2,886,518	—
Total minimum operating lease obligations	4,130,875	32,912
Less-amounts representing interest	(1,519,443)	(4,607)
Present value of minimum operating lease obligations	2,611,432	28,305
Current maturities	(83,098)	(7,434)
Lease obligations, net of current maturities	\$ 2,528,334	\$ 20,871

(11) Segment Information

The Company has five reportable segments which include: Nuclear Medicine Standards, Cobalt Products, Radiochemical Products, Fluorine Products, and Radiological Services. 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,	
	2020	2019	2020	2019
Radiochemical Products	\$ 1,113,053	\$ 774,107	\$ 1,868,274	\$ 1,237,339
Cobalt Products	224,666	213,239	530,286	589,328
Nuclear Medicine Standards	777,873	930,696	1,819,997	2,031,618
Radiological Services	43,967	217,797	116,288	805,406
Fluorine Products	—	—	160,500	—
Total Segments	2,159,559	2,135,839	4,495,345	4,663,691
Corporate revenue	—	—	—	—
Total Consolidated	\$ 2,159,559	\$ 2,135,839	\$ 4,495,345	\$ 4,663,691

Depreciation and Amortization	Three months ended June 30,		Six months ended June 30,	
	2020	2019	2020	2019
Radiochemical Products	\$ 10,354	\$ 9,269	\$ 20,708	\$ 18,086
Cobalt Products	8,762	1,022	17,523	2,102
Nuclear Medicine Standards	15,989	15,673	31,978	31,292
Radiological Services	8,519	8,636	17,155	17,272
Fluorine Products	30,898	30,807	56,993	56,902
Total Segments	74,522	65,408	144,357	125,654
Corporate depreciation and amortization	(349)	53	4,433	4,791
Total Consolidated	\$ 74,173	\$ 65,461	\$ 148,790	\$ 130,445

Segment Income (Loss)	Three months ended June 30,		Six months ended June 30,	
	2020	2019	2020	2019
Radiochemical Products	\$ 380,728	\$ 252,946	\$ 386,347	\$ 349,002
Cobalt Products	75,874	122,252	199,670	315,122
Nuclear Medicine Standards	117,056	111,921	302,357	328,743
Radiological Services	(13,532)	(901,234)	(28,461)	(589,955)
Fluorine Products	(36,460)	(39,927)	86,410	(77,422)
Total Segments	523,666	(454,042)	946,323	325,490
Corporate loss	(294,338)	(703,152)	(1,139,489)	(1,534,641)
Net Income (Loss)	\$ 229,328	\$ (1,157,194)	\$ (193,166)	\$ (1,209,151)

Expenditures for Segment Assets	Three months ended June 30,		Six months ended June 30,	
	2020	2019	2020	2019
Radiochemical Products	\$ —	\$ 14,844	\$ —	\$ 14,845
Cobalt Products	—	—	—	3,493
Nuclear Medicine Standards	—	4,950	—	4,950
Radiological Services	—	—	—	—
Fluorine Products	—	—	1,565	1,589
Total Segments	—	19,794	1,565	24,877
Corporate purchases	—	—	—	—
Total Consolidated	\$ —	\$ 19,794	\$ 1,565	\$ 24,877

Segment Assets	June 30,	December 31,
	2020	2019
Radiochemical Products	\$ 748,827	\$ 511,381
Cobalt Products	1,331,242	3,369,828
Nuclear Medicine Standards	2,113,653	2,111,225
Radiological Services	84,012	106,374
Fluorine Products	5,422,380	5,477,808
Total Segments	9,700,114	11,576,616
Corporate assets	5,213,468	3,680,179
Total Consolidated	\$ 14,913,582	\$ 15,256,795

(12) Subsequent Events

In April 2020, the Company's Board of Directors approved the International Isotopes Inc. Amended and Restated Employee Stock Purchase Plan (the "ESPP"), which was subsequently approved by the Company's shareholders in July 2020. As a result, the number of shares authorized for issuance under the ESPP was increased by an additional 3,000,000 shares.

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. In particular, statements regarding impact of the novel coronavirus (COVID-19) outbreak on our business, financial condition, operating results and liquidity, the future prospects of our business segments, future cash flow from operations, the Company's ability to achieve profitability, the business prospects and growth projection for our business segments, and the status of our proposed uranium de-conversion facility, are 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, 2019 filed with the Securities and Exchange Commission (SEC) on March 30, 2020 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. 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 subsidiaries and joint venture, TI Services, LLC, and RadQual, LLC (collectively, the Company, we, our, or us) manufacture a full range of nuclear medicine calibration and reference standards, a range of cobalt products, manufacture and distribute sodium iodide I-131 as a generic drug, and provide contract manufacturing of radiopharmaceutical products. We also hold several patents for a fluorine extraction process that we intend to use in conjunction with a planned commercial depleted uranium de-conversion facility, and provide a host of transportation, recycling, and processing services on a contract basis for clients. We also own a 24.5% interest in, and have management control of, RadQual, LLC (RadQual), a global supplier of molecular imaging quality control and calibration devices, with which we have an exclusive manufacturing agreement.

In August 2017, affiliates of the Company, including the Company's Chairman of the Board and the Chief Executive Officer, acquired the remaining 75.5% interest in RadQual. The Company's Chairman of the Board and its Chief Executive Officer also serve as the managing members of RadQual. As a result of this change in ownership, and other factors, the Company determined that it had gained the ability to exercise significant management control over the operations of RadQual. Because of this increased management ability and pursuant to GAAP, the Company has consolidated the accounts of RadQual into its financial statements beginning as of August 2017. See Note 4 "Investment and Business Consolidation" to our unaudited condensed consolidated financial statements in this report for additional information.

Our business consists of the following five major business segments:

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 for SPECT imaging, SPECT camera operational testing, and calibration of dose measurement equipment. Revenue from nuclear medicine products includes consolidated sales from TI Services, LLC (TI Services), a 50/50 joint venture that we formed with RadQual in December 2010 to distribute our products, as well as consolidated sales from RadQual, pursuant to the change in RadQual's ownership in August 2017, as discussed above. 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.

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.

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 distribution of certain 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 consists 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 is in the process of terminating gemstone processing. The Company believes that eliminating work in the Radiological Services segment will allow the Company to better focus upon our core business segments and our new products pipeline. We believe that the loss in revenue resulting from wrapping up of radiological field service work will be more than compensated for by increased revenues in our remaining business segments.

COVID-19 UPDATE

As a result of the COVID-19 pandemic, we experienced a reduction of sales within our nuclear medicine calibration standards segment during the six-months ended June 30, 2020. There was no discernable impact from COVID-19 to our other business segments during the period. Revenue from nuclear medicine products for the six months ended June 30, 2020, decreased approximately 10% compared to the same period in 2019. Revenue from nuclear medicine products for the three months ended June 30, 2020, decreased approximately 16% compared to the same period in 2019. The decrease in sales for the six months and three months ended June 30, 2020, 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. Beginning in June 2020, we saw a substantial recovery of sales of our nuclear medicine products due to a pent-up demand for these products. We are hopeful that sales will remain at normal levels as the year continues.

Starting in June 2020, we have seen our sales through RadQual substantially recover from the impact of the COVID-19 pandemic. We believe that many of the medical procedures have been delayed, not canceled, and there is a pent-up demand for these products. We will also continue to work towards development of several new products and to further expand our international sales. In addition, we will continue to work with TI Services on marketing strategies to boost customer service and sales of some nuclear medicine imaging and pharmacy products.

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 PPE. Alternative sources of raw materials have been obtained without any interruption to production. Travel restrictions related to COVID-19 have also delayed vendor installations of some specialized equipment in our new contract manufacturing facility. Due to these delays, we are now targeting the new facility to be up and running in the first quarter of 2021. With the heightened concern about corporate liquidity during the COVID-19 pandemic, the Company believes that it has adequate cash to support continuing operations.

RESULTS OF OPERATIONS

Three Months Ended June 30, 2020 Compared to Three Months Ended June 30, 2019

Revenue for the three months ended June 30, 2020 was \$2,159,559 as compared to \$2,135,839 for the same period in 2019, an overall increase of \$23,720, or approximately 1%. This increase in revenue was largely the result of increased revenue in our Radiochemical Products segment, 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, 2020 and 2019:

	For the three- months ended June 30, 2020	For the three- months ended June 30, 2019	\$ change	% change
Sale of Product				
Radiochemical Products	\$ 1,113,053	\$ 774,107	\$ 338,946	44%
Cobalt Products	224,666	213,239	11,427	5%
Nuclear Medicine Standards	777,873	930,696	(152,823)	-16%
Radiological Services	43,967	217,797	(173,830)	-80%
Fluorine Products	—	—	—	0%
Total Consolidated	<u>\$ 2,159,559</u>	<u>\$ 2,135,839</u>	<u>\$ 23,720</u>	<u>1%</u>

Cost of sales decreased to \$903,909 for the three months ended June 30, 2020 from \$971,384 for the same period in 2019. This is a decrease of \$67,475, or approximately 7%. The decrease in cost of sales in the three-month comparison was primarily due to the decreased sales activity in our Nuclear Medicine and radiological services segments, as discussed in detail below. Gross profit for the three months ended June 30, 2020 was \$1,255,650, compared to \$1,164,455 for the same period in 2019. This represents an increase in gross profit of \$91,195, or approximately 8%.

The following table presents cost of sales and gross profit data for each of our business segments for the three months ended June 30, 2020 and 2019:

	For the three- months ended June 30, 2020	% of Total Sales 2020	For the three- months ended June 30, 2019	% of Total Sales 2019
Total Sales	\$ 2,159,559		\$ 2,135,839	
Cost of Sales				
Radiochemical Products	\$ 480,816	22%	\$ 338,487	16%
Cobalt Products	79,091	4%	51,494	2%
Nuclear Medicine Standards	332,380	15%	446,699	21%
Radiological Services	11,622	1%	134,704	6%
Fluorine Products	—	0%	—	0%
Total Segments	<u>903,909</u>	<u>42%</u>	<u>971,384</u>	<u>45%</u>
Gross Profit	\$ 1,255,650		\$ 1,164,455	
Gross Profit %	58%		55%	

Operating expense increased approximately 8% to \$1,351,751 for the three months ended June 30, 2020, from \$1,246,979 for the same period in 2019. This increase of \$104,772, is primarily due to an approximate 24% increase in Salaries and Contract Labor costs. This increase in Salaries and Contract Labor was a result of adding staff to our payroll to support contract manufacturing and new product development.

The following table presents a comparison of total operating expense for the three months ended June 30, 2020 and 2019:

	For the three- months ended June 30, 2020	For the three- months ended June 30, 2019	% change	\$ change
Operating Costs and Expenses:				
Salaries and Contract Labor	\$ 736,539	\$ 596,045	24%	\$ 140,494
General, Administrative and Consulting	573,747	600,580	-4%	(26,833)
Research and Development	41,465	50,354	-18%	(8,889)
Total operating expenses	<u>\$ 1,351,751</u>	<u>\$ 1,246,979</u>	<u>8%</u>	<u>\$ 104,772</u>

Other income was \$559,895 for the three months ended June 30, 2020, as compared to Other Expense of (\$867,660) for the same period in 2019. This is an increase of \$1,427,555. The increase is due to a combination of income from the SBA Loan (as defined below) of \$495,500 converted to grant income during the three months ended June 30, 2020 and expenses related to the contamination event in the state of Washington that occurred in the three months ended June 30, 2019. Interest expense for the three months ended June 30, 2020 was \$196,344, compared to \$136,842 for the same period in 2019. This is an increase of \$59,502, or approximately 43%. 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, 2020, we accrued dividends payable of \$63,195, which have been recorded as interest expense. Additionally, non-cash interest expense in the amount of \$32,084 was recorded for this same period for the issuance of warrants related to the preferred stock issuances. As discussed below, in December 2019, we entered into a promissory note agreement with our Chief Executive Officer, Chairman of the Board, former Chairman of the Board, and one of our major shareholders (the 2019 Promissory Note). Interest recorded for the three months ended June 30, 2020 for the 2019 Promissory Note was \$10,000 whereas there was no similar interest expense for the same period in 2019. Additionally, non-cash interest expense in the amount of \$60,259 for the issuance of warrants in conjunction with the 2019 Promissory Note was recorded for the three months ended June 30, 2020. See Note 7 "Debt" to our unaudited condensed consolidated financial statements in this Quarterly Report for additional information about our indebtedness and the associated interest expense.

Our net income for the three months ended June 30, 2020, was \$229,328, compared to net loss of (\$1,157,194), for the same period in 2019. This is an increase of income of \$1,386,522 and is the result of increased sales of our radiochemical product sodium iodide, a reduction in net expenses related to the cleanup of the contamination event that occurred in the state of Washington in the second quarter of 2019, and \$495,500 of income from the SBA Loan converted to grant income during the second quarter of 2020.

Radiochemical Products. Revenue from the sale of radiochemical products for the three months ended June 30, 2020 was \$1,113,053, compared to \$774,107 for the same period in 2019. This is an increase of \$338,946, or approximately 44%. The increase is a result of a \$588,946 or 112% increase in radiochemical product sales year over year that was primarily the result of sales of our new generic sodium iodide I-131 drug product which was launched in March 2020. This increase in sales was partially offset by a reduction in payments received for contract manufacturing services in the three-month period compared to 2019.

Gross profit of radiochemical products for the three months ended June 30, 2020 was \$632,237, compared to \$435,620, for the same period in 2019, and gross profit percentages were approximately 57% and 56% for the three months ended March 31, 2020 and 2019, respectively. This increased gross profit percentage is a result of sales of our new generic sodium iodine I-131 drug product and continued improvements of utilization of raw materials. Cost of sales for radiochemical products increased to \$480,816 for the three months ended June 30, 2020, as compared to \$338,487 for the same period in 2019. This is an increase of \$142,329, or approximately 42%, and was primarily the result of increased sales of product. Operating expense for this segment increased to \$251,509 for the three months ended June 30, 2020, compared to \$182,674 for the same period in 2019. This increase in operating expense of \$68,835, or approximately 38%, is primarily due to increased costs for support labor for contract manufacturing startup operations, increased support labor related to increased radiochemical sales activity, and increased support labor related to sales of our new generic sodium iodine I-131 drug product. This segment reported net income of \$380,728 for the three months ended June 30, 2020, as compared to net income of \$252,946 for the same period in 2019. The increase in net income of \$127,782 or approximately 51%, is primarily the result of the 112% increase radiochemical product sales but somewhat offset by a reduction in payments received related to our contract manufacturing and supply agreement during the three months ended June 30, 2020.

Cobalt Products. Revenue from the sale of cobalt products for the three months ended June 30, 2020 was \$224,666, compared to \$213,239, for the same period in 2019. This represents an increase of \$11,427, or approximately 5%. Our cobalt sealed source manufacturing is largely dependent on our ability to procure cobalt material from the DOE's Advanced Test Reactor (ATR). Although we have not been able to obtain high specific activity material from the ATR reactor since late 2013, periodically we are able to acquire recycled material or material from alternative suppliers 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. In addition, we have begun to supply cobalt to periodically supply material to customers who previously paid for the material under supply agreements entered into with us in 2015. As we have supplied this material to our customers, we have recognized the sales on our statement of operations.

In October 2014, we entered into a ten-year agreement with the DOE for the irradiation of cobalt targets. The agreement gives us the ability to purchase the current full capacity of the DOE's ATR throughout the ten-year period. It takes many years to irradiate these cobalt targets to the desired level of activity. Our production calculations indicated we should have anticipated having high specific activity cobalt available for our customers in late 2019. However, extended reactor shutdowns and lower than expected production rates of cobalt-60 in the new design cobalt targets have delayed delivery of high specific activity cobalt until much later in 2020 and the start of 2021.

As of March 31, 2020, we continued to hold many in-progress, old design cobalt targets at the ATR. We believe that many of the older design targets we hold at the ATR, and that we report as inventory, still hold significant market value in excess of their current carrying values and we have concluded that no impairment existed at that time. We will periodically continue to review the residual value of this cobalt material for potential impairment and make adjustments as deemed appropriate.

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.

In April 2019, because of our inability to supply high specific activity cobalt material produced by the DOE's ATR, we were forced to modify a supply agreement with one of our cobalt customers. The modifications require that we refund approximately \$1,100,000, of payments received for prior year undelivered material, plus interest at 12% per year, payable over a one-year period. We have also agreed with this customer to refund approximately \$1,100,000 paid for material that was to have been delivered in later years. There will be no interest charge on this refund. In December 2019, this agreement was modified further allowing the Company to delay the original payments by 3 months and refund an additional \$462,258 with no interest charge. In addition, we have identified another customer ready to purchase this material. The Company does not anticipate any significant net negative effect of this change as sales under the new agreement are expected to offset most of the refunds made under the old agreement. Accordingly, we will classify refund payments due within one year as a short-term liability and payments due beyond one year as a long-term liability, rather than as short-term deferred revenue on our condensed consolidated balance sheets.

Cost of sales for the three months ended June 30, 2020, was \$79,091, as compared to \$51,494, for the same period in 2019. Gross profit for cobalt products for the three months ended June 30, 2020 was \$145,575 compared to \$161,745 for the same period in 2019. This is a decrease of \$16,170, or approximately 10% and is primarily attributable to cost of the material sold in source manufacturing for the three months ended June 30, 2020, as compared to the same period in 2019. Operating expense in this segment increased to \$69,701 for the three months ended June 30, 2020, from \$39,493 for the same period in 2019. This is an increase of \$30,208, or approximately 77%. This increase in operating expenses for the three months ended June 30, 2020 is due to increased labor expenses. Our net income for cobalt products was \$75,874 for the three months ended June 30, 2020, as compared to a net income of \$122,252 for the same period in 2019. The decrease in net income of \$46,378, or approximately 38%, was attributable to the increased operating expenses.

Nuclear Medicine Standards. Revenue from nuclear medicine products for the three months ended June 30, 2020, was \$777,873, compared to \$930,696 for the same period in 2020. This represents a decrease in revenue of \$152,823, or approximately 16%. As discussed above, due to a change in the member ownership of RadQual, in August 2017 we began reporting our investment in RadQual on a consolidated basis. Therefore, revenue in this segment includes all sales of RadQual and TI Services with all intercompany sales for the consolidated period eliminated. The decrease in sales for the period ended June 30, 2020 was due to slowing sales activity attributed to the COVID-19 global outbreak which resulted in the temporary closure of many imaging clinics and suspension of elective or non-essential imaging procedures.

Starting in June 2020, we have seen our sales through RadQual substantially recover from the impact of the COVID-19 pandemic. We believe that many of the medical procedures have been delayed, not canceled, and there is a pent-up demand for these products. We will also continue to work towards development of several new products and to further expand our international sales. In addition, we will continue to work with TI Services on marketing strategies to boost customer service and sales of some nuclear medicine imaging and pharmacy products.

Cost of sales for our nuclear medicine standards segment for the three months ended June 30, 2020, was \$332,380, as compared to \$446,699 for the same period in 2019. The decrease in cost of sales in the period-to-period comparison of \$114,319, or 26%, is due to decrease in sales for the three-month period ended June, 2020, as compared to the same period in 2019. Gross profit for our nuclear medicine standards segment for the three months ended June 30, 2020 was \$445,493 compared to \$483,997 for the same period in 2019. This is a decrease in gross profit of 38,504, or approximately 8%. The decrease in gross profit in the period-to-period comparison is primarily the result of the decreased sales. Our gross profit percentages were approximately 57% and 52% for the three-month periods ended June 30, 2020 and 2019, respectively. The increase in the gross profit percentage for the three months ended June 30, 2020 is primarily due to increased profit margins in our sales through TI Services.

Operating expense for this segment for the three months ended June 30, 2020 decreased to \$328,437, from \$378,539 for the same period in 2019. This is a decrease of \$50,102, or approximately 13%, and is the result of decreased non-controlling member interest expense as compared to the same period in 2019. Operating expense includes consolidated net operating expense reported for RadQual of \$126,367 and non-controlling member interest expense of \$39,789, for the three months ended June 30, 2020, as compared to \$124,348 of net operating expense and non-controlling member interest expense of \$76,204 for the same period in 2019. Net operating expense included for TI Services was \$23,381 for the three months ended June 30, 2020, and \$29,393 for the same period in 2019. TI Services non-controlling interest included was (\$919) for the three-month period ended June 30, 2020, as compared to (\$2,425) for the same period in 2019. Net income for this segment for the three months ended June 30, 2020 was \$117,056, compared to \$111,921 for the same period in 2019. This is an increase in net income of \$5,136, or approximately 5% and is primarily the result of decreased operating expenses partially offset by decreased gross profit.

Radiological Services. Revenue from all radiological services for the three months ended June 30, 2020 was \$43,967, compared to \$217,797, for the same period in 2019, a decrease of \$173,830 or approximately 80%. The majority of our revenue in this segment has been generated by the performance of activities in connection with contracts for the DOE and the International Atomic Energy Agency (IAEA) to support recovery of disused sources and removal of certain devices. The decrease in the revenue for the period comparison is the result of the DOE cancelling and putting on hold all contracts related to this type of work. The Company plans to suspend these activities going forward.

On May 2, 2019, the Company's radiological services team was involved in a contamination event involving a breached cesium-137 source at an off-site location in the state of Washington. This work was being performed under a contract with the DOE. The Company supported the initial onsite contamination clean-up operations at that location and completed removal of the cesium source Company equipment. The Company has reviewed the results of the DOE investigation into this event and has implemented appropriate corrective actions. Since August 2019 the DOE has assumed full control of the ongoing cleanup operations and has assumed all of the financial obligations associated with the contractors hired to carry out all of the facility recovery operations. Under the terms of the contract the Company believes it should be indemnified from financial liability for this event by the DOE under the Price Anderson Amendments Act (PAAA) and the Company has formally requested the DOE to provide indemnification under the PAAA.

The Washington Department of Health (DOH) issued a Notice of Violation to the Company in May 2020 citing two violations of the Company's reciprocity license in the State of Washington. Also, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of the Company's radiological safety program and issued a Notice of Violation in June 2020 citing two different violations of the Company's NRC materials license. The Company has requested and completed Predecisional Enforcement Conferences with the Washington DOH and the NRC and has provided the agencies with information on all corrective actions completed by the Company to prevent reoccurrence. The Company is awaiting the results of deliberations by Washington DOH and NRC on these matters and their respective decisions for any further actions or the imposition of a civil penalty against the Company. In addition to the costs and expenses identified above, in the event the Washington DOH Notice of Violation results in the imposition of a civil penalty against the Company, based upon consultation with legal counsel, the Company reasonably believes such civil penalty falls within the parameters for indemnification of the Company under the PAAA. It is not possible at this time to predict the timing or outcome of these matters or to estimate a potential amount of loss, if any.

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 will continue through the remainder of 2020 and the Company will see a steady decline in revenue from this service as production is wrapped up. We plan to convert the spaces in the facility that had been used to perform this contract work into expanded Nuclear Medicine 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.

Cost of sales for the three months ended June 30, 2020, was \$11,622, as compared to \$134,704, for the same period in 2019. Gross profit for this segment for the three months ended June 30, 2020 was \$32,345, compared to \$83,093, reported for the same period in 2019. The decrease in gross profit of \$50,748, or approximately 61%, is the result of the decrease in service contracts completed and reported in this segment for the three months ended June 30, 2020, as compared to the same period in 2019. Operating expense for the three months ended June 30, 2020 was \$45,877 as compared to \$96,641, reported for the same period in 2019. This decrease of \$50,764, or approximately 53%, is the result of decreased sales and activity within the business segment.

Net loss for this segment for the three months ended June 30, 2020 was \$13,532, compared to net loss of \$901,234, for the same period in 2019. This is a decrease in net loss of \$887,702, or approximately 99% and is the result of net other expenses incurred in the three months ended June 30, 2019 of \$887,686 associated with clean-up operations related to the contamination event as noted above.

Fluorine Products. There was no revenue to report from the fluorine products segment for the three months ended June 30, 2020, or for the same period in 2019. During the three months ended June 30, 2020, we incurred \$36,460 of expense related to items in support of future planning and design for the proposed de-conversion facility, as compared to \$39,927 for the same three-month period in 2019. This is an increase of 9% 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 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, 2020 Compared to Six Months Ended June 30, 2019

Revenue for the six-month period ended June 30, 2020 was \$4,495,345, as compared to \$4,663,691 for the same period in 2019, a decrease of \$168,346, or approximately 4%. 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, 2020 and June 30, 2019:

	For the six- months ended June 30, 2020	For the six- months ended June 30, 2019	\$ change	% change
Sale of Product				
Radiochemical Products	\$ 1,868,274	\$ 1,237,339	\$ 630,935	51%
Cobalt Products	530,286	589,328	(59,042)	-10%
Nuclear Medicine Standards	1,819,997	2,031,618	(211,621)	-10%
Radiological Services	116,288	805,406	(689,118)	-86%
Fluorine Products	160,500	—	160,500	0%
Total Consolidated	<u>\$ 4,495,345</u>	<u>\$ 4,663,691</u>	<u>\$ (168,346)</u>	-4%

Gross profit for the six-month period ended June 30, 2020 was \$2,622,911, compared to \$2,603,879, for the same period in 2019. This represents a decrease of \$19,032 or approximately 1%.

The following table presents cost of sales and gross profit data for each of our business segments for the six months ended June 30, 2020 and 2019:

	For the six- months ended June 30, 2020	% of Total Sales 2020	For the six- months ended June 30, 2019	% of Total Sales 2019
Total Sales	\$ 4,495,345		\$ 4,663,691	
Cost of Sales				
Radiochemical Products	\$ 890,411	20%	\$ 618,137	13%
Cobalt Products	143,530	3%	171,638	4%
Nuclear Medicine Standards	805,154	18%	917,842	20%
Radiological Services	33,339	1%	352,196	8%
Fluorine Products	—	0%	—	0%
Total Segments	<u>1,872,434</u>	<u>42%</u>	<u>2,059,812</u>	<u>45%</u>
Gross Profit	\$ 2,622,911		\$ 2,603,879	
Gross Profit %	58%		56%	

Operating expenses were \$2,928,322 for the six-month period ended June 30, 2020, compared to \$2,543,845 for the same period in 2019. This represents an increase of \$384,477, or approximately 15%. This increase is primarily due to an approximate 11% increase in General, Administrative and Consulting costs combined with an approximate 21% increase in Salaries and Contract Labor costs. The increase in General, Administrative and Consulting costs is a result of increased rent expense related to the expansion of our existing facility and increased professional services expense during the six months ended June 30, 2020, as compared to the same period in 2019. The increase in Salaries and Contract Labor was a result of adding staff to our payroll. Research and Development costs decreased to \$88,393, for the six months ended June 30, 2020, as compared to \$96,658, for the same period in 2019. This is a decrease of \$8,265, or approximately 9% and is primarily the result of a decrease in expenditures for product development in several of our business segments for the six months ended June 30, 2020, as compared to the same period in 2019.

The following table shows total operating expenses for the six-month period ended June 30, 2020 and 2019:

	For the six- months ended June 30, 2020	For the six- months ended June 30, 2019	% change	\$ change
Operating Costs and Expenses:				
Salaries and Contract Labor	\$ 1,477,744	\$ 1,219,744	21%	\$ 258,000
General, Administrative and Consulting	1,362,185	1,227,443	11%	134,742
Research and Development	88,393	96,658	-9%	(8,265)
Total operating expenses	<u>\$ 2,928,322</u>	<u>\$ 2,543,845</u>	15%	<u>\$ 384,477</u>

Interest expense for the six months ended June 30, 2020 was \$391,224, compared to \$250,919 for the same period in 2019. This is an increase of \$140,305, or approximately 56%. Interest expense includes dividends accrued on our Series C Preferred Stock. As discussed below, we issued Series C Preferred Stock in February and May 2017. For the six months ended June 30, 2020, we accrued dividends payable of \$126,390 which have been recorded as interest expense. Additionally, non-cash interest expense in the amount of \$64,167 was recorded for this same period for the issuance of warrants related to the preferred stock issuances. Additionally, non-cash interest expense in the amount of \$123,544 for the issuance of warrants in conjunction with the 2019 Promissory Note was recorded for the six months ended June 30, 2020.

Our net loss for the six-month period ended June 30, 2020, was \$193,166 as compared to \$1,209,151 for the same period in 2019. This is a decrease in loss of \$1,015,985 or approximately 84%. This decrease in net loss is the result of increased sales of our radiochemical product sodium iodide, a reduction in net expenses related to the cleanup of the contamination event that occurred in the state of Washington in the second quarter of 2019, and \$495,500 of income from the SBA Loan converted to grant income during the second quarter of 2020.

Radiochemical Products. Revenue from the sale of radiochemical products for the six-month period ended June 30, 2020 was \$1,868,274 compared to \$1,237,339 for the same period in 2019. This is an increase of \$630,935, or approximately 51%. This increase was primarily the result of sales of our new generic sodium iodide I-131 drug product which was launched in March 2020. This increase in sales was partially offset by a reduction in payments received for contract manufacturing services in the six-month period compared to 2019.

Cost of sales was \$890,411 for the six-month period ended June 30, 2020, and \$618,137 for the same period in 2019. This is an increase of \$272,274, or approximately 44%. This increase is primarily the result of our increase in sales, as discussed above.

Gross profit percentages for our radiochemical products for the six months ended June 30, 2020 and 2019 were approximately 52% and 50%, respectively. Operating expense for this segment for the six-month period ended June 30, 2020 was \$597,951, compared to \$270,200 for the same period in 2019. This is an increase of \$327,751, or approximately 121%, and is primarily due to increased costs for support labor for contract manufacturing startup operations, increased rent expense directly related to our facility expansion for contract manufacturing operations, increased support labor related to increased radiochemical sales activity, and increased support labor related to rollout and sales of our new generic sodium iodine I-131 drug product. Net income for this segment increased to \$386,347 for the six-month period ended June 30, 2020, from \$349,002 for the same period in 2019. This increase of \$37,345, or approximately 11%, is primarily the result of the 87% increase radiochemical product sales but somewhat offset by a reduction in payments received for our contract manufacturing and supply agreement during the three months ended June 30, 2020.

Cobalt Products. Revenues from the sale of cobalt products for the six-month period ended June 30, 2020 were \$530,286, compared to \$589,328 for the same period in 2019. This is a decrease of \$59,042, or approximately 10%, and is the result of decreased Cobalt sealed source manufacturing and Cobalt recycling. Our cobalt sealed source manufacturing is largely dependent on our ability to procure cobalt material from the DOE's Advanced Test Reactor (ATR). Although we have not been able to obtain high specific activity material from the ATR reactor since late 2013, periodically we are able to acquire recycled material or material from alternative suppliers 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. In addition, we have begun to supply cobalt to periodically supply material to customers who previously paid for the material under supply agreements entered into with us in 2015. As we have supplied this material to our customers, we have recognized the sales on our statement of operations.

In October 2014, we entered into a ten-year agreement with the DOE for the irradiation of cobalt targets. The agreement gives us the ability to purchase the current full capacity of the DOE's ATR throughout the ten-year period. 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 late 2019. However, extended reactor shutdowns and lower than expected production rates of cobalt-60 in the new design cobalt targets have delayed delivery of high specific activity cobalt until much later in 2020 and start of 2021.

As of March 31, 2020, we continued to hold many in-progress, old design cobalt targets at the ATR. We believe that many of the older design targets we hold at the ATR, and that we report as inventory, still hold significant market value in excess of their current carrying values and we have concluded that no impairment existed at that time. We will periodically continue to review the residual value of this cobalt material for potential impairment and make adjustments as deemed appropriate.

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.

In April 2019, because of our inability to supply high specific activity cobalt material produced by the DOE's ATR in 2018, we modified our supply agreement with one of our cobalt customers. The modification included our agreement to reduce the customer's cobalt purchase obligations in future years and we agreed to refund approximately \$1,100,000, of payments received from this customer for prior year undelivered material, plus interest at 12% per year, payable over a one-year period. We have also agreed with this customer to refund approximately \$1,100,000 paid for material that was to have been delivered in later years. There will be no interest charge on this refund. In addition, we have identified another customer ready to purchase this material. The Company does not anticipate any significant net negative effect of this change as sales under the new agreement are expected to completely offset refunds made under the old agreement. Accordingly, we will classify refund payments due within one year as a short-term liability and payments due beyond one year as a long-term liability, rather than as short-term deferred revenue on our condensed consolidated balance sheet.

Cost of sales for the six months ended June 30, 2020, was \$143,530, as compared to \$171,638, for the same period in 2019. Gross profit for cobalt products for the six months ended June 30, 2020 was \$386,756 compared to \$417,689 for the same period in 2019. This is a decrease of \$30,933, or approximately 7% and is primarily the result of decreased Cobalt sealed source manufacturing and Cobalt recycling. Our gross profit percentages were approximately 73% and 71% for the six-month periods ended June 30, 2020 and 2019, respectively. The increase in the gross profit percentage for the six months ended June 30, 2020 is primarily due to decreased costs of raw material used in the manufacture of sealed sources. Operating expense in this segment increased to \$187,086 for the six months ended June 30, 2020, from \$102,567 for the same period in 2019. This is an increase of \$84,519, or approximately 82% is a result of increased support labor expenses and equipment expenses in the six months ended June 30, 2020 as compared to the same period in 2019. Our net income for cobalt products was \$199,670 for the six months ended June 30, 2020, as compared to a net income of \$315,122 for the same period in 2019. The decrease in net income of \$115,452 or approximately 37%, was attributable to the increase in operating expenses and decrease in sales for the six months ended June 30, 2020, as compared to the same period in 2019.

Nuclear Medicine Standards. Revenue from nuclear medicine products for the six-month period ended June 30, 2020 was \$1,819,997 compared to \$2,031,618 for the same period in 2019. This represents a decrease in revenue attributable to this segment of \$211,621, or approximately 10%. The decrease in sales for the period ended June 30, 2020 was due to slowing sales activity attributed to the COVID-19 global outbreak which resulted in the temporary closure of many imaging clinics and suspension of elective or non-essential imaging procedures.

As discussed above, due to a change in the member ownership of RadQual, during 2017, we began reporting our investment in RadQual on a consolidated basis. Therefore, revenue in this segment includes all sales of RadQual and sales of TI Services, a 50/50 joint venture that we formed with RadQual in December 2010, to distribute products and services for nuclear medicine, nuclear cardiology, and PET imaging. All intercompany sales for the consolidated period have been eliminated. The decrease in sales for the six months ended June 30, 2020 was due to slowing sales activity attributed to the COVID-19 global outbreak which resulted in the closure of many imaging clinics and suspension of elective or non-essential imaging procedures.

Starting in June 2020, we have seen our sales through RadQual substantially recover from the impact of the COVID-19 pandemic. We believe that many of the medical procedures have been delayed, not canceled, and there is a pent-up demand for these products. We will also continue to work towards development of several new products and to further expand our international sales. In addition, we will continue to work with TI Services on marketing strategies to boost customer service and sales of some nuclear medicine imaging and pharmacy products.

Gross profit for the six-month period ended June 30, 2020 was \$1,014,843, as compared to \$1,113,776 for the same period in 2019, a decrease of \$98,933, or approximately 9%. Operating expense for this segment for the six-month period ended June 30, 2020 decreased to \$748,086, from \$785,033 for the same period in 2019. This is a decrease of \$52,515 or approximately 9% and includes consolidated net operating expense reported for RadQual of \$304,430 and non-controlling member interest expense of \$82,223, for the six months ended June 30, 2020, compared to consolidated net operating expense of \$277,081 and non-controlling member interest expense of \$179,593, for the six months ended June 30, 2020. Net income for this segment for the six-month period ended June 30, 2020, decreased to \$302,357, approximately 8%, from \$328,743 for the same six-month period in 2019.

Radiological Services. Revenue from all radiological services for the six months ended June 30, 2020 was \$116,288, compared to \$805,406, for the same period in 2019, a decrease of \$689,118 or approximately 86%. The majority of our revenue in this segment has been generated by the performance of activities in connection with contracts for the DOE and the International Atomic Energy Agency (IAEA) to support recovery of disused sources and removal of certain devices. The decrease in the revenue for the period comparison is the result of the DOE cancelling and putting on hold all contracts related to this type of work. The Company plans to suspend these activities going forward.

On May 2, 2019, the Company's radiological services team was involved in a contamination event involving a breached cesium-137 source at an off-site location in the state of Washington. This work was being performed under a contract with the DOE. The Company supported the initial onsite contamination clean-up operations at that location and completed removal of the cesium source Company equipment. The Company has reviewed the results of the DOE investigation into this event and has implemented appropriate corrective actions. Since August 2019 the DOE has assumed full control of the ongoing cleanup operations and has assumed all of the financial obligations associated with the contractors hired to carry out all of the facility recovery operations. Under the terms of the contract the Company believes it should be indemnified from financial liability for this event by the DOE under the Price Anderson Amendments Act (PAAA) and the Company has formally requested the DOE to provide indemnification under the PAAA.

The Washington Department of Health (DOH) issued a Notice of Violation to the Company in May 2020 citing two violations of the Company's reciprocity license in the State of Washington. Also, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of the Company's radiological safety program and issued a Notice of Violation in June 2020 citing two different violations of the Company's NRC materials license. The Company has requested and completed Predecisional Enforcement Conferences with the Washington DOH and the NRC and has provided the agencies with information on all corrective actions completed by the Company to prevent reoccurrence. The Company is awaiting the results of deliberations by Washington DOH and NRC on these matters and their respective decisions for any further actions or the imposition of a civil penalty against the Company. In addition to the costs and expenses identified above, in the event the Washington DOH Notice of Violation results in the imposition of a civil penalty against the Company, based upon consultation with legal counsel, the Company reasonably believes such civil penalty falls within the parameters for indemnification of the Company under the PAAA. It is not possible at this time to predict the timing or outcome of these matters or to estimate a potential amount of loss, if any.

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 will continue through the remainder of 2020 and the Company will see a steady decline in revenue from this service as production is wrapped up. We plan to convert the spaces in the facility that had been used to perform this contract work into expanded Nuclear Medicine 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.

Cost of sales for the six months ended June 30, 2020, was \$33,339, as compared to \$352,196, for the same period in 2019. Gross profit for this segment for the six months ended June 30, 2020 was \$82,949, compared to \$453,211, reported for the same period in 2019. The decrease in gross profit of \$370,262, or approximately 82%, is the result of the decrease in service contracts completed and reported in this segment for the six months ended June 30, 2020, as compared to the same period in 2019. Operating expense for the six months ended June 30, 2020 was \$111,410 as compared to \$155,480, reported for the same period in 2019. This decrease of \$44,070, or approximately 28%, is the result of decreased sales and activity within the business segment.

Net loss for this segment for the six months ended June 30, 2020 was \$28,461, compared to net loss of \$589,955, for the same period in 2019. This is a decrease in net loss of \$561,494, or approximately 95% and is the result of net other expenses incurred in the six months ended June 30, 2019 of \$887,686 associated with clean-up operations related to the May 2, 2019 contamination event as noted above.

Fluorine Products. For the six months ended June 30, 2020, we had revenues related to Fluorine Products of \$160,500. These revenues were related to an agreement to provide engineering and technical assistance services related to our fluorine products intellectual property. There was no revenue to report from the fluorine products segment for the six months ended June 30, 2019. During the six months ended June 30, 2020, we incurred \$74,090 of expense related to items in support of future planning and design for the proposed de-conversion facility, as compared to \$77,422 for the same six-month period in 2019. This is a decrease of 4% 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, 2020, we had cash and cash equivalents of \$831,359 as compared to \$575,422 at December 31, 2019. This is an increase of \$255,937 or approximately 44%. For the six months ended June 30, 2020, net cash provided by operating activities was \$415,918 and for the six months ended June 30, 2019, net cash used in operating activities was \$114,905. The increase in cash provided by operating activities and increase in cash and cash equivalents at period end in the period-to-period comparison is the result of decreases in changes to inventory, account payable, and cash as a result of the our modification of our Cobalt supply agreement with DOE as discussed below.

Inventories at June 30, 2020 totaled \$1,298,668, and inventories at December 31, 2019 totaled \$3,423,420. A significant amount of our inventory consists of work-in-process cobalt raw material held at the ATR located outside of Idaho Falls, Idaho. Work in process includes costs to irradiate cobalt-60 material under a contract with the DOE. This material has been placed in the ATR and the Company made progress payments to purchase this material. During the second quarter of 2020, the Company modified its agreement with the DOE due to delays in delivery of Cobalt material. As a result, the DOE refunded certain payments made by INIS in relation to this material and INIS stopped paying the scheduled payments for the inventory. During the six months ended June 30, 2020 work in process was reduced by \$2,050,100 from a \$918,090 cash refund from the DOE and a reduction of accounts payable of \$1,132,010.

At June 30, 2020, this raw cobalt material inventory accounted for approximately 78% of our work-in-process inventory. At December 31, 2019, this in-process raw material inventory accounted for approximately 89% of our work in process inventory. We periodically evaluate the carrying value of our raw materials to determine their future market value to the Company. In the six months ended June 30, 2020 we recorded an impairment of \$18,583 for raw cobalt material due to activity loss.

Cash used in investing activities was \$1,565 for the six months ended June 30, 2020, and cash used in investing activities was \$23,177 for the same period in 2019. The cash used for the six months ended June 30, 2020, and for the same period in 2019, was for the purchase of equipment.

Financing activities used cash of \$155,352, during the six months ended June 30, 2020, and cash used by financing activities for the same period in 2019 was \$239,629. During the six months ended June 30, 2020, cash paid for interest was \$65,536 and during the same six-month period in 2019, cash paid for interest was \$86,388. Additionally, during the six months ended June 30, 2020, we received \$10,273 in proceeds from the sale of our common stock through our Employee Stock Purchase Plan, as compared to \$3,438 for the same period in 2019.

In February 2020, the Company paid its second annual dividend on the Series C Preferred Stock. Dividends payable totaled \$251,280. 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 3,408,000 shares of common stock in lieu of a dividend payment of \$204,480. The remaining \$46,800 of dividend payable was settled with cash.

Total increase in cash for the six-month period ended June 30, 2020, was \$259,001 compared to a cash decrease of \$377,711 for the same period in 2019.

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, especially in light of the market volatility and uncertainty as a result of the COVID-19 outbreak.

At June 30, 2020, there were 50,090,000 outstanding warrants to purchase our common stock. Included in this number are 17,165,000 Class M Warrants issued February 17, 2017, with an exercise price of \$0.12 per share and an expiration date of February 17, 2022; and, 2,925,000 Class N Warrants issued May 12, 2017, with an exercise price of \$0.10 per share and an expiration date of May 12, 2022; and, 30,000,000 Class O Warrants issued December 30, 2019, with an exercise price of \$0.045 and an expiration date of December 30, 2024.

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 connection with the 2013 Promissory Note, each of the two lenders was issued 5,000,000 Class L warrants to purchase shares of our common stock at an exercise price of \$0.06 per share. The warrants were immediately exercisable. In June 2014, we renegotiated the terms of the 2013 Promissory Note. Pursuant to the modification, the maturity date was extended to December 31, 2017 and each lender was granted an additional 7,500,000 Class L warrants to purchase shares of our common stock at an exercise price of \$0.06 per share. The warrants were immediately exercisable. In February 2017, the 2013 Promissory Note was further modified to extend the maturity date to December 31, 2020, with all remaining terms unchanged. On December 23, 2018, all 25,000,000 Class L warrants expired. In December 2019, the 2013 Promissory Note was further modified to extend the maturity date to December 31, 2021, with all remaining terms unchanged.

At June 30, 2020, accrued interest payable on the 2013 Promissory Note totaled \$196,734.

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.

At June 30, 2020, accrued interest on the 2018 Promissory Note totaled \$15,770.

In December 2019, we entered into a promissory note agreement with our Chief Executive Officer, Chairman of the Board, former Chairman of the Board, and one of our major shareholders (the 2019 Promissory Note). The 2019 Promissory Note authorizes us to borrow up to \$1,000,000. As of December 31, 2019, we had borrowed \$675,000 under the 2019 promissory note. In February 2020, we borrowed an additional \$325,000. The 2019 Promissory Note is secured and bears interest at 4% per annum and has a maturity date of December 31, 2022. According to the terms of the 2019 Promissory Note, at any time, a holder of the 2019 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 connection with the 2019 Promissory Note, we issued 30,000,000 Class O Warrants to purchase shares of our common stock at \$0.045 per share (the Class O Warrants). The warrants are exercisable at an exercise price of \$0.045 per share and have a term of five years. At March 31, 2020, accrued interest on the 2019 Promissory Note totaled \$19,131.

On April 23, 2020, we, through our wholly-owned subsidiary entered into a Loan Agreement and Promissory Note (collectively the “SBA Loan”) with KeyBank National Association pursuant to the Paycheck Protection Program (the “PPP”) under the recently enacted Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”) administered by the U.S. Small Business Administration (the “SBA”). We received total proceeds of \$495,500 from the SBA Loan. The SBA Loan is scheduled to mature on April 22, 2022 and has a 1.00% interest rate and is subject to the terms and conditions applicable to loans administered by the SBA under the CARES Act. The SBA Loan may be prepaid at any time prior to maturity with no prepayment penalties.

The SBA Loan contains customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. Subject to certain conditions, the SBA Loan may be forgiven in whole or in part by applying for forgiveness pursuant to the CARES Act and the PPP. The amount of loan proceeds eligible for forgiveness is based on a formula based on a number of factors, including the amount of loan proceeds used by the Company during the twenty-four week period after the loan origination for certain purposes, including payroll costs, interest on certain mortgage obligations, rent payments on certain leases, and certain qualified utility payments, provided that, among other things, at least 60% of the loan amount is used for eligible payroll costs, the employer maintaining or rehiring employees and maintaining salaries at certain level.

As of June 30, 2020, we have used the entire loan proceeds to fund qualifying expenses. As a result, we believe that we have met the PPP eligibility criteria for forgiveness and have concluded that the loan represents, in substance, a government grant that is expected to be forgiven. As such, in accordance with IAS 20 “Accounting for Government Grants and Disclosure of Government Assistance”, we have recognized the entire loan amount as Other Income at June 30, 2020.

We do not anticipate taking any action that would cause any portion of the loan to be ineligible for forgiveness. However, to the extent that any amount is deemed unforgivable, such amount is payable over two to five years at an interest rate of 1%, with a deferral of payments for the first six months.

OFF-BALANCE SHEET ARRANGEMENTS

As of June 30, 2020, we had no off-balance sheet arrangements or obligations.

CRITICAL ACCOUNTING POLICIES

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

A description of the Company's critical accounting policies 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, 2019, filed with the SEC on March 30, 2020.

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, 2020, 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, 2020.

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 March 31, 2020 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

From time to time, the Company has been and may again become involved in legal proceedings arising in the ordinary course of business. Except as set forth below, the Company is not a party to any legal proceedings that it believes to be material and the Company is not aware of any pending or threatened litigation against us that it believes could have a material adverse effect on its business, operating results, financial condition, or cash flows.

As previously disclosed, on May 2, 2019, the Company's radiological services team was involved in a contamination event involving a breached cesium-137 source at an off-site location in the State of Washington. This work was being performed under a contract with the U.S. Department of Energy (DOE). The Company supported the initial onsite contamination clean-up operations at that location and completed removal of the cesium source Company equipment. The Company has reviewed the results of the DOE investigation into this event and has implemented appropriate corrective actions. Since August 2019, the DOE has assumed full control of the ongoing cleanup operations and has assumed all of the financial obligations associated with the contractors hired to carry out all of the facility recovery operations. Under the terms of the contract, the Company believes it should be indemnified from financial liability for this event by the DOE under the Price Anderson Amendments Act (PAAA) and the Company has formally requested the DOE to provide indemnification under the PAAA. While the DOE's review of the request is still underway, the Company believes that a determination of indemnification under the PAAA is probable. Such indemnification would allow the Company to recoup all its costs associated with this contamination event.

In connection with the contamination event, on May 14, 2020, the Washington Department of Health (DOH) issued a Notice of Violation to the Company citing two violations of the Company's reciprocity license in the State of Washington. Also, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of the Company's radiological safety program, and on June 22, 2020, the NRC issued a Notice of Violation to the Company citing two different violations of the Company's NRC materials license. The Company has requested and completed Predecisional Enforcement Conferences with the Washington DOH and the NRC, and has provided the agencies with information on all corrective actions completed by the Company to prevent reoccurrence. The Company is awaiting the results of deliberations by the Washington DOH and NRC on these matters and their respective decisions for any further actions or the imposition of a civil penalty against the Company. It is not possible at this time to predict the timing or outcome of these matters or to estimate a potential amount of loss, if any. In addition, in the event the Washington DOH Notice of Violation

results in the imposition of a civil penalty against the Company, based upon consultation with legal counsel, the Company reasonably believes such civil penalty falls within the parameters for indemnification of the Company under the PAAA.

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, 2019.

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	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)).
10.1	Loan Agreement and Promissory Note, effective April 22, 2020, between International Isotopes Idaho Inc. and KeyBank National Association (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on April 20, 2020).
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	The following financial statements, formatted in XBRL: (i) Unaudited Condensed Consolidated Balance Sheets as of June 30, 2020 and December 31, 2019, (ii) Unaudited Condensed Consolidated Statements of Operations for the three and six months ended June 30, 2020 and 2019, (iii) Unaudited Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2020 and 2019 and (iv) Notes to Unaudited Condensed Consolidated Financial Statements.*

* 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 14, 2020

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