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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**FORM 10-K**

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

For the fiscal year ended December 31, 2022

or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number: 000-22923

**INTERNATIONAL ISOTOPES INC.**

(Exact name of registrant as specified in its charter)

**Texas**

(State or other jurisdiction of incorporation or origination)

**74-2763837**

(IRS Employer Identification No.)

**4137 Commerce Circle  
Idaho Falls, Idaho**

(Address of principal executive offices)

**83401**

(Zip code)

**(208) 524-5300**

(Registrant's telephone number, including area code)

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

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

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COMMON STOCK, \$.01 PAR VALUE  
(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

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. (Check one):

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 has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to § 240.10D-1(b).

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the average bid and asked price of such common equity at June 30, 2022, the last business day of the registrant's second fiscal quarter, was approximately \$50 million. For purposes of this calculation, all directors and executive officers of the registrant and holders of 10% or more of the registrant's common stock are assumed to be affiliates. This determination of affiliate status is not necessarily conclusive for any other purpose.

As of March 3, 2023, the number of shares outstanding of the registrant's common stock, \$.01 par value, was 514,992,771 shares.

#### DOCUMENTS INCORPORATED BY REFERENCE

Certain information called for in Part III of this Annual Report on Form 10-K is incorporated by reference from the registrant's definitive proxy statement for the 2023 annual meeting of shareholders, which will be filed with the Securities and Exchange Commission not later than 120 days after the registrant's fiscal year ended December 31, 2022.

INTERNATIONAL ISOTOPES INC.

FORM 10-K

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## Cautionary Note Regarding Forward-Looking Statements

*This Annual Report on Form 10-K (the “Annual 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 Annual Report are forward-looking. Words such as: “anticipates,” “believes,” “should,” “expects,” “future” and “intends” and similar expressions identify forward-looking statements. In particular, statements regarding: financial condition, operating results and liquidity, future cash flow from operations, our ability to achieve profitability, the expected growth in business segment revenues, our expansion into new markets, the ability of our products to compete with several larger companies and products, the results of market studies used to support our business model, our anticipated improvement in economic conditions, the expected increased revenue resulting from sales of our U.S. Food and Drug Administration (FDA)-approved sodium iodide product, our ability to continue cobalt-60 production, the status of our proposed uranium de-conversion facility, and the sufficiency of our available cash and revenues from operations to meet our operating needs, are forward-looking. 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 Annual Report. Certain risks and uncertainties that could cause actual results to differ significantly from management’s expectations are described in the section entitled “Risk Factors” in this Annual Report. That section, along with other sections of this Annual Report, describes some, but not all, of the factors that could cause actual results to differ significantly from management’s expectations. We do not intend to publicly release any revisions to these forward-looking statements that may be made 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 other reports that we file from time to time with the Securities and Exchange Commission (the “SEC”).*

## PART I

### Item 1. BUSINESS

#### General Business and Products Description

International Isotopes Inc. (the “Company”, “we”, “us” and “our”) produces an FDA approved generic sodium iodide I-131 drug product, manufactures a wide range of nuclear medicine calibration and reference standards, provides radiochemicals for clinical research and life sciences, and produces a variety of cobalt-60 products for medical, research, and industrial applications.

We were formed as a Texas corporation in 1995. Our wholly-owned subsidiaries are International Isotopes Idaho Inc., a Texas corporation; International Isotopes Fluorine Products, Inc., an Idaho corporation; International Isotopes Transportation Services, Inc., an Idaho corporation; RadQual, LLC, a limited liability company (RadQual); and TI Services, LLC, a limited liability company (TI Services). Our core business consists of four reportable segments which include: Radiochemical Products, Cobalt Products, Nuclear Medicine Standards, and Fluorine Products.

During 2022, we focused our efforts on achieving profitability in each of our core business segments and reached several significant goals. During 2022, we:

- Increased company revenues by 16%.
- Reached \$11.2 million in total revenues which was the largest single year in company history.
- Increased sales in the Radiochemical segment by 41% primarily through increases in sales of our FDA approved generic sodium iodide I-131 drug product.
- Completed the sale of unused assets for \$4.0 million in cash and for a gain of \$1.8 million.
- Developed several new products for our Nuclear Medicine products segment and expanded our range of products in this segment into Positron Emission Tomography (PET) imaging standards.
- Expanded sales of our nuclear medicine products through exercising our management opportunity with RadQual, LLC (RadQual). In particular, we increased our international sales by utilizing the marketing and distribution expertise of our wholly owned subsidiary TI Services; and
- Continued to pursue viable opportunities to obtain government or commercial contracts for depleted uranium de-conversion services for our U.S. Nuclear Regulatory Commission (NRC) licensed de-conversion project in Lea County, New Mexico.

In 2023, we plan to continue efforts to further expand and improve upon our operations in our core business segments. We intend to continue to invest in these segments and work to pursue product development, reduce production costs, and expand sales in each of our segments. The following paragraphs provide a brief description of each of our business segments. Certain financial information with respect to each of our business segments, including revenues from external customers, a measure of profit or loss, and total assets, is set forth in Note 15 to our Consolidated Financial Statements which begin on page F-7.

#### Radiochemical Products

This segment includes the production and distribution of various isotopically pure radiochemicals for medical, industrial, and research applications. These products are either directly produced by us or are purchased in bulk from other producers and distributed by us in customized packages and chemical forms tailored to meet customer and market demands. In February 2020, we received FDA approval of our ANDA for our generic sodium iodide I-131 drug product. Our generic sodium iodide drug product is the only generic product of this type manufactured in the U.S. and offers customers an attractive domestic alternative to the single existing foreign commercial drug manufacturer. We have two suppliers of sodium iodide I-131 from whom we purchased material during 2021 and 2022 to produce this product in the most reliable manner possible.

#### Cobalt Products

Our cobalt products segment includes the production of bulk cobalt (cobalt-60), fabrication of cobalt capsules for radiation therapy as well as various industrial applications, and recycling of expended cobalt sources.

The year-over-year demand for cobalt products has remained strong as a result of the introduction of several new types of cobalt therapy units and we have continued to see demand for cobalt-manufactured products for those devices. We have explored, and intend to continue to explore, opportunities to further develop cobalt products and sales on an on-going basis. The production, use, transport, and import/export of these products are all heavily regulated, but we have developed an experienced staff of technicians, shipping specialists, and supervisors as part of our efforts to comply with the regulations and support cost effective, timely delivery of these products.

At the present time, we are the sole purchaser of high activity cobalt from any of the DOE reactors in the U.S. There are a few other cobalt source manufacturers in North America. We believe both our product and service provide us with a competitive edge in competing with these other manufacturers.

#### Nuclear Medicine Standards

This segment consists of the manufacture of sources and standards associated with Single Photon Emission Computed Tomography (SPECT) and Positron Emission Tomography (PET) imaging, patient positioning, and calibration or operational testing of dose measuring equipment for the nuclear pharmacy industry. Our nuclear medicine standards products include flood sources, dose calibrators, rod sources, flexible and rigid rulers, spot markers, pen point markers, and a host of specialty design items. These products are manufactured and distributed by our wholly-owned subsidiary, RadQual. In July 2021, we purchased the remaining 75.5% interest of RadQual. Prior this purchase we were one of two managing members of RadQual and had significant influence in management decisions with regard to RadQual's business operations. Following the July 2021 acquisition, we have now fully consolidated the income and expenses from both RadQual LLC and TI Services.

There are over 5,000 nuclear medicine centers in the United States (U.S.) that require nuclear medicine products on a regular repeat basis. We have been manufacturing these products for RadQual since 2001. Most nuclear medicine product sales are to U.S. customers. However, in recent years, because of stronger marketing efforts, we have seen an increase in foreign sales, as shown in Note 14 to the accompanying audited financial statements. All these products contain radioactive isotopes that decay at a predictable rate. Therefore, customers are required to periodically replace most of these products when they reach the end of their useful lives. The useful life of these products varies depending on the isotope used in manufacture, but in most cases averages eighteen months to two years. Most of the isotopes used in manufacturing these nuclear medicine products are available from various sources world-wide and we are not dependent on a single supplier. In addition to the products themselves, we have developed a complete line of specialty packaging for the safe transportation and handling of these products.

This segment now includes source disposal activities that were previously reported in the discontinued Radiological Services business segment.

#### Radiological Services

We discontinued separate reporting of activities of our Radiological Services business segment.

The Radiological Services business segment included field services, gemstone processing, and source disposal. As the Company is no longer engaged in field services and gemstone processing, which previously made up the substantial portion of activities of this segment, separate reporting of this segment has been discontinued. Spaces and resources previously used to perform these discontinued business activities have been allocated to our other business segments. The loss of revenue from these activities has been more than compensated for by the expansion of sales in our Radiochemical products segment and expected expansion of sales in our Nuclear Medicine Standards segment. The Company continues to engage in source disposal activities and has begun reporting these activities under the Nuclear Medicine Standards segment starting January 1, 2022.

#### Fluorine Products and the Planned Uranium De-Conversion Facility

We established the fluorine products business segment in 2004 to support production and sale of various fluoride gases produced using our Fluorine Extraction Process (FEP). FEP was intended to be completed in conjunction with the operation of a proposed depleted uranium (DUF6) de-conversion facility in Lea County, New Mexico. DUF6 is the waste by-product of uranium enrichment, and any uranium enrichment facility will create very large quantities of DUF6. In October 2012, we received a construction and operating license from the NRC for the planned facility. Changes in the nuclear industry near the end of 2013, however, significantly reduced commercial demand for this type of facility. Therefore, we suspended all further development work on the project. We still anticipate a potential future need for a depleted uranium conversion facility and, therefore, we are keeping all licenses and permits current.

In connection with the proposed de-conversion facility, Lea County, New Mexico transferred property to us under the provisions of the New Mexico Local Economic Development Act, Project Participation Agreement (PPA) as a location for construction of the facility. Under the original agreement, we were obligated to meet certain performance objectives for construction start and staffing levels. Because of the project delay we did not meet those objectives. We plan to continue to work with Lea County to execute a modification to the agreement at some future point should the project move forward. If we do not extend or modify the commitment dates in a modified agreement then we may either purchase or re-convey the property to Lea County, New Mexico. If we do not retain title to the property, it could have a material adverse impact on future plans for the project.

#### **Industry Overview, Target Markets, and Competition**

The industries and markets that require or involve the use of radioactive material are diverse. Our current core business operations involve products that are used in a wide variety of applications and in various markets. The following provides an explanation of the markets and competitive factors affecting our current business segments.

#### Nuclear Medicine Standards

Calibration and reference standards are required for the daily operational checks and calibration of the measurement of SPECT and PET imaging devices frequently used in nuclear medicine. Calibration and quality assurance testing are required as a routine part of the normal operations of this equipment to ensure its reliability and accuracy. For years, we have been the exclusive manufacturer of RadQual reference standard products. As RadQual is now our wholly-owned subsidiary, we continue to sell these same RadQual products through distributors who make direct sales in the U.S. and internationally. We directly ship these products to all 50 states and many overseas locations. There is only one other major producer of these products in the world that competes directly with us for these products. Most of the products manufactured by our

competitor are similar in design to our products because all must meet Original Equipment Manufacturer (OEM) dimensional and performance standards. However, we attempt to differentiate our products from our competitor's products through increased levels of quality control and customer service. We are certified under ISO-9001:2015 and ISO-13485-2016 quality programs that have allowed us to start selling these products into several foreign countries that require this additional quality certification for manufacturers. We use a small number of suppliers for the isotopes and other materials used in manufacturing these nuclear medicine products, but if we were to lose any of these suppliers, in most cases other suppliers would be available. We are also working to expand the number and types of products that are manufactured in this segment and expand our raw product qualified suppliers

### Cobalt Products

In 2014, we entered into a new 10-year agreement with the DOE utilizing a new cobalt target design for high activity cobalt production. Because of the lengthy irradiation time required we initially anticipated that cobalt shipments to customers would resume in late 2018. However, due to delays in the ATR operating schedule we were not able to take our first shipment of these targets until March 2020. Due to lower than desired activity rates in the material, we bought the remaining low activity targets at a discounted rate. There is a high demand for lower activity cobalt. We have taken shipment of and sold this material throughout 2021 and 2022 and will continue to have supply for at least two more years. We are now working with the DOE on future purchases of both high and low activity cobalt. Our cobalt products are used in applications such as radiation therapy, security devices, radiography examination and in some commercial applications. While there are other technologies available to provide external radiation therapy, there are several new devices just gaining market approval that still depend on cobalt sources for their specialized applications. There are currently no other producers of high specific activity cobalt in the U.S., however, there are producers of high specific activity material in Canada and several other countries. In addition to us, there is only one other company in the U.S. currently licensed to handle large quantities of cobalt.

There has been a significant increase in regulation by the NRC in recent years that has created a significant barrier to new entrants to this market. We expect steady demand for cobalt sealed source products over the next several years but are primarily dependent upon our contract relationship with the DOE for a large portion of our cobalt production supply. An interruption in the operation of the ATR could have a negative impact on our cobalt products business segment.

### Radiochemical Products

In February 2020, our ANDA for a generic radiochemical sodium iodide drug product was approved by the FDA. This product is approved for use in treatment of hyperthyroidism and carcinoma of the thyroid and is the first and only generic sodium iodide I-131 product approved by the FDA in the U.S. and only generic product of this type manufactured in the U.S. The only other supplier to the U.S. of an FDA approved sodium iodide product comes from a foreign manufacturer.

Since the launch of this drug product in 2020, the corresponding sales have had a significant positive impact on our revenues in 2021 and 2022. We expect this significant growth in sales for this product to continue in 2023 and beyond. We are also considering other generic drug opportunities and plan to expand the range of FDA approved products offered within this business segment in the coming years.

We also supply radiochemical products in bulk form. The markets for most radiochemicals can be highly competitive. The target markets for these products are customers who (1) incorporate them into finished industrial or medical devices; (2) use radioisotope products in clinical trials for various medical applications; or (3) further process and include the radioisotope products into pharmaceutical products approved by the U.S. FDA for labeled use in therapy or imaging.

In February 2022, we sold the improvements and equipment in an expansion that had been constructed to our manufacturing facility for cGMP processing. Using the capital from this sale, we are currently developing a business plan and exploring other opportunities that support our current radiopharmaceutical product, produce additional radiopharmaceutical products or explore new contract manufacturing opportunities. We believe that we are uniquely qualified and have a competitive advantage for future opportunities because we have a unique combination of NRC licensing, GMP compliant operating facility, and trained personnel.

### Fluorine Products and the Planned Depleted Uranium De-Conversion Facility

Our Fluorine Products segment was developed in conjunction with uranium de-conversion to take advantage of the anticipated need for depleted uranium de-conversion services. During 2013, we curtailed all further work on the de-conversion facility because of a lack of demand for uranium de-conversion services at that time. However, we believe that in the future

there will be a demand for this service to address still growing stockpiles of depleted UF<sub>6</sub>. When that demand occurs, we believe the groundwork we have completed on the depleted uranium de-conversion and fluorine extraction project should put us in a strong position to take advantage of the NRC license that has already been issued for this facility and should serve to justify the financial investment in this uranium de-conversion project in the future.

## **Government Regulation**

### *Licensing*

We currently operate under two NRC licenses, one for broad scope operations and another for exempt distribution. Our broad scope license covers calibration and reference standard manufacturing and distribution, radioisotope processing and distribution, large scale cobalt processing and recycle operations, radioactive gemstone processing, environmental sample analysis, certain field service activities, and research and development. The exempt distribution license permits the release and distribution of irradiated gemstones to unlicensed entities in the U.S. All of our existing licenses and permits are adequate to allow current business operations. We do not handle “special nuclear materials” (i.e. nuclear fuels and weapons grade uranium, thorium or plutonium); therefore, our facility is not designated as a “nuclear” facility that would require additional licensing.

As a condition of our NRC licenses in Idaho, we are required to provide financial assurance for decommissioning activities. We fulfill this license requirement with a surety bond which names the NRC as beneficiary and is supported by a restricted cash account held in trust by a third party. Similar financial assurances will be required to fund the decommissioning of the proposed de-conversion facility.

In October 2012, we were granted a 40-year construction and operating license by the NRC for our planned depleted uranium de-conversion and fluorine extraction processing facility (the “de-conversion facility”). The de-conversion facility is planned to be located in Lea County, New Mexico. Further engineering work on the proposed de-conversion facility was placed on hold in 2013 until additional contracts for utilization could be obtained. There is no specific timeline required by the NRC for the start of construction on this project. The majority of the pre-construction design, licensing and state permitting has already been completed for the project and a ground water permit from the state of New Mexico remains to be obtained before the plant could begin operation.

### *Regulation of Radioisotope Production Waste*

All our manufacturing processes generate some radioactive waste. We must handle this waste pursuant to the Low-Level Radioactive Waste (LLRW) Policy Act (LLRW Act), which requires the safe disposal of mildly radioactive materials. The estimated costs for storage and disposal of these materials have been included in the manufacturing and sales price of our products. However, actual disposal costs are subject to change at the discretion of the disposal site and are ultimately applied at the time of disposal. We have obtained all necessary permits and approvals for the disposal of our waste materials, and we do not anticipate any negative changes in capacity or regulatory conditions that would limit or restrict our waste disposal capabilities.

### *Nuclear Regulatory Commission Oversight*

We operate under two NRC licenses and are subject to NRC oversight and periodic inspections of our operations.

### *Other Regulations*

We are registered as a medical device manufacturer through the FDA for several of our nuclear medicine reference and calibration standards. We are registered with the U.S. Department of Transportation (DOT) for the shipment of radioactive materials. We also have an NRC license for the import and export of radioactive materials. Because of increasing security controls and regulations, it is likely that we may encounter additional regulations affecting transportation, storage, sale, and import/export of radioactive materials.

We are also subject to inspection by the FDA to manufacture our sodium iodide I-131 product in compliance with our ANDA for sodium iodide I-131 and all applicable cGMP requirements for this and other contract manufactured products. We are registered with the FDA as a drug manufacturing facility, and we are subject to periodic and random inspections by the FDA for the continued manufacture of drug products.



We are subject to government regulation and intervention both in the U.S. and in all foreign jurisdictions in which we conduct business. Compliance with applicable laws and regulations results in higher capital expenditures and operating costs and changes to current regulations with which we must comply can necessitate further capital expenditures and increases in operating costs to enable continued compliance.

#### *Environmental Compliance*

We are subject to various federal, state, local and foreign government requirements regulating the discharge of materials into the environment or otherwise relating to the protection of the environment. These laws and regulations include, but are not limited to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA) and state statutes such as the Idaho Hazardous Waste Management Act, the LLRW Policy Act, NRC regulations concerning various irradiated, radioactive, and depleted uranium materials, and U.S. DOT regulations concerning shipment of radioactive materials. Certain of these laws and regulations can impose substantial fines and criminal sanctions for violations and require installation of costly equipment or operational changes to limit emissions and/or decrease the likelihood of accidental hazardous substance releases. We have incurred, and expect to continue to incur, capital and operating costs to comply with these laws and regulations. In addition, changes in laws, regulations and enforcement of policies, or the imposition of new clean-up requirements or remedial techniques, could require us to incur costs in the future that would have a negative effect on our financial condition or results of operations.

#### **Distribution Methods for Products**

We sell our products directly to our customers who, in some cases, are both end users and distributors. We use common commercial carriers for delivery of our products.

#### **Dependence on Customers**

Historically, we had been dependent on one customer, RadQual, of which we owned 24.5%, for a significant amount of our gross revenue. In July 2021, we purchased the remaining 75.5% of the ownership interest in RadQual, making it a wholly-owned subsidiary. Our sales to RadQual for 2021 accounted for approximately 28% of our total gross revenue for that year. The change in ownership of RadQual has substantially eliminated any risks associated with having RadQual as a single major customer.

Combined sales, on which we are dependent, to our three largest customers, accounted for 23% of our total gross revenues in 2022 and accounted for 17% of our total gross revenues in 2021.

#### **Patents, Trademarks, Licenses and Royalty Agreements**

In 2004, we obtained certain patents related to the FEP. In 2010, we were granted an additional process patent on the FEP process. During 2012, we were granted additional process patents for the FEP process in the United States.

In May 2021, we entered into an exclusive licensing agreement with Memorial Sloan-Kettering Cancer Center (MSKCC) for commercial development of a Radioimmuno Assay (RIA) test kit for the detection of SARS COVID-19 virus in the blood. A patent application for this test kit was submitted to the U.S. patent office in March 2021. The useful application and commercial viability of this opportunity will continue to be evaluated, however, at the present time we do not plan commercial development of this product but may pursue other related commercial opportunities.

#### **Employees**

As of December 31, 2022, we had 33 total employees, including 32 full-time employees.

## Available Information

Our internet website address is [www.intisoid.com](http://www.intisoid.com). We are subject to the reporting requirements under the Securities Exchange Act of 1934, as amended (the Exchange Act). Consequently, we are required to file reports and information with the SEC, including Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. These reports and other information concerning us are available free of charge through (i) our website as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC, and (ii) the SEC's website at [www.sec.gov](http://www.sec.gov). Information contained on, or accessible through, our website is not incorporated by reference into this Annual Report or other reports filed with the SEC.

## Item 1A. RISK FACTORS

*Readers should carefully consider the following factors that may affect our business, future operating results and financial condition, as well as other information included in this Annual Report. The risks and uncertainties described below are not the only ones the Company faces. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations. If any of the following risks occur, our business, financial condition and operating results could be materially adversely affected.*

### Risks Related To Our Company

***We have incurred, and may continue to incur, losses.*** We have incurred net losses for most fiscal periods since our inception. From inception through December 31, 2022, we have an accumulated deficit (including preferred stock dividends and returns) in the amount of \$126,460,843. The negative cash flow we have sustained has materially reduced our working capital, which in turn could materially and negatively impact our ability to fund future operations and continue to operate as a going concern. Management has taken and continues to take, actions to improve our financial condition and results of operations. The availability of necessary working capital, however, is subject to many factors beyond our control, including, among other things, our ability to obtain financing on favorable terms, or at all, economic cycles, market acceptance of our products, competitors' responses to our products, the intensity of competition in our markets, and the level of demand for our products.

***We may need additional financing to continue operations.*** Because we may continue to experience negative cash flow, we may need to obtain additional financing to continue operations. Management will continue to plan and take actions to improve our financial results which could enhance our ability to obtain financing. However, obtaining additional financing is subject to many factors beyond our control and may not be available to us on acceptable terms or at all. If we are unable to raise additional funds when needed, we could be required to delay development and construction of projects, reduce the scope of, abandon or sell some or all our growth projects or default on our contractual commitments in the future, any of which would have a material adverse effect on our business, financial condition and operating results.

***Our operations expose us to the risk of material environmental liabilities.*** We are subject to potential material liabilities related to the remediation of environmental hazards and to personal injuries or property damages that may be caused by hazardous substance releases and exposures. The materials used in our operations expose us to risks of environmental contamination that could subject us to liability, including remediation obligations that could be very costly. In addition, the discovery of previously unknown contamination could require us to incur costs in the future that would have a negative effect on our financial condition or results of operations. We have a Surety Bond in place supported by funds in a restricted cash account to provide the financial assurance required by the NRC for our Idaho facility license for decommissioning and a similar mechanism will be required to fund the decommissioning of the proposed new depleted uranium facility. However, if a contamination event occurred within, or outside of, our facility, we may be financially responsible to remediate such contamination and could have to borrow money or fund the remediation liability from our future revenue. We may not be able to borrow the funds, or have available revenue, sufficient to meet this potential liability, which could have a significant negative impact on our financial condition and results of operations.

***We are dependent upon key personnel.*** Our ongoing operations are currently dependent on Steve T. Laflin, President and Chief Executive Officer. The loss of Mr. Laflin could have a material adverse effect on our business. There is no assurance that we will be able to retain Mr. Laflin or our existing personnel or attract additional qualified employees. The loss of any of our key personnel or an inability to attract additional qualified employees could result in a significant decline in revenue.

**General economic conditions in markets in which we do business can impact the demand for our goods and services. Decreased demand for our products and services can have a negative impact on our financial performance and cash flow.** Demand for our products and services, in part, depends on the general economic conditions affecting the countries and industries in which we do business. A downturn in economic conditions in the U.S. or industry that we serve may negatively impact demand for our products and services, in turn negatively impacting our operations and financial results. Further, changes in demand for our products and services can magnify the impact of economic cycles on our businesses.

**Volatility in raw material and energy costs, interruption in ordinary sources of supply and an inability to recover unanticipated increases in energy and raw material costs from customers could result in lost sales or significantly increase the cost of doing business.** Market and economic conditions affecting the costs of raw materials, utilities, energy costs, and infrastructure required for the delivery of our goods and services are beyond our control and any disruption or halt in supplies, or rapid escalations in costs could affect our ability to manufacture products or to competitively price our products in the marketplace. For instance, an interruption in the supply of isotopes such as cobalt-57, cobalt-60, or iodine-131 could result in lost sales of nuclear medicine and calibration standards sales, cobalt product sales, and sodium iodide I-131 generic drug product. We also purchase some of our radiochemical products from overseas suppliers and the price of those products could be adversely affected through changes in currency exchange rates.

**We are subject to extensive government regulation in jurisdictions around the globe in which we do business. Regulations address, among other things, environmental compliance, import/export restrictions, healthcare services, taxes and financial reporting, and can significantly increase the cost of doing business, which in turn can negatively impact our operations, financial results and cash flow.** We are subject to government regulation and intervention both in the United States and in all foreign jurisdictions in which we conduct business. Compliance with applicable laws and regulations results in higher capital expenditures and operating costs and changes to current regulations with which we must comply can necessitate further capital expenditures and increases in operating costs to enable continued compliance. Additionally, from time to time, we may be involved in legal or administrative proceedings under certain of these laws and regulations. Significant areas of regulation and intervention include the following:

**Radioactive Waste.** All our manufacturing processes generate some radioactive waste. For waste that cannot be decayed in storage we must handle this waste pursuant to the LLRW Policy Act, which requires the safe disposal of mildly radioactive materials. The estimated costs for storage and disposal of these materials have been included in the manufacturing and sales price of our products. However, actual disposal costs are subject to change at the discretion of the disposal site and are ultimately applied at the time of disposal. An unexpected or material increase in these costs could have a material adverse effect on our financial condition and results of operations.

**Health Compliance.** Health regulations dictated by the United States Occupational Safety and Health Administration and NRC are extensive in our business. There is no assurance that our activities will comply with all applicable health regulations at times and, as a result, may expose us to liability under applicable health regulations. Costs and expenses resulting from such liability may materially negatively impact our operations and financial condition. Overall, health laws and regulations will continue to affect our business worldwide.

**NRC License Enforcement Actions.** The NRC may take enforcement action in the event that we are found to be in violation of NRC regulations or in violation of any of our license requirements. Consequences of violations depend upon the severity of the violations as well as the adequacy and timeliness of corrective actions implemented by the licensee to investigate and correct the cause of the violation and to prevent reoccurrence. The NRC has discretionary authority in the action they choose to take against license violations, but these actions can include civil penalties and restrictions upon licensee operations or license suspension. The imposition of any such penalties and/or restrictions upon our operations or suspension of our license could have a material adverse effect on our financial condition and results of operations.

**Environmental Regulation.** We are subject to various federal, state, local and foreign government requirements regulating the discharge of materials into the environment or otherwise relating to the protection of the environment. These laws and regulations include, but are not limited to CERCLA, the RCRA and state statutes such as the Idaho Hazardous Waste Management Act, the LLRW Policy Act, NRC regulations concerning various irradiated, radioactive, and depleted uranium materials, and U.S. DOT regulations concerning shipment of radioactive materials. Certain of these laws and regulations can impose substantial fines and criminal sanctions for violations and require installation of costly equipment or operational changes to limit emissions and/or decrease the likelihood of accidental hazardous substance releases. We have

incurred, and expect to continue to incur, capital and operating costs to comply with these laws and regulations. In addition, changes in laws, regulations and enforcement of policies, or the imposition of new clean-up requirements or remedial techniques, could require us to incur costs in the future that would have a negative effect on our financial condition or results of operations.

***Import/Export Regulation.*** We are subject to significant regulatory oversight of our import and export operations due to the nature of our product offerings. Penalties for non-compliance can be significant and violations can result in adverse publicity. Because of increasing security controls and regulations, it is likely that we may encounter additional regulations affecting the transportation, storage, sale, and import/export of radioactive materials.

***Taxes.*** We structure our operations to be tax efficient and to make use of tax credits and other incentives. Nevertheless, changes in tax laws, actual results of operations, final audit of tax returns by taxing authorities, and the timing and rate at which tax credits can be utilized can change the rate at which we are taxed, thereby affecting our financial results and cash flow.

***We may incur material losses and costs as a result of product liability claims that may be brought against us.*** We face an inherent business risk of exposure to product liability claims in the event that products supplied by us fail to perform as expected or such failures result, or are alleged to result, in bodily injury. Although we have purchased insurance with coverage and in amounts that we believe to be adequate and reasonable in light of our current and planned operations, including our planned uranium de-conversion and fluoride gas production business, if a successful product liability claim were brought against us in excess of our available insurance coverage, it would have a material adverse effect on our business and financial results.

***Catastrophic events such as natural disasters, pandemics, war and acts of terrorism could disrupt our business or the business of our suppliers or customers, and any such disruptions could have a negative impact on our operations, financial results and cash flow.*** Our operations are at all times subject to the occurrence of catastrophic events outside our control, ranging from severe weather conditions such as hurricanes, floods, earthquakes and storms, to health epidemics and pandemics, to acts of war and terrorism. Any such event could cause a serious business disruption that could affect our ability to produce and distribute our products and possibly expose us to third-party liability claims. Additionally, such events could impact our suppliers, thereby causing energy and raw materials to become unavailable to us, and our customers, who may be unable to purchase or accept our products and services. Any such occurrence could have a negative impact on our operations and financial condition.

In addition, public health epidemics or outbreaks could adversely impact our business. For example, as a result of the COVID-19 pandemic, we experienced a reduction of sales within our nuclear medicine calibration standards segment and radiochemicals segment during 2021. There was no discernable impact from COVID-19 to our cobalt products business segment during the period. The decrease in sales for 2021 for our nuclear medicine calibration standards segment was the result of the temporary closure of many imaging clinics and suspension of elective or non-essential imaging procedures. During 2021 and 2022, we experienced some global shipping disruption that were partially attributable to the COVID-19 pandemic.

To-date we have not furloughed or terminated any employees as a result of the financial impact of COVID-19. We have seen a limited impact in our raw material supply chain related to the COVID-19. However, from the beginning of 2022, we have experienced an increase in costs for many raw materials and production supplies due to recent cost inflation which have led to increases to costs of goods sold and operating expenses. Although, all segments have been impacted from these cost increases, our nuclear medicine calibration standards segment has been impacted the most. We have seen these increased costs stabilize somewhat; and we are working on counteracting these cost increases with an increase to our produce prices. We believe we can increase our sales prices enough to overcome these cost increases while continuing to maintain and grow our sales.

***Our future growth is largely dependent upon our ability to develop new products that achieve market acceptance with acceptable margins.*** Our businesses operate in global markets that are characterized by rapidly changing technologies and evolving industry standards. Accordingly, our future growth rate depends upon several factors, including, but not limited to, our ability to (i) identify emerging technological trends in our target end-markets, (ii) develop and maintain competitive products, (iii) enhance our products by adding innovative features that differentiate our products from those of our competitors, and (iv) develop, manufacture, and bring products to market quickly and cost-effectively. Our ability to develop new products based on technological innovation or U.S. FDA approval can affect our competitive position and requires the investment of significant resources. These development efforts divert resources from other potential investments in our businesses, and they may not lead to the development of new products on a timely basis or that meet the needs of our customers as fully as competitive offerings. In addition, the markets for our products may not develop or grow as we currently anticipate. The failure of our technologies or products to gain market acceptance due to more attractive offerings by our competitors could significantly reduce our revenues and adversely affect our competitive standing and prospects.

***We are dependent on various third parties in connection with our business operations.*** The production of high-specific activity cobalt is dependent upon the DOE, and its prime-operating contractor, which controls the Idaho reactor. Current activity at the Idaho ATR may continue to affect the supply of cobalt material needed for the manufacture of cobalt sources. Loss of the ability to use, or cost-effectively use, these irradiation services would significantly impact our cobalt products business segment because there is not currently another reactor available in the U.S. that is capable of providing this type of service for us. Our radiochemical iodine is supplied to us through two supply sources. Unanticipated contract terminations by these suppliers or suppliers the key raw materials of our other products or other third parties would have a material adverse impact on our operations, financial results, and cash flow.

***We are dependent on a limited number of customers in connection with some of our current business operations.*** Combined sales to our three top customers accounted for 23% and 17% of our total gross revenue during 2022 and 2021, respectively. Although we are making efforts to reduce our dependency on a small number of customers, the loss of any one of these customers could have a significant impact on our future results of operations and financial condition. Unanticipated contract terminations by any of these current customers could have a material adverse impact on operations, financial results, and cash flow.

***We are subject to competition from other companies.*** Each of our existing business areas has direct competition from other businesses. High-specific activity cobalt is supplied by other reactor facilities around the world. Nuclear medicine calibration and reference standards are being produced by one other major manufacturer in the U.S. We have one major competitor in the U.S. for our sodium iodide I-131 drug product. Most of our radiochemicals are also manufactured by several other companies in the world. Most of our competitors have significantly greater financial resources that could give them a competitive advantage over us.

### **Risks Related To Our Common Stock**

***Trading in our common stock is limited and the price of our common stock may be subject to substantial volatility.*** Our common stock is quoted on the OTCQB Marketplace under the U.S. trading symbol “INIS”. The market for our securities is limited, the price of our stock is volatile, and the risk to investors in our common stock is greater than the risk associated with stock trading on other markets. These factors may reduce the potential market for our common stock by reducing the number of potential investors. This may make it more difficult for investors in our common stock to sell shares to third parties or to otherwise dispose of their shares. This could cause our stock price to decline.

***We currently do not intend to pay dividends on our common stock.*** We do not plan to pay dividends on shares of our common stock in the near future. Consequently, an investor in our common stock can only achieve a return on its investment in us if the market price of our common stock appreciates.

***We are contractually obligated to issue shares in the future, which will dilute your interest in us.*** As of December 31, 2022, there were approximately 16,716,000 shares of common stock issuable upon the exercise of vested stock options, at a weighted-average exercise price of \$.06 per share. An additional 31,942,544 shares were reserved for issuance under our equity plans as of December 31, 2022. Our outstanding preferred stock and certain of our outstanding debt is also convertible into shares of our common stock at the holders’ option. In addition, we expect to issue additional options to purchase shares of our common stock to compensate employees, consultants and directors, and we may issue additional shares to raise capital to expand our manufacturing capability, develop additional products, or fund our planned uranium de-conversion plant. Any such issuance will have the effect of further diluting the interest of the holders of our securities.

### **Item 1B. UNRESOLVED STAFF COMMENTS**

We are a smaller reporting company, and therefore, are not required to provide the information required by this item.

## Item 2. PROPERTIES

We lease one property which serves as our main corporate headquarters and houses all of our current manufacturing operations for our core business segments. We also hold the conditional title to 640 acres of land in Lea County, New Mexico for the proposed de-conversion facility. The following paragraphs provide a brief summary of these properties.

4137 Commerce Circle, Idaho Falls, Idaho – The facility located on this property houses our main corporate headquarters and all of our current manufacturing operations. In January 2020, we entered into a new lease agreement due to new and expanded facilities made available to us. The initial lease term is until January 2030 and provides an option to renew for an additional 5 years. The lease provides for the Company to expand its leased space as needed into additional areas of the building. The facility was new when leased in March 2001 and remains in excellent condition. We have a right of first refusal on this property that allows us to match any offer to purchase this property.

Land - Lea County, New Mexico – In August 2011, we received land from Lea County, New Mexico, pursuant to a PPA, whereby the land was deeded to us for no monetary consideration. In return, we committed to construct a uranium de-conversion and FEP facility on the land. In order to retain title to the property, we were 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. We did not meet the performance milestones set forth in the PPA and we executed a modification to the agreement extending these due dates to December 31, 2016 and 2017, respectively. We plan to work with Lea County to execute an additional modification to the agreement to further extend these dates once an estimated restart date for the project is determined. If we do not succeed in extending the commitment dates or in reaching performance dates set forth in a modified agreement then we may, at our 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. We have 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 our obligations under the agreements for permanent transfer of the title.

## Item 3. LEGAL PROCEEDINGS

We are not a party to any legal proceedings that we believe to be material and we are not aware of any pending or threatened litigation against us that we believe could have a material adverse effect on our business, operating results, financial condition, or cash flows.

## Item 4. MINE SAFETY DISCLOSURES

Not applicable.

## PART II

## Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is traded on the OTCQB under the trading symbol "INIS". The following table shows the high and low prices of our common stock on the OTCQB. The following quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions:

OTC Bulletin Board (Symbol "INIS")

<b>Period</b>	<b>High (US \$)</b>	<b>Low (US \$)</b>
First Quarter 2021	0.34	0.04
Second Quarter 2021	0.15	0.09
Third Quarter 2021	0.14	0.08
Fourth Quarter 2021	0.11	0.06
First Quarter 2022	0.10	0.08
Second Quarter 2022	0.10	0.06
Third Quarter 2022	0.09	0.04
Fourth Quarter 2022	0.07	0.03

## Holders of Record

As of March 11, 2023, there were 490 holders of record of our common stock.

## Dividends

We have never paid any cash dividends on our common stock. In the future, and based upon our profit performance, our Board of Directors (the “Board”) will evaluate and determine whether to issue dividends, subject to compliance and limitations under any applicable debt or other financing agreements in effect at that time or retain funds for research and development and expansion of our business. We do not anticipate paying any dividends to shareholders of our common stock for the foreseeable future.

## Recent Sales of Unregistered Securities; Use of Proceeds from Registered Securities

None.

## Purchases of Equity Securities by the Issuer

None.

## Performance Graph

We are a smaller reporting company, and therefore, are not required to provide the information required by this item.

## Item 6. [RESERVED]

## Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*The following discussion of our results of operations and financial condition should be read in conjunction with the accompanying financial statements and related notes thereto included in Item 8, “Financial Statements and Supplementary Data,” within this Annual Report. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report, including information with respect to our plans and strategies for our business, statements regarding the industry outlook, our expectations regarding the future performance of our business and the other non-historical statements contained herein are forward-looking statements. See “Cautionary Note Regarding Forward-Looking Statements.” You should also review the “Risk Factors” in Item 1A. of this Annual Report for a discussion of important factors that could cause actual results to differ materially from the results described herein or implied by such forward-looking statements.*

### Overview

International Isotopes Inc. (the “Company”, “we”, “us” and “our”) produces an FDA approved generic sodium iodide I-131 drug product, manufactures a wide range of nuclear medicine calibration and reference standards and provides radiochemicals for clinical research and life sciences. The Company also produces a variety of cobalt-60 products and supports clients contract manufacturing of radiopharmaceutical and radiochemical products. A more detailed description of each of these product lines and services along with a description of our business segments can be found in Item 1, “Business” within this Annual Report.

During 2022, we focused our efforts on achieving profitability in each of our core business segments and reached several significant goals. During 2022, we:

- Increased company revenues by 16%.
- Reached \$11.2 million in total revenues which was the largest single year in company history.
- Increased sales in the Radiochemical segment by 41% due to increases in sales of our FDA approved generic sodium iodide I-131 drug product.
- Completed sale of unused assets for \$4.0 million in cash for a gain of \$1.8 million.

- Developed several new products for our Nuclear Medicine products segment and expanded these products into Positron Emission Tomography (PET) imaging standards.
- Expanded sales of our nuclear medicine products through exercising our management opportunity with RadQual, LLC (RadQual). In particular, we increased our international sales by utilizing the marketing and distribution expertise of our wholly owned subsidiary TI Services; and
- Continued to pursue viable opportunities to obtain government or commercial contracts for depleted uranium de-conversion services for our U.S. Nuclear Regulatory Commission (NRC) licensed de-conversion project in Lea County, New Mexico.

As a result of the COVID-19 pandemic, we experienced a reduction of sales within our nuclear medicine calibration standards segment and radiochemicals segment during 2020 and 2021. There was no discernable impact from COVID-19 to our cobalt products business segment during the same period. The decrease in sales for 2020 and 2021 for our nuclear medicine calibration standards segment was the result of the temporary closure of many imaging clinics and suspension of elective or non-essential imaging procedures. In 2022, our sales in most segments recovered and we saw very limited continued negative impact related to COVID-19. The sale of radiochemical products increased during the year 2022; however, we believe the increases in revenue for 2022 for nuclear medicine could have been greater in 2022 were it not for the lingering negative impact of COVID-19 in the first quarter of 2022.

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. With the heightened concern about corporate liquidity during the COVID-19 pandemic, the Company believes that it has adequate cash to support continuing operations.

### **Business Strategy and Core Philosophies**

Broadly defined, our business strategy is to continue to build our reputation as a leader in the radiochemical, cobalt, and nuclear medicine product industries, and to maximizing the revenue potential of our generic sodium iodine I-131 product and nuclear medicine standards products. We also intend to continually seek ways to improve our customer service and expand our market share, with the ultimate goal of providing greater return to our shareholders. Specifically, we are continuously working with our customers to improve and develop new products to better serve the needs of the end user which, ultimately, we believe will boost product sales. A key part of our short-term and long-term business strategy is to develop and market additional generic drug products, similar to our sodium iodide I-131 product, and develop additional nuclear medicine standards products that will offer customers high quality, reliable, and affordable products as well as increase our revenues. In addition, we will manage cash reserves and pursue additional financial support that will be structured in such a way to support further expansion of our products and services to exploit additional market opportunities.

Our core philosophy is to strive to provide high quality products and services as a profitable and environmentally conscious business, while offering excellent customer service and providing a safe and productive working environment for our employees. We operate in accordance with an ISO Quality Management System and in accordance with all current Good Manufacturing Practices under which we seek to maintain the highest level of quality and continuously improve our product manufacturing processes.

### **Results of Operations**

Following is a summary of results of operations for 2022:

- Revenue in 2022 was approximately \$11.2 million, which was a 16% increase compared to 2021 and was the largest annual revenue generated in the company's history;
- Our 2022 sales in our Radiochemical Products increased by approximately 41% as compared to 2021;
- Our 2022 sales in Cobalt Products and Nuclear Medicine Standards segments decreased by approximately 15% and 1% respectively as compared to 2021;
- Our total gross profit rate decreased to 56% in 2022 from 59% in 2021; and
- Our operating costs for 2022 increased approximately 17% as compared 2021; and
- We had a net profit of \$303,238 in 2022 compared to a net loss of \$902,347 in 2021



## Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

The following table presents comparative revenues for the years ended December 31, 2022 and 2021:

Revenues	For the year ended December 31, 2022	% of Total Revenues 2022	For the year ended December 31, 2021	% of Total Revenues 2021
Radiochemical Products	\$ 6,045,767	54%	\$ 4,275,044	44%
Cobalt Products	1,157,536	10%	1,354,517	14%
Nuclear Medicine Standards	3,978,685	36%	4,002,606	42%
Flourine Products	—	0%	29,775	0%
Total Segments	\$ 11,181,988	100%	\$ 9,661,942	100%

### Revenues

Total revenues in 2022 were \$11,181,988, compared to \$9,661,942 in 2021, which represents an increase of \$1,520,046, or approximately 16%. The performance of each segment is discussed in the following paragraphs.

Revenues	For the year ended December 31, 2022	For the year ended December 31, 2021	\$ change	% change
Radiochemical Products	\$ 6,045,767	\$ 4,275,044	\$ 1,770,723	41%
Cobalt Products	1,157,536	1,354,517	(196,981)	-15%
Nuclear Medicine Standards	3,978,685	4,002,606	(23,921)	-1%
Flourine Products	—	29,775	(29,775)	-100%
Total Segments	11,181,988	9,661,942	1,520,046	16%
Corporate revenue	—	—	—	—
Total Consolidated	\$ 11,181,988	\$ 9,661,942	\$ 1,520,046	16%

### Radiochemical Products

Sales of radiochemical products accounted for approximately 54% in 2022 as compared to 44% of our total sales revenue in 2021. Sales in this segment increased by \$1,770,723, or approximately 41% to \$6,045,767 in 2022 as compared to \$4,275,044 in 2021. The increase is primarily the result of sales of our new generic sodium iodide I-131 drug product which was launched in March 2020. We expect sales of our new product to continue to trend upward.

In February 2020, we received approval of an ANDA to the FDA for a sodium iodide radiopharmaceutical product for use in treatment of hyperthyroidism and carcinoma of the thyroid. We began sales of this product in March 2020, and these sales have had a significant positive impact on our revenues for 2021 and 2022. We expect continued growth in sales for this product in 2022 and beyond. This is the first of several potential generic drug products we plan to submit to the FDA in the coming years. Within this segment, we also currently distribute sodium iodide (I-131) as a radiochemical product. The radiochemical product is being used for a variety of applications including industrial use and use in investigational and clinical trials. We believe that the product enhancements we have made, in addition to the generic drug products we plan to submit to the FDA, should increase future sales in this business segment.

In 2019, we entered into a manufacturing and supply agreement with a company and completed an expansion of our existing facility to support contract manufacturing activities. Because of changing market conditions that company requested a termination of that contract manufacturing arrangement, and a settlement agreement was reached with that company in December 2020. As part of the settlement agreement, we received a termination payment consisting of cash and the other company's relinquishment on all claims to expansion of our facility and all the equipment purchased by them. The settlement resulted in a significant one-time gain for us in 2020. In February 2022, we were able to sell these assets we received in the settlement agreement for another significant one-time gain as detailed under Other Income (Expense) below. We are currently developing a business plan to produce additional radiopharmaceutical products or explore new contract manufacturing opportunities utilizing the cash from that sale.

### Cobalt Products

Cobalt products sales accounted for approximately 10% of our total sales revenue in 2022 and approximately 14% in 2021. Sales in this segment decreased by \$196,981, or approximately 15%, in 2022 to \$1,157,536, as compared to \$1,354,517 in 2021. The decrease in revenue within this segment was the result of decreased Cobalt Sealed Source Manufacturing due to timing of receipt of additional cobalt material from the ATR in 2022, delays in customer contracts for Cobalt Sealed Source Manufacturing, and delays due to maintenance and repairs to our manufacturing equipment. Our sealed source manufacturing generates the majority of our revenue within this segment and sealed source sales depend on our ability to produce or procure cobalt material.

In October 2014, we entered into a ten-year agreement with the DOE for the irradiation of cobalt targets. It takes many years to irradiate these cobalt targets to the desired level of activity and we anticipated having high specific activity cobalt available for our customers in 2020. However, the material had lower than expected activity and receipt of material was delayed until about June 2021. At that point the material still had lower than expected activity, and we reached an agreement with the DOE to purchase the lower activity material at a discounted rate. Periodically we have been able to acquire recycled material that can be used to manufacture sealed sources for customers, and in some instances, our customers have supplied their own cobalt material for source fabrication. We will continue to have access to additional low specific activity material produced by the DOE and expect to obtain, process, and sell additional cobalt products as a result during 2023.

We have entered into cobalt supply agreements with several customers. The terms of these cobalt contracts require some advance progress payments from each customer. The funding received under these contracts has been recorded as unearned revenue under short- and long-term liabilities in our consolidated financial statements. We recognized some of this revenue in prior years including in 2022 and 2021 when we fulfilled contract performance objectives by supplying sealed sources manufactured with cobalt from the ATR or alternate suppliers.

### Nuclear Medicine Standards

Due to decreased activity in the Radiological Services segment, starting January 1, 2022, this segment was reorganized into our Nuclear Medicine Standards segment. Additionally, we reclassified our reporting for 2021 to include all activities for the Radiological Services business segment under the Nuclear Medicine Standards segment.

Sales in the nuclear medicine standards segment accounted for approximately 36% and 40%, of our total sales revenue in 2022 and 2021, respectively. Sales in this segment decreased by \$23,921, or approximately 1%, to \$3,978,685 in 2022, as compared to \$4,002,606 in 2021. This small decrease in sales in 2022 is due to a \$93,547 decrease in sales related to the discontinued Radiological Services segment partially offset by an increase of \$69,626 in sales related to nuclear medicine standards products.

In 2017, affiliates of the Company purchased 75.5% of the member units of RadQual and at that time, we were named as one of the managing members of RadQual. Because of this change in member ownership and management, we have consolidated RadQual's operations within the nuclear medicine segment for financial reporting since that time. For purposes of consolidation, all significant intercompany activity has been eliminated in the reporting process. In July 2021, we acquired the remaining 75.5% of the member units of RadQual. As a result of the acquisition, RadQual and TI Services are now our wholly-owned subsidiaries and are fully consolidated.

We anticipate that our sales of RadQual products will remain strong and that our ownership of RadQual will create significant future opportunities through new product development and expanding markets. Additionally, we will continue to work closely with TI Services using their expertise in marketing and distribution strategies to strengthen nuclear medicine product sales.

### Radiological Services

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

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

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

We continue to engage in source disposal activities and have begun reporting these activities under the Nuclear Medicine Standards segment starting January 1, 2022. Additionally, we reclassified our reporting for 2021 to include all activities for the Radiological Services business segment under the Nuclear Medicine Standards segment.

## Fluorine Products

In 2022, we had no revenues related to Fluorine Products as compared to \$29,775 in 2021. These revenues were related to an agreement to provide engineering and technical assistance services related to our fluorine products' intellectual property. We did not have any revenue from this agreement in 2022. In October 2022, we entered into an option agreement with a Company to sell the NRC license and other assets related to this business area. The agreement gives the buyer up to 18 months to purchase these assets. Work on this project had been on hold since 2013 because of a slowdown in the nuclear industry that specifically impacted fuel cycle facilities. Until such time that we execute the asset sales agreement we will 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.

During 2021, we incurred \$144,860 of planning and other expenses related to the de-conversion project, as compared to \$150,196 in 2021. This is a decrease of \$5,336, or approximately 4%, and is the result of decreased professional services allocated to this project in 2022. The largest expense in this business segment is \$104,379, approximately 72% of the total expenses for 2022, for the amortization of our NRC license for this project. We expect that our costs in the future will be limited to essential items such as continued interactions with our customers, the state of New Mexico, and Lea County, New Mexico.

### Cost of Revenues and Gross Profit

Cost of revenues for 2022 was \$4,891,927 as compared to \$3,924,142 in 2021, an increase of \$967,785, or 25%. Gross profit percentage decreased to 56% for 2022, from 59% in 2021. The following table presents revenues and cost of revenues information:

	<u>For the year ended December 31, 2022</u>	<u>% of Total Revenues 2022</u>	<u>For the year ended December 31, 2021</u>	<u>% of Total Revenues 2021</u>
Total Revenues	\$ 11,181,988	100%	\$ 9,661,942	100%
Cost of Revenues				
Radiochemical Products	\$ 2,217,468	20%	\$ 1,698,124	18%
Cobalt Products	577,417	5%	546,043	6%
Nuclear Medicine Standards	2,097,042	19%	1,679,975	17%
Fluorine Products	—	—	—	—
Total Segments	\$ 4,891,927	44%	\$ 3,924,142	41%
Gross Profit	\$ 6,290,061		\$ 5,737,800	
Gross Profit %		56%		59%
	967,785	25%	2,956,357	

During 2022, we continued to monitor and control direct costs. Raw materials used in our radiochemical products and nuclear medicine standards represented the bulk of direct costs for 2022. In each of these business segments, we have purchase agreements in place with suppliers to obtain optimum pricing. Periodically, the cost increases for these raw materials or we may also use alternate supply sources for our material which might not carry pricing as favorable as our contracted suppliers.

The decrease in gross profit percentage in 2022 is a result of increased cost in raw material and supplies in our Nuclear Medicine Standards segment driven by recent cost inflation. We have seen these increased costs stabilize somewhat; and we are working on further offsetting these cost increases with increases to our product prices. We believe we can increase our sales prices enough to overcome these cost increases while continuing to be competitive and maintain sales growth.

### Operating Costs and Expenses

Total operating costs and expenses for 2022 were \$7,492,958, as compared to \$6,418,592 in 2021. This is an increase of \$1,074,366, or approximately 17%.

The following table presents operating costs and expenses for 2022 as compared to 2021:

	<u>For the year ended December 31, 2022</u>	<u>For the year ended December 31, 2021</u>	<u>% change</u>	<u>\$ change</u>
Operating Costs and Expenses:				
Salaries and Contract Labor	\$ 3,390,652	\$ 2,687,735	26%	\$ 702,917
General, Administrative and Consulting	3,568,590	3,459,143	3%	109,447
Research and Development	533,716	271,714	96%	262,002
Total operating expenses	\$ 7,492,958	\$ 6,418,592	17%	\$ 1,074,366

Salaries and contract labor expense increased by \$702,917, or approximately 26%, which was the result of an increased number of employees and increases to labor rates. In addition, non-cash equity compensation expense recorded for the year ended December 31, 2022, was \$352,458 as compared to \$84,564 for the same period in 2021. This is an increase of \$267,894, or approximately 317%, and is the result of equity compensation recorded for outstanding stock options granted to directors, officers, and employees.

General administrative and consulting expenses increased to \$3,568,590 in 2022, as compared to \$3,459,143 in 2021, an increase of \$109,447, or approximately 3%. This increase is due to periodic waste disposal costs of \$329,237 in 2022 with no such cost in 2021. Research and development expense was \$533,716 for 2022, compared to \$271,714 for 2021. This is an increase of \$262,002, or approximately 96%. This increase in research and development expense was the result of increased costs associated with product development in our Radiochemical and Nuclear Medicine Standards business segments.

During both 2022 and 2021, we limited further investment in the planned de-conversion facility and limited further spending on the project only for expenses necessary to maintain licensing, continue interactions with Lea County, New Mexico, and supporting a due diligence review of the project by a company interested in purchasing these project assets. We will continue to delay further engineering work on the de-conversion project until we are able to secure additional contracts for de-conversion services.

### ***Other Income (Expense)***

The following table presents other income (expense) for 2022 as compared to 2021:

	<b>For the year ended December 31, 2022</b>	<b>For the year ended December 31, 2021</b>
Other income (expense)	\$ 2,110,576	\$ 683,253
Interest income	9,502	111
Interest expense	(613,943)	(791,532)
Total other (expense)	<u>\$ 1,506,135</u>	<u>\$ (108,168)</u>

Other income was \$2,110,576 for 2022 as compared to other income of \$683,253 for 2021. This is an increase in other income of \$1,427,323. The increase is primarily due to a \$1,797,978 gain on the sale of assets to Pharmalogic Idaho, LLC. In February 2022, we entered into an Asset Purchase Agreement with Pharmalogic Idaho, LLC, pursuant to which we sold certain assets for \$4,000,000 in cash. The assets consisted primarily of manufacturing equipment and a sublease acquired by the Company in connection with the previously announced termination of the manufacturing and supply agreement with another company. In 2021, we recognized "other income" for an anticipated tax refund of approximately \$440,000 for the Employer Retention Credit.

In September 2022, we experienced a fraudulent transactions incident. The fraudulent charges totaled approximately \$85,000. These charges were recorded as "other expense". Investigations by our bank and by law enforcement are ongoing. There have been no indications of any involvement within our Company. As we expected to recoup all fraudulent charges from our bank, we recognized "other income" to offset the fraudulent charges recorded under "other expense". In October and November 2022, we recovered all the fraudulent charges from our bank.

Interest income in 2022 was \$9,502 as compared to \$111 in 2021. This increase of \$9,391 was due to increased interest rates earned for cash balances held at banks and other institutions in interest-bearing accounts.

Interest expense decreased during 2022, to \$613,943, from \$791,532 in 2021. This decrease of \$177,589, or approximately 22%, was due to a decrease in non-cash interest expense and the payoff of some notes payable. In 2022, non-cash interest expense was \$274,443 as compared to \$401,077 in 2021. This is a decrease of \$126,634. Interest expense includes dividends accrued on our Series C Preferred Stock (as defined below) issued in 2017. In 2022, we recorded interest expense of \$243,780 for dividends payable on our Series C Preferred Stock.

In connection with the 2013 Promissory Note (as defined below), we recorded \$30,000 of interest expense for each of 2022 and 2021, and approximately \$3,000 and \$13,000 of non-cash interest expense related to a debt discount feature on the 2013 Promissory Note for 2022 and 2021 respectively.

In connection with the 2019 Promissory Note (as defined below), we recorded \$40,000 of interest expense for 2022 and 2021, and approximately \$256,000 of non-cash interest expense related to a debt discount feature and issuance of warrants related to the 2019 Promissory Note for 2022 and 2021. We will have \$0 in non-cash interest expense in connection with the 2019 Promissory Note in 2023 and future years.

In connection with our 2017 issuance of Series C Preferred Stock, we issued Class M Warrants and Class N Warrants. All these warrants expired in 2021. We recorded approximately \$0 and \$131,000 of non-cash interest expense for 2022 and 2021 respectively in relation to these warrants.

### ***Net Income or Loss***

Our net income was \$303,238 in 2022, compared to a net loss was \$902,347 in 2021. This is an increase in net income of \$1,205,578. This increase is largely the result of the approximate \$1.8 million gain on sale of assets. Additionally, the increase in income is the result of the increase in revenue in our Radiochemical Products segment offset by the increase in operating expense from salaries and contract labor and expenses from research and development in 2022, as compared to the same period in 2021.

### ***Liquidity and Capital Resources***

On December 31, 2022, we had cash and cash equivalents of \$2,375,817 compared to \$474,851 at December 31, 2021. Net cash used in operating activities was \$1,497,719 in 2022, compared to net cash used by operating activities of \$161,914 in 2021. This represents an increase in cash used in operating activities of approximately \$1,335,805. This increase is due to a large increase in accounts receivable due to the increased sales activity in 2022 as compared to 2021 and decreased net income from operating activities in the year over year comparison.

Accounts receivable at December 31, 2022 were \$1,596,886 as compared to \$853,675 at December 31, 2021. Our allowance for bad debt at December 31, 2022 was \$0 as compared to \$18,910 at December 31, 2021.

Inventories at December 31, 2022 were \$744,793 as compared to \$924,775 at December 31, 2021. A large portion of our inventory consists of Cobalt target inventory. For 2022, our target inventory accounted for approximately 25% of our work in process inventory. For 2021, our target inventory accounted for approximately 48% of our work in process inventory.

Included in our work in process inventory are in-process and completed nuclear medicine products, irradiated cobalt, and nuclear medicine-related materials and products.

We recognized a net profit of \$303,238, for the year ended December 31, 2022, and have an accumulated deficit of \$126,460,843 since inception. To date, our operations and plant and equipment expenditures have been funded principally from proceeds from public and private sales of debt and equity as well as through asset sales.

Net cash provided in investing activities was \$3,879,986 for 2022 and net cash used in investing activities was \$205,474 for 2021. During 2022, we used \$120,014 to purchase equipment, and we used \$205,474 to purchase equipment in 2021. We had proceeds from sale of equipment of \$4,000,000 in 2022, and we had no proceeds from sale of equipment in 2021.

Financing activities used cash of \$472,004 for the year ended December 31, 2022. We received proceeds from the sale of common stock in the amount of \$76,571 and made principal payment on loans in the amount of \$540,032 in 2022. For the year ended December 31, 2021, financing activities used cash of \$78,699. We received proceeds from the sale of common stock in the amount of \$18,890 and issued debt for proceeds of \$351,255. In addition, we made principal payment on loans in the amount of \$437,627 in 2021.

In February 2017, we entered into subscription agreements with certain investors, including two of our directors, for the sale of (i) an aggregate of 3,433 shares of Series C Preferred Stock, and (ii) Class M warrants to purchase an aggregate of 17,165,000 shares of our common stock (Class M Warrants), for gross proceeds of \$3,433,000. The Series C Preferred Stock accrues dividends at a rate of 6% per annum, payable annually on February 17<sup>th</sup> of each year, commencing on February 17, 2018. Shares of Series C Preferred Stock are convertible at the option of the holder at any time into shares of our common stock at an initial conversion price equal to \$0.10 per share, subject to adjustment. At any time after February 17, 2019, if the volume-weighted average closing price of our common stock over a period of 90 consecutive trading days is greater than \$0.25 per share, we 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. All outstanding shares of Series C Preferred Stock must be redeemed by us on February 17, 2022 at the original purchase price per share, payable in cash or shares of common stock, at the option of the holder. In February 2022, based on approval of majority of the Preferred C Holders, we extended the redemption date of the Series C Preferred Stock to February 17, 2023. In December 2022, based on approval of majority of the Preferred C Holders, we extended the redemption date of the Series C Preferred Stock to February 17, 2025. Holders of 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 Class M Warrants were exercisable at an exercise price of \$0.12 per share, subject to adjustment as set forth in the warrant, and expired in February 2022. In February 2022, 515,000 Class M Warrants were exercised at a price of \$0.12. The Company received \$61,800 for the exercise.

In March 2017, we amended our 8% unsecured debentures issued that were scheduled to mature in July 2017 (the Notes) and gave the noteholders certain additional rights (the Amendment). Pursuant to the Amendment, the Notes were modified to provide each holder the right, at the holder's option and exercisable prior to May 12, 2017, to convert all or any portion of the principal amount of the Notes, plus accrued but unpaid interest, into shares of our Series C Preferred Stock at a conversion price of \$1,000 per share. Holders that elected to convert their Notes into Series C Preferred Stock received a warrant to purchase up to 3,750 shares of our common stock for each share of Series C Preferred Stock received upon conversion of the Notes, with each warrant having a five-year term, a cashless exercise feature, and an exercise price of \$0.10 per share of common stock. As a result of this modification, an aggregate of \$780,000 of the Notes was converted to 780 shares of Series C Preferred Stock and 2,925,000 Class N Warrants (as defined below). Residual interest was also paid to Note holders who converted of \$1,515. The Notes matured in July 2017 and were repaid in full.

As discussed above, in May 2017, we issued 780 shares of Series C Preferred Stock, and Class N warrants to purchase an aggregate of 2,925,000 shares of our common stock (Class N Warrants) upon conversion of \$780,000 of the Notes. The Series C Preferred Stock accrues dividends at a rate of 6% per annum, payable annually on February 17<sup>th</sup> of each year, commencing on February 17, 2018. Shares of Series C Preferred Stock are convertible at the option of the holder at any time into shares of our common stock at an initial conversion price equal to \$0.12 per share, subject to adjustment. At any time after February 17, 2019, if the volume-weighted average closing price of our common stock over a period of 90 consecutive trading days is greater than \$0.25 per share, we 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. All outstanding shares of Series C Preferred Stock were to be redeemed by us on February 17, 2022 at the original purchase price per share, payable in cash or shares of common stock, at the option of the holder. In February 2022, based on approval of majority of the Preferred C Holders, we extended the redemption date of the Series C Preferred Stock to February 17, 2023. In December 2022, based on approval of majority of the Preferred C Holders, we extended the redemption date of the Series C Preferred Stock to February 17, 2025. Holders of 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 Class N Warrants were exercisable at an exercise price of \$0.12 per share, subject to adjustment as set forth in the warrant, and expired in February 2022.

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. In January 2022, the 2013 Promissory Note was further modified to extend the maturity date to December 31, 2023, with all remaining terms unchanged.

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 the principal and accrued interest settled with shares of our common stock based on the average price of the shares over the previous 20 trading days. Pursuant to an

amendment to the 2018 Promissory Note in June 2018, the maturity date was extended to March 31, 2019 with all other provisions remaining unchanged. Pursuant to a second amendment to the 2018 Promissory Note in February 2019, the maturity date was extended to July 31, 2019 with all other provisions remaining unchanged. Pursuant to a third amendment to the 2018 Promissory Note in July 2019, the maturity date was extended to January 31, 2020 with all other provisions remaining unchanged. Pursuant to a fourth amendment to the 2018 Promissory Note in December 2019, the maturity date was extended to December 31, 2021, the note was modified to become secured by company assets, with all other provisions remaining unchanged. In December 2021, the 2018 Promissory Note was further modified to extend the maturity date to December 31, 2023, with all remaining terms unchanged.

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 borrowed \$675,000 under the 2019 promissory note; the remaining \$325,000 was borrowed in February 2020. 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 are required to issue up to 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. In December 2022, the 2019 Promissory Note was modified to extend the maturity date to December 31, 2024, with all remaining terms unchanged.

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

We expect that cash from operations, cash obtained through securities offerings, and our current cash balance will be sufficient to fund operations for the next twelve months. Although we may seek additional debt financing for our projects and operations in the future, there is no assurance that we will be able to secure additional debt financing on acceptable terms to us, or at all.

### **Goals for 2023**

Based upon the investments we have made in our facilities and investments we anticipate making, and based on projects, and products developed thus far in 2023, we have the following goals for the rest of 2023:

- Continue to expand sales of our FDA approved sodium iodide I-131 generic drug product;
- Complete development of and launch a fully automated I-131 capsule loading system to pharmacies in the U.S and select overseas customers;
- Begin development of one or more new generic drug products to further enhance revenue production within our Radiochemical segment and identify additional future generic product opportunities;
- Expand sales of our nuclear medicine products and increase cash flow by offering new products and further expanding our international sales and distributor relationships;
- Develop a business plan to produce additional radiopharmaceutical products or explore new contract manufacturing opportunities.
- Explore acquisition opportunities to expand our product offerings and increase, revenue, cash flow, and profit margin;
- Continue to expand our customer base, increase revenues, reduce production and operating costs, and attempt to achieve profitability in our core business segment operations; and
- Continue to support essential tasks related to our de-conversion project and continue to pursue any opportunities to benefit from sale of these assets through and through royalty payment arrangements.

## Critical Accounting Estimates

*Asset retirement obligation* – The asset retirement obligation is based on the expected future cash flows of the decommissioning funding plan. The decommissioning funding plan is based on the estimated number of hours of specific personnel, estimated wages and disposal costs. Once the decommissioning funding plan has been developed, we use a discount rate to determine the estimated current value of the liability.

## Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are a smaller reporting company, and therefore, are not required to provide the information required by this item.

## Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The following financial statements are included herewith and are hereby incorporated by reference:

Index to Consolidated Financial Statements

	<u>Page No.</u>
Report of Independent Registered Public Accounting Firm	F-1
Financial Statements:	
Consolidated Balance Sheets as of December 31, 2022 and 2021	F-2
Consolidated Statements of Operations for the years ended December 31, 2022 and 2021	F-3
Consolidated Statement of Shareholders' Equity for the years ended December 31, 2022 and 2021	F-4
Consolidated Statements of Cash Flows for the years ended December 31, 2022 and 2021	F-5
Notes to Consolidated Financial Statements	F-6

## Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

## Item 9A. CONTROLS AND PROCEDURES

### Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures (as defined in Rules 13a-15I and 15d-15(e) under the Exchange Act) that are designed to ensure information required to be disclosed in our reports that are filed or submitted under the Exchange Act, is 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 (CEO) and Chief Financial Officer (CFO), has conducted an evaluation (pursuant to Rule 13a-15(b) of the Exchange Act) of the effectiveness of our disclosure controls and procedures as of December 31, 2022. Based on that evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective as of December 31, 2022.



## **Management’s Annual Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15(d)-15(f) under the Exchange Act). Internal control over financial reporting is a process to provide reasonable assurance regarding the reliability of our financial reporting for external purposes in accordance with accounting principles generally accepted in the U.S. Internal control over financial reporting includes maintaining records that in reasonable detail accurately and fairly reflect our transactions; providing reasonable assurance that transactions are recorded as necessary for preparation of our financial statements; providing reasonable assurance that receipts and expenditures are made in accordance with management authorization; and providing reasonable assurance that unauthorized acquisition, use or disposition of company assets that could have a material effect on our financial statements would be prevented or detected on a timely basis. Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our financial statements would be prevented or detected.

Management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework and criteria established in *Internal Control — Integrated Framework (2013)*, issued by the Committee of Sponsoring Organizations of the Treadway Commission. This evaluation included review of the documentation of controls, evaluation of the design effectiveness of controls, testing of the operating effectiveness of controls and a conclusion on this evaluation. Based on this evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2022.

### **Changes in Internal Control over Financial Reporting**

There were no changes in our internal control over financial reporting during the year ended December 31, 2022, that have materially affected, or are reasonable likely to materially affect, our internal control over financial reporting.

#### **Item 9B. OTHER INFORMATION**

None.

#### **Item 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS**

None.

### **PART III.**

#### **Item 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE**

We have adopted a Code of Ethics that applies to our principal executive officer, principal financial officer, principal accounting officer and controller, or persons performing similar functions. Our Code of Ethics is posted on our website and can be accessed, free of charge, at <http://www.intisoid.com>. If we waive, or implicitly waive, any material provision of the Code of Ethics that apply to our executive officers, or substantively amend the Code of Ethics, in each case that is required to be disclosed, we will disclose that fact on our website.

The other information required by this item is incorporated by reference from our definitive proxy statement for our 2023 annual meeting of shareholders, which will be filed with the SEC within 120 days after December 31, 2022.

#### **Item 11. EXECUTIVE COMPENSATION**

The information required by this item is incorporated by reference from our definitive proxy statement for our 2023 annual meeting of shareholders, which will be filed with the SEC within 120 days after December 31, 2022.

#### **Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The information required by this item is incorporated by reference from our definitive proxy statement for our 2023 annual meeting of shareholders, which will be filed with the SEC within 120 days after December 31, 2022.

### **Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

The information required by this item is incorporated by reference from our definitive proxy statement for our 2023 annual meeting of shareholders, which will be filed with the SEC within 120 days after December 31, 2022.

### **Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The information required by this item is incorporated by reference to our definitive proxy statement for our 2023 annual meeting of shareholders, which will be filed with the SEC within 120 days after December 31, 2022.

### **Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES**

#### *(a)(1) and (a)(2) Financial Statements*

See the index to and the financial statements beginning on page [31], which financial statements are incorporated herein by reference.

#### *(a)(3) Exhibits*

The following documents are filed or incorporated herein by reference as exhibits to this report:

- 2.1++ [Membership Interest Purchase Agreement, dated July 8, 2021, between RadQual, LLC, International Isotopes Inc., and each of the sellers named therein](#) (incorporated by reference to Exhibit 2.1 of the Company's Current Report on Form 8-K filed on July 14, 2021).
- 2.2++ [Asset Purchase Agreement, dated February 10, 2022, between International Isotopes Inc. and Pharmalogic Idaho, LLC](#) (incorporated by reference to Exhibit 2.1 of the Company's Current Report on Form 8-K filed on February 16, 2022).
- 3.1 [Restated Certificate of Formation of the Company, 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 the Company](#) (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed on February 24, 2017).
- 3.3 [Certificate of Amendment to Statement of Designation of the Series C Convertible Redeemable Preferred Stock International Isotopes Inc., dated February 16, 2022](#) (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed on February 22, 2022).
- 3.4 [Certificate of Amendment to Statement of Designation of the Series C Convertible Redeemable Preferred Stock International Isotopes Inc., dated December 28, 2022](#) (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed December 28, 2022).
- 3.5 [Bylaws of the Company](#) (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† [International Isotopes Inc. Amended and Restated Employee Stock Purchase Plan](#) (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K, filed on July 21, 2020).
- 10.2† [International Isotopes Inc. Amended and Restated 2015 Incentive Plan](#) (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K, filed on July 30, 2018).
- 10.3+ [Lease Agreement \(4137 Commerce Circle\), dated January 20, 2020, between the Company and Adrian Rand Robison and Dorothy Robison.](#)
- 10.4† [Form of Director and Officer Indemnification Agreement](#) (incorporated by reference to Exhibit 99.1 of the Company's Current Report on Form 8-K filed on September 17, 2008).

- 10.5 [Memorandum of Agreement, dated October 22, 2009, between the Company and the New Mexico Environment Department](#) (incorporated by reference to Exhibit 99.1 of the Company's Current Report on Form 8-K filed on October 27, 2009).
- 10.6 [Registration Rights Agreement, dated February 17, 2017, among the Company and the purchasers named therein](#) (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on February 24, 2017).
- 10.7† [Amended and Restated Employment Agreement, dated May 16, 2012, between the Company and Stephen Laflin](#) (incorporated by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012).
- 10.8† [Modification #3 to the Amended and Restated Employment Agreement, dated February 22, 2023, between the Company and Stephen Laflin](#) (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on February 28, 2023).
- 10.9 [Promissory Note Agreement, dated December 23, 2013, among the Company, Ralph Richart and John McCormack](#) (incorporated by reference to Exhibit 10.19 of the Company's Annual Report on Form 10-K for the year ended December 31, 2013).
- 10.10 [Modification #1 to the Promissory Note Agreement, dated June 30, 2014, among the Company, Ralph M. Richart and John M. McCormack](#) (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2014).
- 10.11 [Modification #2 to the Promissory Note Agreement, dated February 3, 2017, among the Company, Ralph M. Richart and John M. McCormack](#) (incorporated by reference to Exhibit 10.18 of the Company's Annual Report on Form 10-K for the year ended December 31, 2016).
- 10.12 [Isotope and Technical Service Order Form, dated October 2, 2014, between the Company and the U.S. Department of Energy](#) (incorporated by reference to Exhibit 10.18 of the Company's Annual Report on Form 10-K for the year ended December 31, 2014).\*\*
- 10.13 [Cobalt-60 Pellet Supply Agreement, dated April 7, 2015, between Nordion \(Canada\) Inc., as general partner of and on behalf of Nordion Sterilization LP, and International Isotopes Inc.](#) (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015).\*\*
- 10.14 [First Modification to Cobalt-60 Pellet Supply Agreement, effective April 21, 2017, between International Isotopes Inc. and Nordion \(Canada\) Inc., as general partner of and on behalf of Nordion Sterilization LP](#) (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on May 10, 2017).\*\*
- 10.15 [Certificate of Amendment to Statement of Designation of the Series C Convertible Redeemable Preferred Stock International Isotopes Inc](#) (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed on December 28, 2022).

- 21.1+ [Subsidiary list.](#)
- 23.1+ [Consent of Haynie & Company.](#)
- 31.1+ [Certification of Chief Executive Officer under Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 31.2+ [Certification of Chief Financial Officer under Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 32.1\* [Certification of Chief Executive Officer furnished under Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- 32.2\* [Certification of Chief Financial Officer furnished under Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- 101.INS+ XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
- 101.SCH+ XBRL Taxonomy Extension Schema Document
- 101.CAL+ XBRL Taxonomy Extension Calculation Linkbase Document
- 101.DEF+ XBRL Taxonomy Extension Definition Linkbase Document
- 101.LAB+ XBRL Taxonomy Extension Label Linkbase Document
- 101.PRE+ XBRL Taxonomy Extension Presentation Linkbase Document
- 104 Cover Page Interactive Data File (embedded within the Inline XBRL document and contained in Exhibit 101)

† This exhibit constitutes a management contract or compensatory plan or arrangement.

\*\* Confidential treatment has been granted as to certain portions, which portions were omitted and filed separately with the Securities and Exchange Commission pursuant to a confidential treatment request.

++ Schedules have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The Company hereby undertakes to supplementally furnish copies of any omitted schedules to the Securities and Exchange Commission upon request.

+ Filed herewith.

\* Furnished herewith.

**Item 16. FORM 10-K SUMMARY**

None.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

International Isotopes Inc.

By: /s/ Steve T. Laflin

Steve T. Laflin  
President, Chief Executive Officer, and  
Director

Date: April 5, 2023

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

April 5, 2023

By: /s/ Steve T. Laflin

Steve T. Laflin  
President, Chief Executive Officer, and  
Director

April 5, 2023

By: /s/ W. Matthew Cox

W. Matthew Cox  
Chief Financial Officer, Secretary

April 5, 2023

By: /s/ Robert Atcher

Robert Atcher  
Director

April 5, 2023

By: /s/ Christopher Grosso


Christopher Grosso  
Chairman of the Board of Directors

**INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES**  
**CONSOLIDATED FINANCIAL STATEMENTS**  
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## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and  
Stockholders of International Isotopes Inc.

### Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of International Isotopes Inc. (the Company) as of December 31, 2022 and 2021, and the related statements of operations, stockholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2022, and the related notes (collectively referred to as the financial statements). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

### Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

### Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by





communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

*Valuation of Intangible Assets/Impairment Analysis – Deconversion Facility*

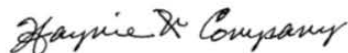
Description of the Matter:

As discussed in Note 2 and Note 6 to the financial statements, the Company had approximately \$3.5 Million net in assets related to the future construction and operation of a depleted uranium de-conversion facility as of December 31, 2022. The actual construction of the facility was put on hold in a previous year and performance milestones have not been met. Because of this delay, management must assess whether these assets are impaired. Management's assessment relies on estimates, future projections of the market, and judgment.

Auditing management's valuation/impairment analysis can be complex, involves judgment, and requires a thorough understanding of the irradiation process.

How We Addressed the Matter in Our Audit:

We obtained and reviewed signed agreements with all involved parties. We reviewed management's decommissioning funding plan as well as the Nuclear Regulatory Commission Letter of Acceptance. We reviewed management's assessment and anticipated future plans, which included obtaining additional agreements with outside interested parties, and compared this assessment to prior years noting no inconsistencies or indications of management bias. Lastly, we tested the changes in the balance by reviewing copies of all payments and costs added in the current year and recalculated the expected ending balance.



Haynie & Company  
Salt Lake City, Utah  
April 5, 2023

We have served as the Company's auditor since 2018.

INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES  
Consolidated Balance Sheets

Assets	December 31, 2022	December 31, 2021
<b>Current assets</b>		
Cash and cash equivalents	\$ 2,375,817	\$ 474,851
Accounts receivable	1,596,886	853,675
Inventories	744,793	924,775
Prepays and other current assets	1,023,129	1,004,423
Total current assets	<u>5,740,625</u>	<u>3,257,724</u>
<b>Long-term assets</b>		
Restricted cash	840,049	830,752
Property, plant and equipment, net	2,024,486	4,299,937
Capitalized lease disposal costs, net	228,125	246,748
Financing lease right-of-use asset	12,621	18,631
Operating lease right-of-use asset	2,311,082	2,429,622
Goodwill	1,384,255	1,384,255
Patents and other intangibles, net	3,703,353	3,859,473
Total long-term assets	<u>10,503,971</u>	<u>13,069,418</u>
Total assets	<u>\$ 16,244,596</u>	<u>\$ 16,327,142</u>
<b>Liabilities and Stockholders' Equity</b>		
<b>Current liabilities</b>		
Accounts payable	\$ 382,392	\$ 1,424,028
Accrued liabilities	1,472,504	1,189,165
Unearned revenue	879,365	907,953
Current portion of operating lease right-of-use liability	131,572	121,069
Current portion of financing lease liability	5,513	8,542
Current portion of related party notes payable, net of debt discount	620,000	993,735
Current installments of notes payable	23,348	290,017
Total current liabilities	<u>3,514,694</u>	<u>4,934,509</u>
<b>Long-term liabilities</b>		
Accrued long-term liabilities	112,500	—
Related party notes payable, net of current portion and debt discount	1,000,000	620,000
Notes payable, net of current portion	34,406	57,769
Asset retirement obligation	942,378	892,086
Financing lease liability, net of current portion	2,832	8,346
Operating lease right-of-use liability, net of current portion	2,232,244	2,363,815
Mandatorily redeemable convertible preferred stock, net of current portion and discount	4,063,000	4,719,822
Total long-term liabilities	<u>8,387,360</u>	<u>8,661,838</u>
Total liabilities	<u>11,902,054</u>	<u>13,596,347</u>
<b>Stockholders' equity</b>		
Common stock, \$0.01 par value; 750,000,000 shares authorized; 514,889,916 and 502,584,176 shares issued and outstanding respectively	5,148,899	5,025,842
Additional paid in capital	125,654,486	124,469,034
Accumulated deficit	(126,460,843)	(126,764,081)
Total equity	<u>4,342,542</u>	<u>2,730,795</u>
Total liabilities and stockholders' equity	<u>\$ 16,244,596</u>	<u>\$ 16,327,142</u>

See accompanying notes to consolidated financial statements.

INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES  
Consolidated Statements of Operations

	Years ended December 31,	
	2022	2021
Sale of product	\$ 11,181,988	\$ 9,661,942
Cost of product	4,891,927	3,924,142
Gross profit	6,290,061	5,737,800
Operating costs and expenses:		
Salaries and contract labor	3,390,652	2,687,735
General, administrative and consulting	3,568,590	3,459,143
Research and development	533,716	271,714
Total operating expenses	7,492,958	6,418,592
Operating loss	(1,202,897)	(680,792)
Other income (expense):		
Other income	2,110,576	683,253
Interest income	9,502	111
Interest expense	(613,943)	(791,532)
Total other (expense) income	1,506,135	(108,168)
Net income (loss)	303,238	(788,960)
Income attributable to noncontrolling interest	—	113,387
Net income (loss) attributable to International Isotopes Inc.	\$ 303,238	\$ (902,347)
Net income per common share - basic:	\$ —	\$ —
Net income per common share - diluted:	\$ —	\$ —
Weighted average common shares outstanding - basic	510,794,145	477,723,996
Weighted average common shares outstanding - diluted	510,794,145	477,723,996

See accompanying notes to consolidated financial statements.

INTERNATIONAL ISOTOPES INC AND SUBSIDIARIES  
Consolidated Statement of Stockholders' Equity  
Years ended December 31, 2022 and 2021

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Equity Attributable to Internat'l Isotopes Shareholders	Equity Attributable to Noncontrolling Interest	Total Equity
	Shares	Amount					
Balance December 31, 2020	424,344,298	\$4,243,443	\$122,191,837	\$(125,861,734)	\$ 573,546	\$ 2,313,706	\$2,887,252
Shares issued under employee stock purchase plan	313,420	3,135	15,753	—	18,888	—	18,888
Shares issued for exercise of employee stock options	2,024,798	20,248	(20,248)	—	—	—	—
Stock grant	118,315	1,183	(1,183)	—	—	—	—
Stock issued in lieu of dividends on preferred C shares	1,398,200	13,982	193,498	—	207,480	—	207,480
Warrant exercise	32,621,409	326,214	(326,214)	—	—	—	—
Conversion of preferred C stock	1,500,000	15,000	135,000	—	150,000	—	150,000
Conversion of preferred B stock	87,500	875	174,125	—	175,000	—	175,000
Stock based compensation	—	—	84,566	—	84,566	—	84,566
Shares issued for purchase of 75.5% of RadQual	40,176,236	401,762	2,021,900	—	2,423,662	(2,423,662)	—
Distribution to non-controlling interest	—	—	—	—	—	(3,431)	(3,431)
Net (loss) income				(902,347)	(902,347)	113,387	(788,960)
Balance December 31, 2021	502,584,176	5,025,842	124,469,034	(126,764,081)	2,730,795	—	2,730,795
Shares issued under employee stock purchase plan	245,081	2,451	12,320	—	14,771	—	14,771
Shares issued for exercise of employee stock options	648,948	6,489	(6,489)	—	—	—	—
Stock grant	187,231	1,872	(1,872)	—	—	—	—
Stock issued in lieu of dividends on preferred C shares	2,271,980	22,720	181,760	—	204,480	—	204,480
Warrant exercise	515,000	5,150	56,650	—	61,800	—	61,800
Conversion of preferred B stock	8,437,500	84,375	590,625	—	675,000	—	675,000
Stock based compensation	—	—	352,458	—	352,458	—	352,458
Net (loss) income				303,238	303,238	—	303,238
Balance December 31, 2022	<u>514,889,916</u>	<u>\$5,148,899</u>	<u>\$125,654,486</u>	<u>\$(126,460,843)</u>	<u>\$ 4,342,542</u>	<u>\$ —</u>	<u>\$4,342,542</u>

INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES  
Consolidated Statements of Cash Flows

	Years ended December 31,	
	2022	2021
Cash flows from operating activities:		
Net income (loss)	\$ 303,238	\$ (788,960)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	374,196	581,274
Gain on disposal of property, plant and equipment	(1,797,978)	—
Accretion of obligation for lease disposal costs	50,292	43,266
Accretion of beneficial conversion feature	274,443	401,077
Equity based compensation	352,458	84,564
Right-of-use amortization	(2,528)	23,989
Changes in operating assets and liabilities:		
Accounts receivable	(743,211)	(57,547)
Prepays and other current assets	(18,706)	243,007
Inventories	179,982	(86,988)
Unearned revenues	(28,588)	(106,249)
Accounts payable and accrued liabilities	(441,317)	(499,347)
Net cash used in operating activities	<u>(1,497,719)</u>	<u>(161,914)</u>
Cash flows from investing activities:		
Proceeds from sale of property, plant and equipment	4,000,000	—
Purchase of property, plant, equipment and patents	(120,014)	(205,474)
Net cash provided by (used in) investing activities	<u>3,879,986</u>	<u>(205,474)</u>
Cash flows from financing activities:		
Proceeds from sale of stock	76,571	18,890
Proceeds from issuance of notes payable	—	101,253
Proceeds from issuance of debt - related party	—	250,000
Distribution to non-controlling interest	—	(3,431)
Payments on financing lease liability	(8,543)	(7,786)
Principal payments on notes payable	(540,032)	(437,627)
Net cash used in financing activities	<u>(472,004)</u>	<u>(78,701)</u>
Net change in cash and cash equivalents	1,910,263	(446,089)
Cash and cash equivalents at beginning of year	1,305,603	1,751,692
Cash and cash equivalents at end of year	<u>\$ 3,215,866</u>	<u>\$ 1,305,603</u>
Supplemental disclosure of cash flow activities:		
Cash paid for interest	<u>\$ 54,071</u>	<u>\$ 75,786</u>
Supplemental disclosure of noncash financing and investing transactions:		
Decrease in accrued interest and increase in equity for conversion preferred dividends to stock	\$ 204,480	\$ 207,480
Increase in operating lease right-of-use asset and right-of-use liability for new lease	\$ —	\$ 1,603
Increase in equity and decrease in liability for the conversion of preferred stock	\$ 675,000	\$ 325,000
Non-cash increase of capitalized asset retirement obligation for increased funding plan	\$ —	\$ 260,715
Decrease in unearned revenue and increase in notes payable for repayment plan	\$ —	\$ 146,072
Increase in equity and decrease in non-controlling interest for acquisition of non-controlling interest in RadQual and TI Services	\$ —	\$ 2,423,662
December 31,		
	2022	2021
Cash and cash equivalents	\$ 2,375,817	\$ 474,851
Restricted cash included in long-term assets	840,049	830,752
Total cash, cash equivalents, and restricted cash shown in statement of cash flows	<u>\$ 3,215,866</u>	<u>\$ 1,305,603</u>

See accompanying notes to consolidated financial statements.

INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

NOTE 1 – DESCRIPTION OF BUSINESS AND SIGNIFICANT ACCOUNTING POLICIES

*Description of business* – International Isotopes Inc. (the “Company” or “INIS”) was incorporated in Texas in November 1995. The accompanying 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 the Company and its wholly-owned subsidiaries, International Isotopes Idaho Inc., International Isotopes Fluorine Products, Inc., and International Isotopes Transportation Services, Inc. The consolidated financial statements also include the accounts of wholly owned subsidiaries TI Services, LLC, (“TI Services”), and 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 devices, and is now headquartered in Idaho Falls, Idaho. In addition, the Company had a 24.5% interest in RadQual. In August 2017, affiliates of the Company purchased the remaining 75.5% of RadQual and at the time the Company was named as one of the two managing members of RadQual. As a result of this ownership change, the Company has significant influence in management decisions with regard to RadQual’s business operations. In July 2021, the Company purchased the remaining 75.5% of RadQual. RadQual and TI Services are now wholly-owned subsidiaries of the Company.

*Nature of Operations* – INIS and its subsidiaries, (collectively, the “Company,” “we,” “our” or “us”) manufacture a full range of nuclear medicine calibration and reference standards, a wide range of products, including cobalt teletherapy sources and a varied selection of radioisotopes and radiochemicals for medical research, pharmacy compounding, and clinical applications. The Company also distributes a varied selection of radioisotopes and radiochemicals for medical and clinical research applications. The Company also holds several patents for a fluorine extraction process that it plans to use in conjunction with a proposed commercial depleted uranium de-conversion facility which would be located in Lea County, New Mexico (the “De-Conversion Facility”). The Company’s business consists of four major business segments: Nuclear Medicine Standards, Cobalt Products, Radiochemical Products, and Fluorine Products. 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 the operating cycle, have been recorded as unearned revenue and, depending upon estimated ship dates, classified under current or long-term liabilities on the Company’s consolidated balance sheets. These unearned revenues will be recognized as revenue in the future period during which the cobalt shipments begin. All assets expected to be realized in cash or sold during the normal operating cycle of the business are classified as current assets.

*Principles of Consolidation* – The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, including RadQual and TI Services. All significant intercompany accounts and transactions have been eliminated during consolidation.

Significant accounting policies

a) Financial instruments and cash equivalents

The carrying value of notes payable approximates fair value because they bear interest at rates which approximate market rates.

Cash and cash equivalents, totaling \$2,375,817 and \$474,851 at December 31, 2022 and 2021, respectively, consist of operating accounts and money market accounts. For purposes of the consolidated statements of cash flows, the Company considers all highly-liquid financial instruments with original maturities of three months or less at date of purchase to be cash equivalents.

At December 31, 2022 and 2021, the Company had pledged cash on deposit in a money market account valued at \$840,049 and \$830,752 respectively, as security for a surety bond. The surety bond is required as part of the Company’s operating license agreement with the Nuclear Regulatory Commission (“NRC”).

The Company maintains its cash accounts in various deposit accounts, the balances of which are periodically in excess of federally insured limits.

b) Accounts receivable

The Company sells products mainly to recurring customers, wherein the customer's ability to pay has previously been evaluated. The Company generally does not require collateral. The Company periodically reviews accounts receivable for amounts considered uncollectible and allowances are provided for uncollectible accounts when deemed necessary. At December 31, 2022, the Company had no allowance for doubtful accounts. At December 31, 2021, the Company has accrued an allowance for doubtful accounts of approximately \$19,000.

c) Inventories

Inventories are carried at the lower of cost or net realizable value. Cost is determined using the first in, first out method. When indicators of inventory impairment exist, the Company measures the carrying value of the inventory against its market value, and if the carrying value exceeds the market value, the inventory value is adjusted down accordingly. No impairment was recorded for the years ended December 31, 2022 and December 31, 2021.

d) Property, plant and equipment

Depreciation on property, plant and equipment is computed using the straight-line method over the estimated useful life of the asset.

Leasehold improvements are amortized over the shorter of the life of the lease or the service life of the improvements. Maintenance, repairs, and renewals that neither materially add to the value of the property nor appreciably prolong its life are charged to expense as incurred. Gains or losses on dispositions of property and equipment are included in the results of operations.

e) Goodwill and other intangibles

Goodwill is not amortized but is tested for impairment at least annually. Goodwill represents the excess of the purchase price over the fair value of net tangible and identifiable intangible assets recorded as a result of the change in ownership of RadQual. As of December 31, 2022 and 2021, there has been no impairment of goodwill.

Patents and other intangibles are amortized using the straight-line method over their estimated useful lives and are evaluated for impairment at least annually or when events or circumstances arise that indicate the existence of impairment. The Company evaluates the recoverability of identifiable intangible assets whenever events or changes in circumstances indicate that an intangible asset's carrying amount may not be recoverable. Such circumstances could include but are not limited to: (1) a significant decrease in the market value of an asset, (2) a significant adverse change in the extent or manner in which an asset is used, or (3) an accumulation of costs significantly in excess of the amount originally expected for the acquisition of an asset. When indicators of impairment exist, the Company measures the carrying amount of the asset against the estimated undiscounted future cash flows associated with it. Should the sum of the expected future cash flows be less than the carrying value of the asset being evaluated, an impairment loss would be recognized. The impairment loss would be calculated as the amount by which the carrying value of the asset exceeds its fair value. The evaluation of asset impairment requires the Company to make assumptions about future cash flows over the life of the asset being evaluated. These assumptions require significant judgment and actual results may differ from assumed and estimated amounts. During the years ended December 31, 2022 and 2021, the Company had no impairment losses related to intangible assets.

f) Impairment of long-lived assets

Long-lived assets are reviewed for impairment annually, or when events or circumstances arise that indicate the existence of impairment, using the same evaluation process as described above for patents and other intangibles. There was no impairment recorded during the years ended December 31, 2022 and 2021.

g) Income taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry-forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rate is recognized in income in the period that includes the enactment date.

h) Use of estimates

Management of the Company has made a number of estimates and assumptions relating to the reporting of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and reported amounts of revenues and expenses during the reporting period to prepare these consolidated financial statements in conformity with GAAP. Actual results could differ from those estimates.

i) Revenue recognition

Revenue is recognized when products are shipped. No warranty coverage or right of return provisions are provided to customers. Amounts received as prepayment on future products or services are recorded as unearned revenues and recognized as income when the product is shipped or service performed. See Note 14 Revenue Recognition.

j) Research and development costs

Research and development costs are expensed as incurred and totaled \$533,716 and \$271,714 for the years ended December 31, 2022 and 2021, respectively. These research and development costs were incurred to maintain our planned de-conversion facility license and in our radiochemical products and nuclear medicine standards business segments.

k) Share-based compensation

The Company accounts for issuances of share-based compensation to employees in accordance with GAAP which requires the recognition of the cost of employee services received in exchange for an award of equity instruments in the financial statements and is measured based on the grant date fair value of the award. Compensation expense is recognized over the period during which an employee is required to provide service in exchange for the award (the vesting period).

For the years ended December 31, 2022 and 2021, the Company recognized share-based compensation expense of \$352,458 and \$84,564, respectively, related to stock options and stock grants. This expense is included as part of salaries and contract labor in the accompanying statements of operations.

l) Net loss per common share – basic and diluted

Basic loss per share is computed on the basis of the weighted-average number of common shares outstanding during the year. Diluted loss per share is computed on the basis of the weighted-average number of common shares plus all potentially dilutive issuable common shares outstanding during the year.

The table below shows the calculation of diluted shares:

	December 31,	
	2022	2021
Weighted average common shares outstanding - basic	510,794,145	477,723,996
Effects of dilutive shares		
Stock options	—	—
Warrants	—	—
Series B redeemable convertible preferred stock	—	—
Series C redeemable convertible preferred stock	—	—
Weighted average common shares outstanding - diluted	510,794,145	477,723,996

For the year ended December 31, 2022, the Company had 24,993,500 stock options outstanding, and 4,063 outstanding shares of Series C redeemable convertible preferred stock (Series C Preferred Stock), each of which were not included in the computation of diluted income per common share because they would be anti-dilutive.

For the year ended December 31, 2021, the Company had 20,777,500 stock options outstanding, 7,065,000 warrants outstanding, 4,063 outstanding shares of Series C redeemable convertible preferred stock (Series C Preferred Stock), and 675 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 per common share because they would be anti-dilutive.



The table below summarizes common stock equivalents outstanding at December 31, 2022 and 2021:

	December 31,	
	2022	2021
Stock options	24,993,500	20,777,500
Warrants	—	7,065,000
850 Shares of Series B redeemable convertible preferred stock	—	337,500
4,213 Shares of Series C redeemable convertible preferred stock	40,630,000	40,630,000
	<u>65,623,500</u>	<u>68,810,000</u>

m) Business segments and related information

GAAP establishes standards for the way public business enterprises are to report information about operating segments in annual financial statements and requires enterprises to report selected information about operating segments in interim financial reports issued to shareholders. It also establishes standards for related disclosure about products and services, geographic areas and major customers. The Company currently operates in four business segments.

n) Recent accounting standards

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

NOTE 2 – BUSINESS CONDITION AND LIQUIDITY

The Company has a history of recurring losses with an accumulated deficit of \$126,460,843 at December 31, 2022 and net income of \$303,238 for the year then ended. The Company’s working capital, which includes inventory that will not be sold for up to three years, has increased by \$3,902,716 from the prior year. The Company has cash flows used by operations of \$1,497,719. During 2022, the Company sought to improve future cash flows from operating activities through execution of new sales agreements, improving operating cost control measures, making improvements in current manufacturing processes, pursuing new service contracts, and developing new products. The Company’s net income was \$303,238 in 2022, compared to net loss of \$902,347 in 2021. This is an increase in net income of \$1,205,585. This increase in net income is largely the result of the approximate \$1.8 million gain on sale of assets.

During the year ended December 31, 2022, the Company continued to focus on its long-standing core business segments, which consist of its radiochemical products, cobalt products, and nuclear medicine standards, and in particular, the pursuit of new business opportunities within those segments.

In addition to the Company’s cobalt production agreement with the DOE, the Company entered into supply agreements in 2015 with several customers for the purchase of cobalt-60. It takes several years to irradiate cobalt targets to the desired level of activity; the shipment of cobalt-60 product to these customers is delayed until cobalt that fits the customers need can be produced. Pursuant to these cobalt-60 supply agreements, the Company will not only supply cobalt-60 to the customers but, in some instances, will also provide on-going services with respect to manufacturing and selling cobalt sources. Each contract requires quarterly progress payments to be paid by customers to the Company.

Due to changes in the nuclear industry over the past few years, the Company’s plans for the design and construction of a large-scale uranium de-conversion and fluorine extraction facility were placed on hold. The Company expects that further activity on this project will remain on hold until the market and industry conditions change to justify resuming design and construction of the facility. The Company will continue to incur some costs associated with the maintenance of licenses and other necessary project investments for the proposed facility, and the Company expects to continue to keep certain agreements in place to support resumption of project activities at the appropriate time. In July 2015, the Company announced that it executed an amendment to its Project Participation Agreement (PPA) with the Lea County, New Mexico Board of Commissioners. The PPA granted to the Company direct and indirect assistance for locating its proposed depleted UF6 de-conversion facility in Hobbs, New Mexico. The principal component of assistance was the conveyance of approximately 640 acres of land for construction and operation of the proposed facility. The conveyance of the land was contingent upon the Company commencing construction on Phase 1 of the facility by December 31, 2014 and hiring a certain number of

employees by December 31, 2015. Under the amendment to the PPA, the Lea County, New Mexico Board of Commissioners agreed to extend those dates to December 31, 2016 and December 31, 2017, respectively. The Company did not meet the deadlines set forth in the amended PPA, but plans to continue discussions with the Lea County, New Mexico Board of Commissioners to further extend the milestone dates once contract opportunities materialize. If the Company does not succeed in extending the commitment dates or in reaching performance dates set forth in a modified agreement, 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 holds a Nuclear Regulatory Commission (“NRC”) construction and operating license for the depleted uranium facility 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 believes that it provides it with a very valuable asset. During 2022 the company has signed an Option to Purchase Assets Agreement with a company that may be interested in bringing this project forward. The assets under consideration include the NRC license, property agreements, and all engineering design work completed to date on the project. During 2023 the company expects to support further due diligence review of the project by a third party that could lead to the sale of these assets in 2023 or 2024. During the year ended December 31, 2022, the Company incurred costs of approximately \$145,000 to maintain licenses and other necessary project investments. During the same period in 2021, the Company incurred costs of approximately \$150,000 for planning and development activities on the project.

The Company expects that cash from operations 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.

#### NOTE 3 – PURCHASED ASSET AND INVESTMENTS

##### Interest in RadQual, LLC

The Company had a 24.5% interest in RadQual, with which the Company has an exclusive manufacturing agreement for nuclear medicine products. On August 10, 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. As a result of this change in ownership, the Company was named as a managing member and 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 10, 2017.

In July 2021, the Company purchased the remaining 75.5% interest in RadQual for an aggregate purchase price of approximately \$4.4 million, which was paid in shares of our common stock, resulting in the issuance of 40,176,236 shares of our common stock as consideration. As a result of this purchase, the Company owns 100% of RadQual. The Company will continue to consolidate the accounts of RadQual as its wholly-owned subsidiary.

##### Acquisition of Interest in TI Services, LLC

In December 2010, the Company together with RadQual, formed a 50% owned joint venture, TI Services, LLC (“TI Services”). TI Services is engaged in the distribution and selling of products related to the nuclear medicine industry. Because the Company controls more than a 50% direct and indirect ownership interest in TI Services, the assets and liabilities of TI Services are consolidated with those of the Company, and RadQual’s non-controlling interest in TI Services is included in the Company’s financial statements as a non-controlling interest.

In July 2021, the Company purchased the remaining 75.5% interest in RadQual. As a result of the is purchase, the Company now controls 100% of TI Services. The Company will continue to consolidate the accounts of TI Services as its wholly-owned subsidiary.

#### NOTE 4 – INVENTORIES

Inventories consisted of the following for the years ended December 31, 2022 and 2021:

	<u>2022</u>	<u>2021</u>
Raw materials	\$ —	\$ —
Work in progress	744,793	924,775
Finished goods	—	—
	<u>\$ 744,793</u>	<u>\$ 924,775</u>

Included in raw material inventory raw cobalt, strontium and other raw elements. Raw material inventory is regularly reviewed for obsolescence. In 2021, the Company determined all raw material inventory was obsolete. The remaining \$33,609 of raw material inventory was reduced to \$0 due to this impairment.

Previously, work in process included costs to irradiate cobalt-60 material under a contract with the DOE. This material was placed in the reactor exclusively for purchase by the Company. In 2021, the company took shipment of all remaining cobalt-60 for which it had paid irradiation charges. The Company has contracted with several customers for the purchase of this cobalt-60 material and has collected advance payments for project management, up-front handling and irradiation charges. The advance payments from customers were recorded as unearned revenue which are recognized in the Company's consolidated financial statements as cobalt products are completed and shipped. For the year ended December 31, 2022 and 2021, the Company recognized approximately \$39,000 and \$18,000, respectively, of revenue in its consolidated statements of operations for customer orders filled during the period under these cobalt contracts.

#### NOTE 5 – PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are summarized as follows at December 31, 2022 and 2021:

	<u>2022</u>	<u>2021</u>	<u>Estimated Useful Lives</u>
Furniture and fixtures	\$ 284,020	\$ 199,908	3 - 5 years
Transportation equipment	114,708	114,708	5 - 10 years
Plant and improvements	501,334	1,146,312	5 years
Production equipment	3,997,193	5,807,683	5 - 10 years
	4,897,255	7,268,611	
Accumulated depreciation	(2,872,769)	(2,968,674)	
	<u>\$ 2,024,486</u>	<u>\$ 4,299,937</u>	

Included in fixed assets are assets purchased during the planning phase for the construction of a de-conversion facility in Hobbs, New Mexico. Although construction of the facility is currently on hold, the Company has determined that these assets continue to have future economic value based on what it considers a strong likelihood that construction of the facility will occur in the future.

Depreciation expense was \$185,193 and \$398,117 for the years ended December 31, 2022 and 2021, respectively.

#### NOTE 6 – PATENTS AND OTHER INTANGIBLE ASSETS

The Company owns certain patents and patents pending related to a fluorine extraction process (FEP), for various uses of some fluoride gases as fluorinating agents, and some of the RadQual nuclear medicine calibration sources. The FEP patents were developed in an effort to expand the potential markets for the high purity fluoride gases the Company will produce with its fluorine extraction process. The feasibility of expanding the fluoride gas markets through the use of this patented technology is uncertain. The RadQual product patents were developed to give RadQual a unique competitive advantage by offering calibration standards exclusive to RadQual.

In October 2012, the NRC issued the Company a 40-year construction and operating license for the de-conversion facility. Capitalized costs associated with the licensing and planning process for this license are being amortized over the 40-year life of the license.

The following table summarizes the patent and intangible activity for the years ended December 31, 2022 and 2021:

	<u>2022</u>
Beginning	\$ 5,362,628
Additions	8,250
Disposals	—
Ending	5,370,878
Accumulated amortization	(1,667,525)
	<u>\$ 3,703,353</u>

During the year ended December 31, 2022 the Company recognized \$164,370 of amortization expense, and during the year ended December 31, 2021, the Company recognized \$163,180 of amortization expense.

Patent and other intangible asset amortization is based on the remaining life of the asset and estimated amortization expense is as follows:

Years ending December 31,	
2023	\$ 164,895
2024	164,895
2025	164,895
2026	164,895
2027	164,895
Thereafter	2,878,878
	<u>\$ 3,703,353</u>

#### NOTE 7 – CONVERTIBLE DEBENTURES AND NOTES PAYABLE

##### Convertible debentures

As discussed in Note 9 below, in February 2017, pursuant to a private placement transaction with certain investors, the Company issued 3,433 shares of Series C Preferred Stock and warrants. In connection with the private placement, two investors holding convertible debentures exchanged aggregate principal totaling \$205,000 of the convertible debentures for shares of the Series C Preferred Stock and warrants.

##### Notes payable

In April 2018, the Company borrowed \$120,000 from its 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 and the 2018 Promissory Note was modified to become secured by company assets, with all other provisions remaining unchanged. Pursuant to a fifth amendment to the 2018 Promissory Note in December 2021, the maturity date was extended to December 31, 2023 with all other provisions remaining unchanged.

At December 31, 2022, accrued interest on the 2018 Promissory Note totaled \$33,770.

In December 2013, the Company entered into a promissory note agreement with its then Chairman of the Board and one of its major shareholders, pursuant to which the Company 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 the Company's 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 (Class L Warrants). The Class L Warrants were immediately exercisable. The fair value of these warrants issued totaled \$384,428 and was recorded as a debt discount were amortized over the life of the 2013 Promissory Note. The Company calculated a beneficial conversion feature of \$15,464 which was accreted to interest expense over the life of the 2013 Promissory Note. 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 the Company's common stock at an exercise price of \$0.06 per share. The Class L 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. In January 2022, the 2013 Promissory Note was further modified to extend the maturity date to December 31, 2023, with all remaining terms unchanged.

At December 31, 2022, the principal balance of the 2013 Promissory Note was \$500,000 and accrued interest payable on the 2013 Promissory Note was \$271,734. Interest expense recorded for the year ended December 31, 2022, was \$30,000.

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 \$462,858 with no interest charge. At December 31, 2021 balance on this refund is \$80,000. This refund was paid in full in February 2022.

In August 2021, one of the prepaid revenue customers requested a refund of the amounts paid. The Company entered into a note agreement to repay \$146,072 by June 2021. Any balance of the refund amount left outstanding after December 31, 2021 accrues interest at a rate of 5% per annum until paid in full. At December 31, 2021 balance on this refund is \$146,072. This refund was paid in full in February 2022.

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 trading 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 (Class O Warrants). The fair value of these Class O Warrants issued totaled \$446,079 and was recorded as a debt discount and was amortized over the life of the 2019 Promissory Note. At December 31, 2022, the remaining balance of this debt discount was \$0. The Company calculated a beneficial conversion feature of \$315,643 which was accreted to interest expense over the life of the 2019 Promissory Note. At December 31, 2022, the remaining balance of this beneficial conversion feature was \$0. In January 2023, the 2019 Promissory Note was modified to extend the maturity date to December 31, 2024, with all remaining terms unchanged. At December 31, 2022 accrued interest on the 2019 Promissory Note totaled \$119,131.

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

Notes payable as of December 31, 2022 and 2021 consist of the following:

	<u>2022</u>	<u>2021</u>
Note payable to related parties bearing interest at 6% all principal and interest due on December 31, 2023, secured	\$ 120,000	\$ 120,000
Note payable to related parties bearing interest at 6% all principal and interest due on December 31, 2022, secured	—	250,000
Note payable to related parties net of unamortized debt discount of \$0 and \$256,265 at December 31, 2022 and 2021, respectively, bearing interest at 4% all principal and interest due on December 31, 2024, secured	1,000,000	743,735
Note payable to related parties bearing interest at 6% all principal and interest due on December 31, 2023, secured	500,000	500,000
Note payable to customer pursuant to a refund agreement. Interest at 12%	—	80,000
Note payable to customer pursuant to a refund agreement. Interest at 5%	—	146,072
Note payable to a financial institution bearing interest at 6.66% monthly installments of \$805, secured	—	3,167
Note payable to a financial institution bearing interest at 5.99% monthly installments of \$1,046, secured	44,521	54,087
Note payable for purchase contract bearing interest at 5% monthly installments of \$4,442, secured	13,233	64,460
Total notes payable	<u>1,677,754</u>	<u>1,961,521</u>
Less: current maturities	<u>(643,348)</u>	<u>(1,283,752)</u>
Notes payable, net of current installments and debt discount	<u>\$ 1,034,406</u>	<u>\$ 677,769</u>

Maturities of convertible debt and notes payable, excluding debt discount and debt issuance costs, at December 31, 2022, are as follows:

Years ending December 31,	
2023	\$ 643,348
2024	1,010,774
2025	11,439
2026	12,193
Thereafter	—
	<u>\$ 1,677,754</u>

#### NOTE 8 – LEASE OBLIGATIONS

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.

	Year Ended December 31	
	2022	2021
Operating lease costs	\$ 285,159	\$ 258,762
Short-term operating lease costs	12,066	6,003
Financing lease expense:		
Amortization of right-of-use assets	4,172	7,786
Interest on lease liabilities	649	1,855
Total financing lease expense	4,821	9,641
Total lease expense	<u>\$ 302,046</u>	<u>\$ 274,406</u>
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ —	\$ 1,603
Right-of-use assets obtained in exchange for new financing lease liabilities	\$ —	\$ —
Weighted-average remaining lease term (years) - operating leases	12.1	13.1
Weighted-average remaining lease term (years) - financing leases	1.1	2.1
Weighted-average discount rate - operating leases	6.75%	6.75%
Weighted-average discount rate - financing leases	7.93%	8.63%

Maturities of lease liabilities as of December 31, 2022, were as follows:

	Operating leases	Finance leases
<u>For the years ended December 31,</u>		
2023	\$ 287,108	\$ 5,881
2024	287,108	2,929
2025	287,108	—
2026	287,108	—
2027	287,108	—
Thereafter	2,025,193	—
Total minimum lease obligations	3,460,733	8,810
Less-amount representing interest	(1,096,917)	(465)
Present value of minimum lease obligations	2,363,816	8,345
Current maturities	(131,572)	(5,513)
Lease obligations, net of current maturities	<u>\$ 2,232,244</u>	<u>\$ 2,832</u>

## NOTE 9 – SHAREHOLDERS’ EQUITY, REDEEMABLE CONVERTIBLE PREFERRED STOCK, OPTIONS AND WARRANTS

### Warrants

In December 2019, the Company entered into the 2019 Promissory Note, as discussed above. In connection with the 2019 Promissory Note, the company issued 20,250,000 Class O Warrants to purchase shares of the Company’s common stock at a purchase price of \$0.045 per share. All 20,250,000 Class O Warrants were exercised in January 2021.

In February 2020, the Company borrowed the remaining amount available for borrowings under the 2019 Promissory Note as discussed above. As a result and according to the terms of the 2019 Promissory Note, the Company issued 9,750,000 additional Class O Warrants to purchase shares of the Company’s common stock at a purchase price of \$0.045 per share. All 9,750,000 Class O Warrants were exercised in January 2021.

On February 14, 2022, 515,000 Class M Warrants were exercised for an exercise price of \$0.12 per share. The Company received \$61,800 of proceeds as a result of the exercise. On February 17, 2022 the 3,625,000 remaining unexercised Class M Warrants expired. On May 12, 2022, the 2,925,000 remaining unexercised Class N Warrants expired.

The following table summarizes warrant activity for the years ended December 31, 2022 and 2021:

<u>Warrants</u>	<u>Outstanding Shares</u>	<u>Weighted Average Exercise</u>
Outstanding at December 31, 2020	50,090,000	\$ 0.07
Granted	—	—
Exercised	(43,025,000)	0.07
Forfeited	—	—
Outstanding at December 31, 2021	7,065,000	0.11
Granted	—	—
Exercised	(515,000)	0.12
Forfeited	(6,550,000)	0.11
Outstanding at December 31, 2022	—	\$ —

At December 31, 2022, there were no outstanding warrants.

Warrants outstanding at December 31, 2021, included 4,140,000 Class M Warrants which were immediately exercisable at an exercise price of \$0.12 per share and expired on February 17, 2022; 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.

#### Mandatorily Redeemable Convertible Preferred Stock

The Company is authorized to issue up to 5,000,000 shares of preferred stock, par value \$0.01 per share. The Board is authorized to set the distinguishing characteristics of each series prior to issuance, including the granting of limited or full voting rights, rights to the payment of dividends and amounts payable in event of liquidation, dissolution or winding up of the Company.

At December 31, 2021, there were 675 shares of the Series B Convertible Redeemable Preferred Stock (the “Series B Preferred Stock”) outstanding with a mandatory redemption date of May 2022 at \$1,000 per share, or \$675,000 in aggregate redemption value. The Series B Preferred Stock were convertible into common stock at a conversion price of \$2.00 per share. These preferred shares carried no dividend preferences. Due to the mandatory redemption provision, the Series B Preferred Stock were classified as a liability in the accompanying consolidated balance sheets. In 2021, 175 shares of Series C Preferred Stock were converted into shares of common stock. On May 31, 2022, the Company paid with shares of the Company’s common stock all 675 outstanding Series B Preferred Stock outstanding with a mandatory redemption date of May 2022 at \$1,000 per share or \$675,000. The May 31, 2022 average price of the Company’s common stock was \$0.08 per share. The Company issued 8,437,500 shares of common stock to satisfy the \$675,000 redemption amount.

At December 31, 2021 and December 31, 2022, there were 4,063 total shares of the Series C Preferred Stock outstanding. The Series C Preferred Stock are convertible at the option of the investors 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. At any time after February 17, 2019, 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 (\$1,000) plus any accrued and unpaid dividends, payable in shares of common stock. All outstanding shares of Series C Preferred Stock were to be redeemed by the Company on February 17, 2022 at the original purchase price per share, payable in cash or shares of common stock, at the option of the holder. In February 2022, based on approval of majority of the Preferred C Holders, the Company extended the redemption date of the Series C Preferred Stock to February 17, 2023. In December 2022, based on approval of majority of the Preferred C Holders, the Company extended the redemption date of the Series C Preferred Stock to February 17, 2025. Holders of 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 Company pays dividends on the Series C Preferred Stock in February each year. Dividends payable totaled \$243,780 in February 2022 and \$254,280 in February 2021. Some holders of the Series C Preferred Stock elected to settle their dividend payments with shares of the Company’s common stock in lieu of cash. The Company issued 2,271,980 shares of common stock in lieu of a dividend payment of \$204,480 in 2022 and 1,398,200 shares of common stock in lieu of a dividend payment of \$205,980 in 2021. \$39,300 of dividend payable was settled with cash in 2022 and \$46,800 was settled with cash in 2021.



The outstanding 4,063 shares of Series C Preferred Stock originated as follows:

On February 17, 2017, the Company entered into subscription agreements with certain investors, including two of the Company's directors, for the sale of (i) an aggregate of 3,433 shares of Series C Preferred Stock, and (ii) Class M warrants to purchase an aggregate of 17,165,000 shares of the Company's common stock (the Class M Warrants), for gross proceeds of \$3,433,000. The Series C Preferred Stock accrues dividends at a rate of 6% per annum, payable annually on February 17<sup>th</sup> of each year, commencing on February 17, 2018.

The Class M Warrants were immediately exercisable at an exercise price of \$0.12 per share, subject to adjustment as set forth in the warrant, and expired in February 2022.

The Company allocated the proceeds to the Series C Preferred Stock and Class M Warrants based on their relative fair value, which resulted in \$2,895,379 being allocated to the Series C Preferred Stock and \$537,621 being allocated to the Class M Warrants. The allocated Class M Warrant value was recorded as a discount to the Series C Preferred Stock and will be amortized to interest expense over the five-year life of the warrants. At December 31, 2021, the balance of the discount to the Series C Preferred Stock was \$13,440 and the net carrying value of these 3,433 shares of Series C Preferred Stock was \$3,419,560. At December 31, 2022, the balance of the discount to the Series C Preferred Stock was \$0 and the net carrying value of these 3,433 shares of Series C Preferred Stock was \$3,433,000.

On March 24, 2017, the Company entered into an Amendment to the 8% Convertible Notes (the Amendment), pursuant to which the 8% Convertible Notes (the Notes) issued by the Company in July 2012 were amended to give noteholders certain additional rights. Pursuant to the Amendment, the Notes were modified to provide each holder the right, at the holder's option and exercisable prior to May 12, 2017, to convert all or any portion of the principal amount of the Notes, plus accrued but unpaid interest, into shares of Series C Preferred Stock at a conversion price of \$1,000 per share. Holders that elected to convert their Notes into Series C Preferred Stock received a Class N Warrant to purchase up to 3,750 shares of the Company's common stock for each share of Series C Preferred Stock received upon conversion of the Notes, with each Warrant having a five-year term, a cashless exercise feature, and an exercise price of \$0.10 per share of common stock. On May 12, 2017, the Company completed the retirement of \$1,835,000 of the Notes in early cash redemptions, and \$780,000 of the Notes were converted into an aggregate of 780 shares of Series C Preferred Stock and Class N Warrants to purchase an aggregate of 2,925,000 shares of the Company's common stock. In 2021, 150 shares of Series C Preferred Stock were converted into shares of common stock.

The Class N Warrants were immediately exercisable at an exercise price of \$0.10 per share, subject to adjustment as set forth in the warrant, and expired in May 2022.

The Company allocated the proceeds to the Series C Preferred Stock and Class N Warrants based on their relative fair value, which resulted in \$675,947 being allocated to the Series C Preferred Stock and \$104,053 being allocated to the Class N Warrants. The allocated Class N Warrant value was recorded as a discount to the Series C Preferred Stock and will be amortized to interest expense over the five-year life of the warrants. At December 31, 2021, the balance of the discount to the Series C Preferred Stock was \$4,737 and the net carrying value of 630 outstanding shares of Series C Preferred Stock was \$625,263. At December 31, 2022, the balance of the discount to the Series C Preferred Stock was \$0 and the net carrying value of 630 shares of Series C Preferred Stock was \$630,000.

#### Employee Stock Purchase Plan

In September 2004, the Company's Board approved an employee stock purchase plan for an aggregate of up to 2,000,000 shares of the Company's common stock. The plan allows employees to deduct up to 15% of their salary or wages each pay period to be used for the purchase of common stock at a discounted rate. The common shares will be purchased at the end of each three-month offering period or other period as determined by the Board. The plan is intended to qualify as an "employee stock purchase plan" under Section 423 of the Internal Revenue Code. An amendment and restatement of the plan was approved in July 2020 by the Company's shareholders, which increased the number of shares available for purchase by 3,000,000 shares. At December 31, 2022 there were 2,541,410 shares available under the employee stock purchase plan.

During 2022 and 2021, the Company issued 245,081 and 313,420 shares of common stock to employees for proceeds of \$14,771 and \$18,888, respectively, in accordance with the employee stock purchase plan.

## 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 amends and restates the Company's Amended and Restated 2006 Equity Incentive Plan (the "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. Unless earlier terminated, the 2015 Plan will terminate on July 13, 2025. At December 31, 2022 there were 29,401,134 shares available for issuance under the 2015 Plan.

## Non-Vested Stock Grants

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

Pursuant to an employment agreement with its Chief Executive Officer, the Company awarded 195,804 fully vested shares of common stock to its Chief Executive Officer in February 2021 under the 2015 Plan. The number of shares awarded was based on a \$28,000 stock award using a price of \$0.143 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 \$23,496, which was determined by multiplying the number of shares awarded by the closing price of the common stock on February 28, 2021, which was \$0.12 per share. The Company withheld 77,489 shares of common stock to satisfy the employee's payroll tax obligations in connection with this issuance. The net shares issued on February 28, 2021 totaled 118,315.

## Stock Options

A summary of the stock options issued under the Company's equity plans is as follows:

<u>Warrants</u>	<u>Outstanding Shares</u>	<u>Weighted Average Exercise Price</u>	<u>Weighted Average Remaining Contractual Life</u>	<u>Average Intrinsic Value</u>
Outstanding at December 31, 2020	20,400,000	\$ 0.06		\$ 107,250
Granted	3,250,000	0.11		
Exercised	(2,552,500)	0.04		362,410
Forfeited	(320,000)	0.07		
Outstanding at December 31, 2021	20,777,500	0.06		627,615
Granted	8,150,000	0.09		
Exercised	(1,200,000)	0.04		57,000
Forfeited	(1,734,000)	0.08		
Outstanding at December 31, 2022	24,993,500	0.07	6.0	—
Exercisable at December 31, 2022	16,716,000	\$ 0.06	4.6	\$ —

The total intrinsic value of stock options outstanding at December 31, 2022 was \$0. The intrinsic value for stock options outstanding is calculated as the amount by which the quoted price of \$0.03 of the Company's common stock as of the end of 2022 exceeds the exercise price of the options.

The Company recognized \$280,393 and \$70,366 of compensation expense related to these options for the years ended December 31, 2022 and 2021, respectively. At December 31, 2022, the remaining compensation expense was \$170,591 and will be recognized over 1.88 years.

In March 2022, 1,000,000 qualified stock options were exercised under a cashless exercise. The company withheld 388,889 shares to satisfy the exercise price and issued 611,111 shares of common stock. The options exercised were granted under the 2015 Plan, and, accordingly, there was not any income tax effect in the condensed consolidated financial statements for the year ended December 31, 2022.

In August 2022, 200,000 qualified stock options were exercised under a cashless exercise. The company withheld 162,163 shares to satisfy the exercise price and issued 37,837 shares of common stock. The options exercised were granted under the 2015 Plan, and, accordingly, there was not any income tax effect in the condensed consolidated financial statements for the year ended December 31, 2022.

In January 2021, 2,000,000 qualified stock options were exercised under a cashless exercise. The company withheld 250,000 shares to satisfy the exercise price and issued 1,750,000 shares of common stock. The options exercised were granted under the 2015 Plan, and, accordingly, there was not any income tax effect in the condensed consolidated financial statements for the year ended December 31, 2021.

In January 2021, 62,500 qualified stock options were exercised under a cashless exercise. The company withheld 13,393 shares to satisfy the exercise price and issued 49,107 shares of common stock. The options exercised were granted under the 2015 Plan, and, accordingly, there was not any income tax effect in the condensed consolidated financial statements for the year ended December 31, 2021.

In September 2021, 200,000 qualified stock options were exercised under a cashless exercise. The company withheld 90,909 shares to satisfy the exercise price and issued 109,091 shares of common stock. The options exercised were granted under the 2015 Plan, and, accordingly, there was not any income tax effect in the condensed consolidated financial statements for the year ended December 31, 2021.

In December 2021, 290,000 qualified stock options were exercised under a cashless exercise. The company withheld 173,400 shares to satisfy the exercise price and issued 116,600 shares of common stock. The options exercised were granted under the 2015 Plan, and, accordingly, there was not any income tax effect in the condensed consolidated financial statements for the year ended December 31, 2021.

During the year ended December 31, 2022, the Company granted an employee 1,000,000 qualified stock options with an exercise price of \$0.10 per share and 25,000 qualified stock options with an exercise price of \$0.08 per share to one of its employees and a total of 125,000 qualified stock options with an exercise price of \$0.03 per share to two other employees. These options vest over a five-year period with the first vesting at the one-year anniversary of the grant and expiration at ten-year anniversary for all grants. On February 21, 2022, the Compensation Committee granted 3,000,000 qualified stock options to the Company's executive officers and 4,000,000 non-qualified stock options to members of the Board. The exercise price for these options was \$0.09 per share. 2,000,000 of the options granted to an executive officer vest one half immediately and one half at the one-year anniversary of the grant. The remaining executive officer and board member options vest one fourth immediately and one fourth each subsequent year. All these granted options expire at the ten-year anniversary of the grant. The options issued during the year ended December 31, 2022 have a fair value of \$442,295 as estimated on the date of issue using the Black-Scholes options pricing model with the following weighted-average assumptions: risk free interest rate of 1.37% to 4.14%, expected dividend yield rate of 0%, expected volatility of 65.19% to 70.09% and an expected life between 5 and 7.5 years.

During the year ended December 31, 2021, the Company granted 3,250,000 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 \$0.11 per share. The options have a fair value of \$209,748 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 0.46% to 1.44%, expected dividend yield rate of 0%, expected volatility of 52.52% to 69.01% and an expected life between 5.5 and 7.5 years.

All options exercised were issued under a qualified plan and accordingly, there is no income tax effect in the accompanying financial statements.

## NOTE 10 – INCOME TAXES

The Company paid no federal or state income taxes during 2022 and 2021. Income tax benefit on losses differed from the amounts computed by applying the recently enacted U.S. federal income tax rate of 21% to pretax losses as a result of the following:

	2022	2021
Income tax expense (benefit)	\$ 72,207	\$ (189,493)
Book and tax differences	(72,207)	(36,981)
State taxes net of federal benefit	—	—
Change in valuation allowance	—	226,474
	<u>\$ —</u>	<u>\$ —</u>

The tax effects of temporary differences that give rise to significant portions of the Company's deferred tax assets (liabilities) as of December 31, 2022 and 2021 are presented below:

	2022	2021
Deferred income tax asset	\$ —	\$ —
Net operating loss carryforward	7,736,618	7,915,642
Valuation allowance	(7,363,815)	(7,497,326)
Total deferred income tax asset	327,803	418,316
Deferred income tax liability - depreciation	(372,803)	(418,316)
Deferred tax asset (liability)	<u>\$ —</u>	<u>\$ —</u>

At December 31, 2022, the Company had net operating losses of approximately \$36,841,000 that will begin to expire in 2024. The valuation allowances for 2022 and 2021 have been applied to offset the deferred tax assets in recognition of the uncertainty that such benefits will be realized.

In accordance with GAAP, the Company has analyzed its filing positions in all jurisdictions where it is required to file income tax returns for the open tax years in such jurisdictions. The Company currently believes that all significant filing positions are highly certain and that all of its significant income tax filing positions and deductions would be sustained upon audit. Therefore, the Company has no significant reserves for uncertain tax positions, and no adjustment to such reserves was required by GAAP. No interest or penalties have been levied against the Company and none are anticipated, therefore no interest or penalty has been included in the provision for income taxes in the consolidated statements of operations.

The Internal Revenue Code contains provisions which reduce or limit the availability and utilization of net operating loss carry forwards in the event of a more than 50% change in ownership. If such an ownership change occurs with the Company, the use of these net operating losses could be limited.

## NOTE 11 – COMMITMENTS AND CONTINGENCIES

### Dependence on Third Parties

Sales during 2022 to the Company's top three customers was approximately 23% of its total gross revenue. The Company is making efforts to reduce its dependency on a small number of customers by expanding both domestic and foreign.

The production of HSA Cobalt is dependent upon the DOE, and its prime operating contractor, which controls the reactor and laboratory operations at the ATR located outside of Idaho Falls, Idaho. On October 2, 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 and with an annual 5% escalation in price. The contract term is October 1, 2014, through September 30, 2024. However, the DOE may end the contract if it determines termination is necessary for the national defense, security or environmental safety of the U.S. If this were to occur, all payments made by the Company would be refunded.

The key isotope materials used to manufacture our radiopharmaceutical product and nuclear medicine reference standards are supplied to the Company through agreements with several suppliers. The loss of any of these suppliers could adversely affect operating results by causing a delay in production or a possible loss of sales.

## Contingencies

Because all the Company's business segments involve the handling or use of radioactive material, the Company is required to have an operating license from the NRC and specially trained staff to handle these materials. The Company has amended this operating license numerous times to increase the amount of material permitted within the Company's facility. Although this license does not currently restrict the volume of business operation 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 and a restricted money market account, in the amount of \$840,049, held with North American Specialty Insurance Company and Merrill Lynch, respectively.

In August 2011, we received land from Lea County, New Mexico, pursuant to a PPA, whereby the land was deeded to us for no monetary consideration. In return, we committed to construct a uranium de-conversion and FEP facility on the land. In order to retain title to the property, we were 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 agreement that extended the start of construction date to December 31, 2015, and the hiring milestone to December 31, 2016. Those dates were not met and the Company is currently in the process of renegotiating a second modification to the agreement to further extend those dates. If we do not succeed in reaching an amendment to extend the performance dates in the agreement then we may, at our 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. We have 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 our obligations under the agreements for permanent transfer of the title.

## Defined Contribution Pension Plan

The Company has a 401(k) defined-contribution pension plan (the "401(k) Plan"). Employees are eligible to participate in the Plan after completing six months of full-time service. Participants, under provision of Internal Revenue Code § 401(k), may elect to contribute up to \$20,500 of their compensation to the 401(k) Plan which includes both before-tax and Roth after-tax contribution options. Although the Company reserves the right to make discretionary matching contributions to participant accounts, there were no employer matching contributions made for either 2021 or 2020. All amounts withheld for employee contributions for 2021 were paid into the 401(k) Plan. The employer reserves the right to terminate the 401(k) Plan at any time.

## NOTE 12 – ASSET RETIREMENT OBLIGATION

As part of the Company's NRC operating license and as part of the Company's facility lease agreements, the Company is responsible for decommissioning any facilities upon termination or relocation of operations. The Company has developed a decommissioning funding plan using guidelines provided by the NRC and has estimated the cost of decommissioning the facility in Idaho Falls. The decommissioning cost estimate is reviewed at least annually to validate the assumptions and is revised as necessary when changes in the facility processes or radiological characteristics would affect the cost of decommissioning.

In accordance with GAAP, the Company has recognized future estimated decommissioning costs as an asset retirement obligation and a related capitalized lease disposal cost. The Company has recognized period-to-period changes in the liability (accretion) in the statement of operations as amortization expense. Changes resulting from revisions to the original estimate are recorded as an increase or decrease to the capitalized lease disposal cost. Capitalized lease disposal cost is amortized on a straight-line basis over the remaining life of the facility operating lease agreement.

The following summarizes the activity of the asset retirement obligation for the years ended December 31, 2022 and 2021:

	<b>Obligation for Lease Disposal Cost</b>
Balance at December 31, 2020	\$ 588,105
Increase in lease disposal costs	260,715
Accretion expense/amortization expense	43,267
Balance at December 31, 2021	892,087
Increase in lease disposal costs	—
Accretion expense/amortization expense	50,291
Balance at December 31, 2022	\$ 942,378

## NOTE 13 – FAIR VALUE MEASUREMENTS

At December 31, 2022 and 2021, the Company had no assets carried at fair value.

## NOTE 14 – 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:

	Twelve Months Ended December 31, 2022				Twelve Months Ended December 31, 2021			
	U.S.	Outside U.S.	Total Revenues	% of Total Revenues	U.S.	Outside U.S.	Total Revenues	% of Total Revenues
Radiochemical Products	\$5,338,010	\$ 707,757	\$ 6,045,767	54%	\$3,774,471	\$ 500,573	\$4,275,044	44%
Cobalt Products	1,137,066	20,470	1,157,536	10%	1,299,503	55,014	1,354,517	14%
Nuclear Medicine Products	3,173,755	804,930	3,978,685	36%	3,095,123	907,483	4,002,606	42%
Fluorine Products	—	—	—	0%	29,775	—	29,775	0%
	<u>\$9,648,831</u>	<u>\$1,533,157</u>	<u>\$11,181,988</u>	<u>100%</u>	<u>\$8,198,872</u>	<u>\$1,463,070</u>	<u>\$9,661,942</u>	<u>100%</u>

Prior period amounts have not been adjusted under the modified retrospective approach.

Under ASC Topic 606, the Company recognizes revenue when it satisfies a performance obligation by transferring control of the promised goods or services to its customers, in an amount that reflects the consideration the Company expects to receive in exchange for the product or service.

Product sales consist of a single performance obligation that the Company satisfies at a point in time. All transactions in the radiochemical products and nuclear medicine standards segments fall into this category. Most sales transactions in the cobalt products business segment fall into this category but other cobalt product sales are recorded as deferred income as discussed below. The Company recognizes product revenue when the following events have occurred: (a) the Company has transferred physical possession of the products, (b) the Company has a present right to payment, (c) the customer has legal title to the products, and (d) the customer bears significant risks and rewards of ownership of the products. Based on the Company’s historical practices and shipping terms specified in the sales agreements and invoices, these criteria are generally met when the products are:

- Invoiced.
  - Shipped from the Company’s facilities (“FOB shipping point”, which is the Company’s standard shipping term).
- For these sales, the Company determined that the customer is able to direct the use of, and obtain substantially all of the benefits from, the products at the time the products are shipped.

The Company’s revenue consists primarily of products manufactured for use in the nuclear medicine industry, distribution of radiochemicals, cobalt source manufacturing, and providing radiological services on a contract basis 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 consolidated balance sheets and classified under current or long-term liabilities, depending upon estimated ship dates. For the year ended December 31, 2022, the Company reported current unearned revenue of \$879,365. For the period ended December 31, 2021, the Company reported current unearned revenue of \$907,953. These unearned revenues will be recognized as revenue in the periods during which the cobalt shipments take place.

### Contract Balances

The Company records a receivable when it has an unconditional right to receive consideration after the performance obligations are satisfied. As of December 31, 2022, and December 31, 2021, accounts receivable totaled \$1,596,886 and \$853,675, respectively.

### Practical Expedients

The Company has elected the practical expedient not to determine whether contacts with customers contain significant financing components.

## NOTE 15 – SEGMENT INFORMATION

Information related to the Company's reportable operating business segments is shown below. The Company's reportable segments are reported in a manner consistent with the way management evaluates the businesses. The Company identifies its reportable business segments based on differences in products and services. The accounting policies of the business segments are the same as those described in the summary of significant accounting policies.

The Company has identified the following business segments:

- The 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, patient positioning, and calibration or operational testing of dose measuring equipment for the nuclear pharmacy industry and includes consolidated reporting of the wholly-owned subsidiaries RadQual and TI Services.
- The Cobalt Products segment includes management of a cobalt irradiation contract, fabrication of cobalt capsules for teletherapy or irradiation devices, and recycling of expended cobalt sources.
- The Radiochemical Products segment includes production and distribution of Iodine-131 generic drug product and various isotopically pure radiochemicals for medical, industrial, or research applications. These products are either directly produced by the Company or are purchased in bulk from other producers and distributed by the Company in customized packages and chemical forms tailored to customer and market demands. Iodine-131 is the predominant radiochemical sold in this segment.
- The Fluorine Products segment historically involved the production of small-scale qualification samples of high purity fluoride gas for various industrial applications, as well as development of laboratory and analytical processes required to support the planned uranium de-conversion and fluorine extraction facility. During 2013, these testing activities were completed, and the pilot plant facility was closed. The Company has developed or acquired all patent rights to these processes. Future work in this segment will involve license support and, as financing permits, further work related to the de-conversion facility.

The following presents certain segment information as of and for the years ended December 31, 2022 and 2021:

	<b>2022</b>	<b>2021</b>
Sale of product		
Radiochemical products	\$ 6,045,767	\$ 4,275,044
Cobalt products	1,157,536	1,354,517
Nuclear medicine standards	3,978,685	4,002,606
Fluorine products	—	29,775
Total segments	<u>11,181,988</u>	<u>9,661,942</u>
Corporate revenue	—	—
Total consolidated	<u>\$ 11,181,988</u>	<u>\$ 9,661,942</u>

	<b>2022</b>	<b>2021</b>
Depreciation and amortization		
Radiochemical products	\$ 63,493	\$ 312,405
Cobalt products	49,202	50,389
Nuclear medicine standards	114,990	77,351
Fluorine products	115,598	114,652
Total segments	<u>343,283</u>	<u>554,797</u>
Corporate depreciation and amortization	30,913	26,477
Total consolidated	<u>\$ 374,196</u>	<u>\$ 581,274</u>

	<b>2022</b>	<b>2021</b>
Segment income (loss)		
Radiochemical products	\$ 4,182,151	\$ 1,171,625
Cobalt products	(95,779)	384,800
Nuclear medicine standards	(15,280)	432,003
Radiological services	54,503	129,229
Fluorine products	(139,860)	(120,421)
Total segments	<u>3,985,735</u>	<u>1,997,236</u>
Corporate loss	(3,682,497)	(2,899,583)
Total consolidated	<u>\$ 303,238</u>	<u>\$ (902,347)</u>

	<b>2022</b>	<b>2021</b>
Expenditures for segment assets		
Radiochemical products	\$ 3,379	\$ 3,103
Cobalt products	17,105	22,242
Nuclear medicine standards	75,478	37,009
Fluorine products	4,100	8,120
Total segments	<u>100,062</u>	<u>70,474</u>
Corporate purchases	19,952	—
Total consolidated	<u>\$ 120,014</u>	<u>\$ 70,474</u>

	<b>2022</b>	<b>2021</b>
Segment assets		
Radiochemical products	\$ 1,075,252	\$ 2,890,590
Cobalt products	406,629	597,420
Nuclear medicine standards	2,741,189	2,256,024
Radiological services	3,205	3,735
Fluorine products	5,147,325	5,258,823
Total segments	<u>9,373,600</u>	<u>11,006,592</u>
Corporate assets	6,870,996	5,320,550
Total consolidated	<u>\$ 16,244,596</u>	<u>\$ 16,327,142</u>



#### NOTE 16 – SUBSEQUENT EVENTS

Pursuant to an employment agreement with its Chief Executive Officer, the Company awarded 560,000 fully vested shares of common stock to its Chief Executive Officer in February 2023 under the 2015 Plan. The number of shares awarded was based on a \$28,000 stock award using a price of \$0.05 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 \$22,400, which was determined by multiplying the number of shares awarded by the closing price of the common stock on February 28, 2021, which was \$0.04 per share. The Company withheld 219,240 shares of common stock to satisfy the employee's payroll tax obligations in connection with this issuance. The net shares issued on February 28, 2023 totaled 340,760.