

IsoRay, Inc.
Form S-3/A
October 09, 2015

As Filed with the Securities and Exchange Commission on October 9, 2015

Registration No. 333-206559

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 1

to

FORM S-3

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

ISORAY, INC.

(Exact name of registrant as specified in its charter)

Minnesota **41-1458152**
(State or other jurisdiction (I.R.S. Employer
of incorporation or organization) Identification No.)

350 Hills Street, Suite 106

Richland, WA 99354

(509) 375-1202

(Address and Telephone Number of Principal Executive Offices and Principal Place of Business)

Dwight Babcock, CEO

350 Hills Street, Suite 106

Richland, WA 99354

(509) 375-1202

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

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Approximate date of commencement of proposed sale to the public: **From time to time after the effective date of this Registration Statement.**

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer " Accelerated filer x
 Non-accelerated filer " Smaller reporting company "

CALCULATION OF REGISTRATION FEE

| Title of each class of securities to be registered | Amount to be registered(1) | Proposed maximum offering price per unit | Proposed maximum aggregate offering price (3) | Amount of registration fee(4) |
|--|----------------------------|--|---|-------------------------------|
| Common stock, par value \$0.001 per share (2) | — | — | — | — |
| Preferred stock, par value \$0.001 per share | — | — | — | — |
| Warrants | — | — | — | — |
| Units(5) | — | — | — | — |
| Total | | | \$ 20,000,000 | \$ 2,324 (6) |

There are being registered hereunder such indeterminate number of shares of common stock, preferred stock, warrants to purchase common stock or preferred stock, and such indeterminate number of units, as may be determined from time to time at indeterminate prices. The securities registered also include such indeterminate amounts and numbers of common stock and preferred stock as may be issued upon conversion of or exchange for (1) preferred stock that provide for conversion or exchange, upon exercise of warrants, or pursuant to the antidilution provisions of any such securities. The securities being registered hereunder also include such indeterminate number of securities as may be issuable with respect to the securities being registered hereunder as a result of stock splits, stock dividends or similar transactions, in each case determined in accordance with to Rule 416 under the Securities Act.

Each share of common stock also includes preferred share purchase rights to purchase shares of Series C Junior Participating Preferred Stock under the registrant’s Rights Agreement dated February 1, 2007 as described under (2) “Description of Capital Stock.” The preferred stock purchase rights are not currently separable from the shares of common stock and are not currently exercisable. The preferred stock purchase rights are attached to and trade with the common stock and no separate consideration is payable for the rights. Therefore, the registration fee for the preferred stock purchase rights is included in the fee for the common stock.

(3) In no event will the aggregate offering price for all securities pursuant to this registration statement exceed \$20,000,000.

(4) Calculated pursuant to Rule 457(o) under the Securities Act.

(5) Any of the securities registered hereunder may be sold separately, or as units with other securities registered hereby. We will determine the proposed maximum offering price per unit when we issue the above listed securities. The proposed maximum per unit and aggregate offering prices per class of securities will be determined from time to time by the registrant in connection with the issuance by the registrant of the securities registered

under this registration statement and is not specified as to each class of security pursuant to General Instruction II.D of Form S-3 under the Securities Act.
(6) Previously paid.

IsoRay hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until IsoRay shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the Securities and Exchange Commission declares our registration statement effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, dated October 9, 2015

ISORAY, INC.

\$20,000,000

Common Stock

Preferred Stock

Warrants

Units

We may offer to the public from time to time in one or more series or issuances at prices and on terms that we will determine at the time of each offering, shares of our common stock, shares of preferred stock, warrants to purchase shares of our common stock and/or preferred stock, units consisting of a combination of the foregoing securities, or any combination of these securities. The aggregate initial offering price of all securities sold by us pursuant to this prospectus will not exceed \$20,000,000.

This prospectus describes the general manner in which our securities may be offered using this prospectus. Each time we offer and sell securities, we will provide you with a prospectus supplement that will contain specific information about the terms of that offering. Any prospectus supplement may also add, update, or change information contained in this prospectus. You should carefully read this prospectus and the applicable prospectus supplement as well as the documents incorporated or deemed to be incorporated by reference in this prospectus before you purchase any of the securities offered hereby. This prospectus may not be used to offer and sell securities unless accompanied by a prospectus supplement.

We may offer the securities directly or through agents or to or through underwriters or dealers. If any agents or underwriters are involved in the sale of the securities their names, and any applicable purchase price, fee, commission or discount arrangement between or among them, will be set forth, or will be calculable from the information set forth, in an accompanying prospectus supplement. The securities may be offered and sold through public or private transactions at market prices prevailing at the time of sale, at a fixed price or fixed prices, at negotiated prices, at various prices determined at the time of sale or at prices related to prevailing market prices. We can sell the securities through agents, underwriters or dealers only with delivery of a prospectus supplement describing the method and terms of the offering of such securities. In addition, shares of our common stock may be offered from time to time through ordinary brokerage transactions on the NYSE MKT. See "Plan of Distribution."

Our principal executive offices are located at 350 Hills Street, Suite 106, Richland, Washington 99354, and our telephone number is (509) 375-1202.

Our common stock is listed on the NYSE MKT under the symbol "ISR" and as of October 6, 2015, the closing price of our common stock was \$1.39.

Investing in the securities we may offer involves various risks. See the sections entitled "Risk Factors" on page 3 and "Note Regarding Forward-Looking Statements" on page 3. Additional risks associated with an investment in us as well as with the particular types of securities will be described in the related prospectus supplement and certain of our filings with the Securities and Exchange Commission. You should read the entire prospectus carefully before you make your investment decision.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is _____.

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The registration statement, including the exhibits and the documents incorporated herein by reference, can be read on the Securities and Exchange Commission website or at the Securities and Exchange Commission offices mentioned under the heading "Where You Can Find More Information."

ABOUT THIS PROSPECTUS

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front cover of this prospectus. You should not assume that the information incorporated by reference in this prospectus is accurate as of any date other than the date the respective information was filed with the Securities and Exchange Commission. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, using a “shelf” registration process. Under this shelf registration process, we may sell any of the securities, or any combination of the securities, described in this prospectus, in each case in one of more offerings up to a total dollar amount of proceeds of \$20,000,000. This prospectus describes the general manner in which our securities may be offered by this prospectus. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of those securities and terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus or in documents incorporated by reference in this prospectus. To the extent that any statement that we make in a prospectus supplement is inconsistent with statements made in this prospectus or in documents incorporated by reference in this prospectus, you should rely on the information in the prospectus supplement. You should carefully read both this prospectus and any prospectus supplement together with the additional information described under “Where You Can Find More Information” before buying any securities in this offering.

ABOUT ISORAY

In this prospectus, the terms "IsoRay," the "Company," "we," "us," "our" and similar terms refer to IsoRay, Inc. and its subsidiaries IsoRay, Medical, Inc. (Medical) and IsoRay International LLC.

In 2003, IsoRay obtained clearance from the FDA for treatment for all solid tumor applications using Cesium-131. As of the date of this prospectus, such applications include prostate cancer; ocular melanoma; head, neck and lung tumors; breast cancer; liver cancer; brain cancer; colorectal cancer; gynecological cancer; esophageal cancer; and pancreatic cancer. The brachytherapy seed form of Cesium-131 may be used in surface, interstitial and intracavity applications for tumors with known radio sensitivity. Management believes its Cs-131 technology will allow it to become a leader in the brachytherapy market. Management believes that the IsoRay Proxcelan® Cesium-131 brachytherapy seed represents the first major advancement in brachytherapy technology in approximately 30 years with attributes that could make it the long-term "seed of choice" for internal radiation therapy procedures.

Brachytherapy seeds are small devices used in an interstitial radiation procedure. The procedure has become one of the primary treatments for prostate cancer. The brachytherapy procedure places radioactive seeds as close as possible to (in or near) the cancerous tumor (the word "brachytherapy" means close therapy). The seeds deliver therapeutic radiation thereby killing the cancerous tumor cells while minimizing exposure to adjacent healthy tissue. This procedure allows doctors to administer a higher dose of radiation directly to the tumor. Each seed contains a radioisotope sealed within a titanium capsule. When brachytherapy is the only treatment (monotherapy) used in the prostate, approximately 70 to 120 seeds are permanently implanted in the prostate in an outpatient procedure. The number of seeds used varies based on the size of the prostate and the activity level specified by the physician. When brachytherapy is combined with external beam radiation or intensity modulated radiation therapy (dual therapy), then approximately 40 to 80 seeds are used in the procedure. The isotope decays over time and eventually the seeds become inert. The seeds may be used as a primary treatment or as an adjunct therapy with other treatment modalities, such as chemotherapy, or as treatment for residual disease after excision of primary tumors. The number of seeds for other treatment sites commonly vary from as few as 8 seeds to more than 100 seeds depending on the type of cancer, the location of the tumor being treated and the type of therapy being utilized.

IsoRay began production and sales of Proxcelan[®] Cesium-131 brachytherapy seeds in October 2004 for the treatment of prostate cancer after clearance of its premarket notification (510(k)) by the Food and Drug Administration (FDA). In December 2007, IsoRay began selling its Proxcelan[®] Cs-131 seeds for the treatment of ocular melanoma, however, the market for the treatment has been limited generating a minimal amount of revenue for the Company. The Company continues to make the treatment available to interested physicians and medical facilities. In June 2009, the Company began selling its Proxcelan[®] Cs-131 seeds for treatment of head and neck tumors, commencing with treatment of a tumor that could not be accessed by other treatment modalities. The Company obtained clearance in August 2009 from the FDA to permit loading Cesium-131 into bioabsorbable braided sutures which are commonly referred to in the industry as braided strands, facilitating treatment of brain, lung, and head and neck tumors as well as tumors in other organs with Proxcelan[®] Cs-131. During the fiscal year ended June 30, 2010, the Company expanded the number of areas of the body in which the Proxcelan[®] Cs-131 seeds were being utilized for treatment by adding lung cancer in August 2009, colorectal cancer in October 2009, and chest wall cancer in December 2009. During the fiscal year ended June 30, 2011, the Company continued the expansion in the number of areas of the body in which the Proxcelan[®] Cs-131 seeds were being utilized through the addition of the treatment of brain cancer in September 2010 and the treatment of gynecological cancer in December 2010.

In March 2011, the Company received clearance to commercially deliver Proxcelan[®] Cesium-131 brachytherapy seeds that are preloaded into bioabsorbable braided sutures into Europe. This clearance permits the product to be commercially distributed for treatment of brain, lung, and head and neck tumors as well as tumors in other organs in Europe.

In August 2011, Medical received clearance from the FDA for its premarket notification (510(k)) for the GliaSite[®] Radiation Therapy System (GliaSite[®] RTS). The GliaSite[®] RTS is the only FDA-cleared balloon catheter device used in the treatment of brain cancer.

In May 2012, Medical received a CE mark for the GliaSite[®] RTS which states that the Company conforms with the product requirements of the European Council Directive 93/42/EEC. The CE mark allows the GliaSite[®] RTS to be sold in 31 European countries and to be marketed in the European Free Trade Associate member states and the European Union. In June 2012, the first Cesium-131 brachytherapy seed sutured mesh was implanted on a patient suffering from a recurring meningioma tumor.

Management focused in fiscal 2012 and 2013 on obtaining its regulatory clearances and final research and development of its GliaSite[®] RTS, entering into international distribution agreements to sell the product in Europe and Australia, and marketing its brain and lung products. The GliaSite[®] RTS is the world's only system that enables doctors to use liquid radiation in areas where the cancer is most likely to remain after brain surgery and tumor removal. In fiscal 2013, the Company began supporting the use of a system developed at the Barrow Neurological Institute to deliver doses of Cesium-131 to treat malignant meningioma, brain metastases, and primary cancers of the brain. A multi-institutional study was conducted to explore the use of braided sutures containing Proxcelan[®] Cs-131 seeds placed directly into the cavity following surgical resection of brain metastases.

In August 2013, Medical received an approval for an extension to the scope of the CE mark for the GliaSite® RTS. This approval allows Medical to implement certain product improvements that management believes will enhance GliaSite® RTS's acceptance by customers in the European market.

In December 2013, the Company received clearance for Cesitrex™ from the US Food and Drug Administration. Cesitrex™ is the liquid form of Cesium-131 and can be used in place of Iotrex®, the liquid form of Iodine-125, in the Company's GliaSite® RTS. In May 2014, the Company received clearance for Cesitrex™ from the Washington Department of Health. In June 2014, the Company delivered its first order of Cesitrex™ for use in treating a patient.

In October 2014, IsoRay announced early success for a young Peruvian girl utilizing Cesium-131 in the first stereotactic implant for inoperable brain cancer. This 7 year old girl is back in school as of August 2015 with no restrictions and normal activities. In December 2014, Barrow Neurological Institute released its findings that IsoRay's Cesium-131 therapy stops brain cancers from recurring in treated locations where previous conventional treatments failed.

Also, in December 2014, Cesium-131 was used in the world's first veterinary implant in a horse with cancer.

In January 2015, the first Cesium-131 prostate cancer treatment was performed in Russia at the Neftyanik Hospital, a center providing cutting edge cancer treatments. In May 2015, the five-year 96% success in local control and 100% survival rates for lung cancer treatment using Cesium-131 were released in a peer-reviewed study.

In June 2015, Cesium-131 was selected by Chicago Prostate Cancer Center for use in the launch of a study of focal treatment of prostate cancer.

While management has not identified additional opportunities to expand treatment to other sites in the body, we continue to investigate potential new opportunities with interested physicians and medical facilities. Management is now focusing primarily on the brain, lung and gynecological markets while the Company continues to research delivery systems other than those historically used by the Company.

Our principal executive offices are located at 350 Hills Street, Suite 106, Richland, Washington 99354, and our telephone number is (509) 375-1202. We maintain an Internet website at www.isoray.com. Information on or accessible through our website does not constitute part of this prospectus and should not be relied upon in connection with making any investment decision with respect to the securities offered by this prospectus.

Although our predecessor operating company was organized in 1998, IsoRay, Inc. was incorporated in 1983 in Minnesota and operated under the name Century Park Pictures Corporation until the merger with IsoRay Medical, Inc. on July 28, 2005.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before making an investment decision, you should carefully consider the risks described under "Risk Factors" in the applicable prospectus supplement and in our most recent Annual Report on Form 10-K, or any updates in our Quarterly Reports on Form 10-Q, together with all of the other information appearing in this prospectus or incorporated by reference into this prospectus and any applicable prospectus supplement, in light of your particular investment objectives and financial circumstances. The risks so described are not the only risks facing our company. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. The trading price of our securities could decline due to any of these risks, and you may lose all or part of your investment.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

In addition to historical information, this prospectus, any prospectus supplement and the documents incorporated by reference herein contain certain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 (PSLRA). This statement is included for the express purpose of availing IsoRay, Inc. of the protections of the safe harbor provisions of the PSLRA.

All statements contained in this prospectus, any prospectus supplement and the documents incorporated by reference herein, other than statements of historical facts, that address future activities, events or developments are forward-looking statements, including, but not limited to, statements containing the words "believe," "expect," "anticipate," "intends," "estimate," "forecast," "project," and similar expressions. All statements other than statements of historical fact are statements that could be deemed forward-looking statements, including any statements of the plans, strategies and objectives of management for future operations; any statements concerning proposed new products, services, developments or industry rankings; any statements regarding future revenue, economic conditions or performance; any statements of belief; and any statements of assumptions underlying any of the foregoing. These statements are based on certain assumptions and analyses made by us in light of our experience and our assessment of historical trends, current conditions and expected future developments as well as other factors we believe are appropriate under the circumstances. However, whether actual results will conform to the expectations and predictions of management is subject to a number of risks and uncertainties that may cause actual results to differ materially.

You should not place undue reliance on our forward-looking statements because the matters they describe are subject to known and unknown risks, uncertainties and other unpredictable factors, many of which are beyond our control. Our forward-looking statements are based on the information currently available to us and speak only as of the date on the cover of this prospectus, the date of any prospectus supplement, or, in the case of forward-looking statements incorporated by reference, as of the date of the filing that includes the statement. New risks and uncertainties arise from time to time, and it is impossible for us to predict these matters or how they may affect us. Over time, our actual results, performance or achievements will likely differ from the anticipated results, performance or achievements that are expressed or implied by our forward-looking statements, and such difference might be significant and materially adverse to our security holders. We do not undertake and specifically decline any obligation to update any forward-looking statements or to publicly announce the results of any revisions to any statements to reflect new information or future events or developments.

We have identified some of the important factors that could cause future events to differ from our current expectations and they are described in this prospectus and supplements to this prospectus under the caption "Risk Factors" as well as in our most recent Annual Report on Form 10-K, including without limitation under the captions "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and in other documents that we may file with the SEC, all of which you should review carefully. Please consider our forward-looking statements in light of those risks as you read this prospectus and any prospectus supplement.

USE OF PROCEEDS

We will retain broad discretion over the use of the net proceeds from the sale of our securities offered by us hereby. Except as described in any prospectus supplement, we currently intend to use the net proceeds from the sale of securities offered by us pursuant to this prospectus for working capital, capital expenditures, research and development, and other general corporate purposes. We may also use such proceeds to fund acquisitions of businesses, technologies or product lines that complement our current business. However, we currently have no commitments or agreements for any specific acquisitions. Pending application of the net proceeds, we intend to invest

the net proceeds of the offering of securities by us in investment-grade, interest-bearing securities.

The intended application of proceeds from the sale of any particular offering of securities using this prospectus will be described in the accompanying prospectus supplement relating to such offering. The precise amount and timing of the application of these proceeds will depend on our funding requirements and the availability and costs of other funds.

GENERAL DESCRIPTION OF SECURITIES

We may offer and sell, at any time and from time to time:

· shares of our common stock;

shares of our preferred stock;

warrants to purchase shares of our common stock and/or preferred stock;

units consisting of a combination of the foregoing; or

any combination of these securities.

The terms of any securities we offer will be determined at the time of sale. When particular securities are offered, a supplement to this prospectus will be filed with the SEC, which will describe the terms of the offering and sale of the offered securities.

DESCRIPTION OF CAPITAL STOCK

The following is a summary description of the rights of our common stock and related provisions of our amended Articles of Incorporation and our Bylaws. The following description of our capital stock is intended as a summary only and is qualified in its entirety by reference to our amended Articles of Incorporation and our Bylaws, which are filed as exhibits to the registration statement of which this prospectus forms a part, and to the applicable provisions of Minnesota law.

Common Stock

Our common shares are listed on the NYSE MKT under the symbol "ISR". As of August 20, 2015, 55,013,553 shares of common stock were issued and outstanding, and there were approximately 237 holders of record.

The Company's Articles of Incorporation provide that the Company has the authority to issue 200 million shares of capital stock, which are currently divided into two classes as follows: 192,998,329 shares of common stock, par value of \$0.001 per share; and 7,001,671 shares of preferred stock, also with a par value of \$0.001 per share.

The holders of our common stock have no preemptive or other subscription rights, and there are no conversion rights or redemption or sinking fund provisions with respect to such shares. All of the outstanding shares of our common stock are, and the shares of our common stock when issued will be, fully paid and nonassessable.

Voting. Holders of the common stock are entitled to one vote per share on all matters to be voted on by the Company's shareholders. The Company's Bylaws provide that a majority of the outstanding shares of the corporation entitled to vote constitute a quorum at a meeting of the shareholders.

Dividends. The Company's Board of Directors, in its sole discretion, may declare and pay dividends on the common stock, payable in cash or other consideration, out of funds legally available, if all dividends due on the preferred stock have been declared and paid. The Company has not paid any cash dividends on its common stock and does not plan to pay any cash dividends on its common stock for the foreseeable future.

Liquidation, Subdivision, or Combination. In the event of any liquidation, dissolution or winding up of the Company or upon the distribution of its assets, all assets and funds remaining after payment in full of the Company's debts and liabilities, and after the payment to holders of any then outstanding preferred stock of the full preferential amounts to which they were entitled, would be divided and distributed among holders of the common stock.

Anti-Takeover Effects Of Provisions Of The Articles Of Incorporation. The authorized but unissued shares of our common and preferred stock are available for future issuance without our shareholders' approval. These additional shares may be utilized for a variety of corporate purposes including but not limited to future public or direct offerings to raise additional capital, corporate acquisitions and employee incentive plans. The issuance of such shares may also be used to deter a potential takeover of IsoRay that may otherwise be beneficial to shareholders by diluting the shares held by a potential suitor or issuing shares to a shareholder that will vote in accordance with IsoRay's Board of Directors' desires. A takeover may be beneficial to shareholders because, among other reasons, a potential suitor may offer shareholders a premium for their shares of stock compared to the then-existing market price.

On February 1, 2007, the Board of Directors of IsoRay, Inc. declared a dividend of one preferred share purchase right (a "Right") for each outstanding Common Share of the par value of \$.001 per share (the "Common Shares") of the Company. The dividend is payable on February 16, 2007 (the "Record Date") to shareholders of record on that date.

Each Right entitles the registered holder to purchase from the Company one one-hundredth of a Series C Junior Participating Preferred Share of the par value of \$.001 per share (the "Preferred Shares") of the Company at a price of \$25 per one one-hundredth of a Preferred Share (the "Purchase Price"), subject to adjustment. The description and terms of the Rights are set forth in a Rights Agreement (the "Rights Agreement"), dated as of February 1, 2007, between the Company and Computershare Trust Company N.A., as Rights Agent (the "Rights Agent").

Initially, the Rights will attach to all certificates representing Common Shares then outstanding and no separate Right Certificates will be distributed. The Rights will separate from the Common Shares and a Distribution Date for the Rights will occur upon the earlier of:

- (i) the close of business on the fifteenth day following a public announcement that a person or group of affiliated or associated persons has become an "Acquiring Person" (i.e., has become, subject to certain exceptions, the beneficial owner of 15% or more of the voting power of the outstanding shares of voting capital stock of the Company in the election of directors), or
- (ii) the close of business on the fifteenth day following the first public announcement relating to a tender offer or exchange offer the consummation of which would result in a person or group of affiliated or associated persons becoming, subject to certain exceptions, the beneficial owner of 15% or more of the voting power of the outstanding shares of voting capital stock of the Company in the election of directors (or such later date as may be determined by the Board of Directors of the Company prior to a person or group of affiliated or associated persons becoming an Acquiring Person).

Until the Distribution Date,

- (i) the Rights will be evidenced by the Common Share certificates and will be transferred with and only with the Common Shares,

- (ii) new Common Share certificates issued after the Record Date upon transfer or new issuance of the Common Shares will contain a notation incorporating the Rights Agreement by reference, and

- (iii) the surrender for transfer of any Common Share certificate, even without such notation or a copy of this Summary of Rights attached thereto, will also constitute the transfer of the Rights associated with the Common Shares represented by such certificate.

As promptly as practicable following the Distribution Date, separate certificates evidencing the Rights ("Right Certificates") will be mailed to holders of record of the Common Shares as of the close of business on the Distribution Date and such separate Right Certificates alone will evidence the Rights.

The Rights are not exercisable until the Distribution Date. The Rights will expire on February 16, 2017, unless extended or earlier redeemed or exchanged by the Company as described below.

The Purchase Price payable, and the number of Preferred Shares or other securities or property issuable, upon exercise of the Rights are subject to adjustment from time to time to prevent dilution:

- (i) in the event of a stock dividend on, or a subdivision, combination or reclassification of, the Preferred Shares,
- (ii) upon the grant to holders of the Preferred Shares of certain rights, options or warrants to subscribe for or purchase Preferred Shares or convertible securities at less than the then current market price of the Preferred Shares, or
- (iii) upon the distribution to holders of the Preferred Shares of evidences of indebtedness or assets (excluding regular periodic cash dividends or dividends payable in Preferred Shares) or of subscription rights or warrants (other than those described in clause (ii) hereof).

The number of Preferred Shares issuable upon the exercise of a Right is also subject to adjustment in the event of a dividend on Common Shares payable in Common Shares, or a subdivision, combination or consolidation of the Common Shares.

With certain exceptions, no adjustment in the Purchase Price will be required until cumulative adjustments require an adjustment of at least 1% in the Purchase Price. No fractional Preferred Shares will be issued (other than fractional shares which are integral multiples of one one-hundredth (subject to adjustment) of a Preferred Share, which may, at the election of the Company, be evidenced by depositary receipts) if in lieu thereof a payment in cash is made based on the closing price (pro-rated for the fraction) of the Preferred Shares on the last trading date prior to the date of exercise.

In the event that any person or group of affiliated or associated persons becomes an Acquiring Person, proper provision shall be made so that each holder of a Right, other than Rights that are or were beneficially owned by the Acquiring Person (which will thereafter be void), will thereafter have the right to receive upon exercise thereof at the then current exercise price of the Right that number of Common Shares having a market value of two times the exercise price of the Right, subject to certain possible adjustments.

In the event that, after the Distribution Date or within 15 days prior thereto, the Company is acquired in certain mergers or other business combination transactions or 50% or more of the assets or earning power of the Company and its subsidiaries (taken as a whole) are sold after the Distribution Date or within 15 days prior thereto, each holder of a Right (other than Rights which have become void under the terms of the Rights Agreement) will thereafter have

the right to receive, upon exercise thereof at the then current exercise price of the Right, that number of common shares of the acquiring company (or, in certain cases, one of its affiliates) having a market value of two times the exercise price of the Right.

In certain events specified in the Rights Agreement, the Company is permitted to temporarily suspend the exercisability of the Rights.

At any time after a person or group of affiliated or associated persons becomes an Acquiring Person (subject to certain exceptions) and prior to the acquisition by a person or group of affiliated or associated persons of 50% or more of the voting power of the outstanding shares of voting capital stock of the Company in the election of directors, the Board of Directors of the Company may exchange all or part of the Rights (other than Rights which have become void under the terms of the Rights Agreement) for Common Shares or equivalent securities at an exchange ratio per Right equal to the result obtained by dividing the exercise price of a Right by the current per share market price of the Common Shares, subject to adjustment.

At any time prior to such time as a person or group of affiliated or associated persons becomes an Acquiring Person, the Board of Directors of the Company may redeem the Rights in whole, but not in part, at a price of \$.001 per Right, subject to adjustment (the "Redemption Price"), payable in cash. The period of time during which the Rights may be redeemed may be extended by the Board of Directors of the Company if no person has become an Acquiring Person. The redemption of the Rights may be made effective at such time, on such basis and with such conditions as the Board of Directors in its sole discretion may establish. The Board of Directors and the Company shall not have any liability to any person as a result of the redemption or exchange of the Rights pursuant to the provisions of the Rights Agreement.

The terms of the Rights may be amended by the Board of Directors of the Company, subject to certain limitations after such time as a person or group of affiliated or associated persons becomes an Acquiring Person, without the consent of the holders of the Rights, including an amendment prior to the date a person or group of affiliated or associated persons becomes an Acquiring Person to lower the 15% threshold for exercisability of the Rights to not less than the greater of (i) the sum of .001% and the largest percentage of the outstanding shares of voting capital stock of the Company with voting power in the election of directors then known by the Company to be beneficially owned by any person or group of affiliated or associated persons (subject to certain exceptions) or (ii) 10%.

Until a Right is exercised, the holder thereof, as such, will have no rights as a shareholder of the Company, including, without limitation, the right to vote or to receive dividends.

The foregoing description of the Rights Agreement is qualified in its entirety by reference to the full text of the Rights Agreement.

Transfer Agent and Registrar. The transfer agent and registrar for our common stock is Computershare Trust Company, N.A. The transfer agent's address is 8774 Lucent Blvd., Ste 225, Highlands Ranch, CO 80129, and its telephone number is (303) 262-0600.

Listing

Our shares of common stock are traded on the NYSE MKT under the ticker symbol "ISR."

DESCRIPTION OF PREFERRED STOCK

We may issue our preferred stock, par value \$0.001 per share, from time to time in one or more series. Of the 7,001,671 shares of presently authorized preferred stock, 1,000,000 are designated as Series A Preferred Stock, 5,000,000 are designated as Series B Preferred Stock, 1,000,000 are designated as Series C Junior Participating Preferred Stock, and 1,671 are designated as Series D. Convertible Preferred Stock. The Series C preferred shares are related to the Rights Agreement described above. As of August 20, 2015, no shares of our Series A, Series C or Series D preferred stock were outstanding and 59,065 shares of our Series B preferred stock were outstanding.

Series A

Series A preferred shares are entitled to a 10% dividend annually on the stated par value per share. These shares are convertible into shares of common stock at the rate of one share of common stock for each share of Series A preferred stock, and are subject to automatic conversion into common stock upon the closing of an underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933 covering the offer and sale of common stock in which the gross proceeds to the Company are at least \$4 million. Series A preferred shareholders have voting rights equal to the voting rights of common stock, except that the vote or written consent of a majority of the outstanding preferred shares is required for any changes to the Company's Articles of Incorporation, Bylaws or Certificate of Designation, or for any bankruptcy, insolvency, dissolution or liquidation of the Company. Upon liquidation of the Company, the Company's assets are first distributed ratably to the Series A preferred shareholders.

Series B

Series B preferred shares are entitled to a cumulative 15% dividend annually on the stated par value per share. These shares are convertible into shares of common stock at the rate of one share of common stock for each share of Series B preferred stock, and are subject to automatic conversion into common stock upon the closing of an underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933 covering the offer and sale of common stock in which the gross proceeds to the Company are at least \$4 million. Series B preferred shareholders have voting rights equal to the voting rights of common stock, except that the vote or written consent of a majority of the outstanding preferred shares is required for any changes to the Company's Articles of Incorporation, Bylaws or Certificate of Designation, or for any bankruptcy, insolvency, dissolution or liquidation of the Company. Upon liquidation of the Company, the Company's assets are first distributed ratably to the Series A preferred shareholders, then to the Series B preferred shareholders.

Series D

Established in August 2013, Series D preferred shares are entitled to dividends in the same form as dividends actually paid on shares of common stock. Additionally, the Company shall not pay any dividends on shares of common stock (other than dividends in the form of common stock) unless the holders of Series D Convertible Preferred Stock shall first receive dividends on shares of Series D Convertible Preferred Stock held by them (on an as-if-converted-to-common-stock-basis) in an amount equal to and in the same form as any such dividends (other than dividends in the form of common stock) to be paid on shares of common stock. Except as required by law, shares of Series D Convertible Preferred Stock shall not have the right to vote on any matter other than those set forth in the Certificate of Designation with the potential to specifically adversely affect the Series D Convertible Preferred Stock. Series D Convertible Preferred shares are convertible into shares of common stock at the rate of 1,869.15 shares of common stock for each share of Series D Convertible Preferred Stock at any time at the option of the holder, provided that the holder will be prohibited from converting shares of Series D Convertible Preferred Stock into shares of our common stock if, as a result of the conversion, the holder, together with its affiliates, would beneficially own more than 9.99% of the total number of shares of our common stock then issued and outstanding, which is referred to herein as the “Beneficial Ownership Limitation”.

Undesignated Preferred Stock

Our Articles of Incorporation authorize our Board of Directors to issue preferred stock from time to time with such designations, preferences, conversion or other rights, voting powers, restrictions, dividends or limitations as to dividends or other distributions, qualifications or terms or conditions of redemption as shall be determined by the Board of Directors for each class or series of stock subject to the provisions of our Articles of Incorporation. Preferred stock is available for possible future financings or acquisitions and for general corporate purposes without further authorization of stockholders unless such authorization is required by applicable law, the rules of the NYSE MKT or other securities exchange or market on which our stock is then listed or admitted to trading.

The Board of Directors, without approval of holders of common stock, can issue preferred stock with voting, conversion or other rights that could adversely affect the voting power and other rights of the holders of common stock. Preferred stock could thus be issued quickly with terms calculated to delay or prevent a change in control of or make removal of management more difficult and/or impair the liquidation rights of our common stock. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of the common stock.

If we offer a specific series of new preferred stock under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the certificate establishing the terms of the preferred stock with the SEC. To the extent required, this description will include:

- the title and stated or par value of the preferred stock;

• the number of shares of the preferred stock offered, the liquidation preference per share and the offering price of the preferred stock;

• the dividend rate(s), period(s) and/or payment date(s) or method(s) of calculation thereof applicable to the preferred stock;

• whether dividends shall be cumulative or non-cumulative and, if cumulative, the date from which dividends on the preferred stock shall accumulate;

- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any, for the preferred stock;
 - any voting rights of the preferred stock;
- the provisions for redemption, if applicable, of the preferred stock;
- any listing of the preferred stock on any securities exchange or market;

the terms and conditions, if applicable, upon which the preferred stock will be convertible into our common stock, including the conversion price or the manner of calculating the conversion price and conversion period, and any other terms of conversion (including any anti-dilution provisions, if any);

the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the affairs of the Company;

any material limitations on issuance of any series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the Company;

any other affirmative, negative or other covenants or contractual rights which might be attendant with the specific series of preferred stock;

- if appropriate, a discussion of Federal income tax consequences applicable to the preferred stock; and
- any other specific terms, preferences, rights, limitations or restrictions of the preferred stock.

The preferred stock offered by this prospectus, when issued, will not have, or be subject to, any preemptive or similar rights, and will, when issued, be fully paid and non-assessable.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of shares of our common stock and/or preferred stock in one or more series together with other securities or separately, as described in each applicable prospectus supplement. Warrants may be issued independently or together with any preferred stock or common stock, and may be attached to or separate from any offered securities.

The applicable prospectus supplement will contain, where applicable, the following terms of and other information relating to the warrants:

- the specific designation and aggregate number of, and the price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the designation, amount and terms of the securities purchasable upon exercise of the warrants;

if applicable, the exercise price for shares of our common stock and the number of shares of common stock to be received upon exercise of the warrants;

if applicable, the exercise price for shares of our preferred stock, the number of shares of preferred stock to be received upon exercise of the warrants, and a description of that series of our preferred stock;

the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if the warrants may not be continuously exercised throughout that period, the specific date or dates on which the warrants may be exercised;

whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;

- any applicable material U.S. federal income tax consequences;

the identity of any warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;

the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange or market;

if applicable, the date from and after which the warrants and the common stock and/or preferred stock will be separately transferable;

- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;

the anti-dilution provisions of the warrants, if any;

- any redemption or call provisions;
- whether the warrants are to be sold separately or with other securities as parts of units; and

any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

DESCRIPTION OF UNITS

We may issue units composed of one or more of the other securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We may evidence units by unit certificates that we issue under a separate agreement. We may issue the units under a unit agreement between us and one or more unit agents. If we elect to enter into a unit agreement with a unit agent, the unit agent will act solely as our agent in connection with the units and will not assume any obligation or relationship of agency or trust for or with any registered holders of units or beneficial owners of units. We will indicate the name and address and other information regarding the unit agent in the applicable prospectus supplement relating to a particular series of units if we elect to use a unit agent.

We will describe in the applicable prospectus supplement the terms of the series of units being offered, including:

• the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;

- any provisions of the governing unit agreement that differ from those described herein; and

• any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The other provisions regarding our common stock, preferred stock and/or warrants as described in this section will apply to each unit to the extent such unit consists of shares of our common stock, preferred stock and/or warrants.

PLAN OF DISTRIBUTION

We may sell the securities offered through this prospectus (i) to or through underwriters or dealers, (ii) directly to a single purchaser or multiple purchasers, including our affiliates, (iii) through agents, or (iv) through a combination of any these methods. The securities may be distributed at a fixed price or prices, which may be changed, market prices prevailing at the time of sale, prices related to the prevailing market prices, or negotiated prices. The prospectus supplement will include the following information:

• the terms of the offering;

• the names of any underwriters or agents;

• the name or names of any managing underwriter or underwriters;

• the purchase price of the securities;

• any over-allotment options under which underwriters may purchase additional securities from us;

• the net proceeds from the sale of the securities;

any delayed delivery arrangements;

any underwriting discounts, commissions and other items constituting underwriters' compensation;

any initial public offering price;

any discounts or concessions allowed or reallocated or paid to dealers;

any commissions paid to agents; and

any securities exchange or market on which the securities may be listed.

Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may be changed from time to time.

Sale Through Underwriters or Dealers

Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

If underwriters are used in the sale, the underwriters will acquire the securities for their own account, including through underwriting, purchase, security lending or repurchase agreements with us. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions. Underwriters may sell the securities in order to facilitate transactions in any of our other securities (described in this prospectus or otherwise), including other public or private transactions and short sales. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless otherwise indicated in the prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters will be obligated to purchase all the offered securities if they purchase any of them. The underwriters may change from time to time any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers.

If dealers are used in the sale of securities offered through this prospectus, we will sell the securities to them as principals. They may then resell those securities to the public at varying prices determined by the dealers at the time of resale. The prospectus supplement will include the names of the dealers and the terms of the transaction.

In compliance with the guidelines of the Financial Services Regulatory Authority, Inc., or FINRA, the maximum compensation to be received by a FINRA member or independent broker-dealer may not exceed 8% of the offering proceeds.

Direct Sales and Sales Through Agents

We may sell the securities offered through this prospectus directly. In this case, no underwriters or agents would be involved. Such securities may also be sold through agents designated from time to time. The prospectus supplement will name any agent involved in the offer or sale of the offered securities and will describe any commissions payable to the agent. Unless otherwise indicated in the prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. The terms of any such sales will be

described in the prospectus supplement.

Delayed Delivery Contracts

If the prospectus supplement indicates, we may authorize agents, underwriters or dealers to solicit offers from certain types of institutions to purchase securities at the public offering price under delayed delivery contracts. These contracts would provide for payment and delivery on a specified date in the future. The contracts would be subject only to those conditions described in the prospectus supplement. The applicable prospectus supplement will describe the commission payable for solicitation of those contracts.

Market Making, Stabilization and Other Transactions

We may elect to list offered securities on an exchange or in the over-the-counter market. Any underwriters that we use in the sale of offered securities may make a market in such securities, but may discontinue such market making at any time without notice. Therefore, we cannot assure you that the securities will have a liquid trading market.

Certain persons participating in an offering may engage in overallotment, stabilizing transactions, syndicate covering transactions and penalty bids in accordance with rules and regulations under the Exchange Act. Overallotment involves the sale in excess of the offering size, which create a short position. Stabilizing transactions involve bids to purchase the underlying security in the open market for the purpose of pegging, fixing or maintaining the price of the securities. Syndicate covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover syndicate short positions.

Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

General Information

Agents, underwriters, and dealers may be entitled, under agreements entered into with us, to indemnification by us against certain liabilities, including liabilities under the Securities Act. Our agents, underwriters, and dealers, or their affiliates, may be customers of, engage in transactions with or perform services for us, in the ordinary course of business.

LEGAL MATTERS

Certain legal matters with respect to the securities being offered hereby will be passed on by Gallagher & Kennedy, P.A., Phoenix, Arizona.

EXPERTS

The consolidated financial statements of IsoRay and Subsidiaries as of June 30, 2015 and 2014 and for each of the three years in the period ended June 30, 2015 and management's assessment of the effectiveness of internal control over financial reporting as of June 30, 2015 have been incorporated by reference herein in reliance on the report of DeCoria, Maichel & Teague, P.S., an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

INTERESTS OF NAMED EXPERTS AND COUNSEL

None.

MATERIAL CHANGES

None.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-3 with the SEC relating to the securities offered by this prospectus. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. We have omitted parts of the registration statement, as permitted by the rules and regulations of the SEC. Statements contained in this prospectus as to the contents of any contract or other document referred to are not necessarily complete and in each instance reference is made to the copy of such contract or other document filed as an exhibit to the registration statement, each such statement being qualified in all respects by such reference. For further information with respect to us and the securities offered hereby, reference is made to such registration statement, exhibits and schedules.

We are subject to the information and periodic reporting requirements of the Exchange Act, and in accordance therewith file periodic reports, current reports, proxy statements and other information with the SEC. Such periodic reports, current reports, proxy statements, other information and a copy of this registration statement on Form S-3 may be inspected by anyone without charge and copies of these materials may be obtained upon the payment of the fees prescribed by the SEC, at the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. This registration statement on Form S-3 and the periodic reports, current reports, proxy statements and other information filed by us are also available through the Internet web site maintained by the SEC at the following address: <http://www.sec.gov>.

INCORPORATION BY REFERENCE

This prospectus is part of a registration statement filed with the SEC. The SEC allows us to “incorporate by reference” into this prospectus the information that we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. The following documents were filed with the SEC pursuant to the Exchange Act and are incorporated by reference and made a part of this prospectus:

- Annual Report on Form 10-K for the fiscal year ended June 30, 2015, filed on September 14, 2015;
- Current Reports on Form 8-K filed on September 2, 2015 and September 15, 2015;

the description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on April 12, 2007 (File No. 001-333407), including any amendments or reports filed for the purpose of updating such description;

the description of our rights contained in our Registration Statement on Form 8-A filed on February 7, 2007 (File No. 001-14247), including any amendments or reports filed for the purpose of updating such description; and

all documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), (i) after the date on which this registration statement that includes this prospectus was initially filed with the SEC and prior to the effectiveness of such registration statement, and (ii) after the date of this prospectus and prior to the termination of this offering, unless otherwise stated therein.

Notwithstanding the foregoing, information furnished under Items 2.02 and 7.01 of any Current Report on Form 8-K, including the related exhibits, is not incorporated by reference in this prospectus.

Any statement contained herein or made in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained herein, or in any other subsequently filed document which also is incorporated or deemed to be incorporated by reference herein, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus

We will provide without charge to each person to whom this prospectus is delivered, upon oral or written request, a copy of any or all of the foregoing documents incorporated herein by reference (other than exhibits to such documents unless such exhibits are specifically incorporated by reference into the information that this prospectus incorporates). Written or telephone requests should be directed to: IsoRay, Inc., 350 Hills Street, Suite 106, Richland, Washington 99354, telephone number (509) 375-1202, Attn: Corporate Secretary.

You should rely only on the information contained or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone else to provide you with different or additional information. We will not make an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus or any supplement is accurate as of any date other than the date of those documents.

COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

The Company's Articles of Incorporation provide to directors and officers indemnification to the full extent provided by law, and provide that, to the extent permitted by Minnesota law, a director will not be personally liable for monetary damages to the Company or its shareholders for breach of his or her fiduciary duty as a director, except for liability for certain actions that may not be limited under Minnesota law. On July 1, 2006, the Company entered into Indemnification Agreements with each of its directors and executive officers, and has entered into Indemnification Agreements with each officer and director who took office subsequent to July 1, 2006, and the Company intends to enter into substantially identical agreements with any officers and directors who take office in the future. The purpose of the Indemnification Agreements is to provide all officers and directors with indemnification to the fullest extent permitted under the Minnesota Business Corporations Act.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable.

PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****Item 14. Other Expenses of Issuance and Distribution.**

The following table sets forth the costs and expenses payable by the Registrant in connection with this offering, other than underwriting commissions and discounts, all of which are estimated except for the SEC registration fee.

| Item | Amount |
|--|---------------|
| SEC registration fee | \$ 2,324 |
| FINRA filing fee* | |
| Printing and engraving expenses* | |
| Legal fees and expenses * | |
| Accounting fees and expenses * | |
| Transfer agent and registrar's fees and expenses * | |
| Miscellaneous expenses* | |
| Total | \$ * |

* Estimated expenses not presently known.

To be filed by amendment, Form 8-K or Rule 424 filing.

Item 15. Indemnification of Directors and Officers.

The Company's Articles of Incorporation provide to directors and officers indemnification to the full extent provided by law, and provide that, to the extent permitted by Minnesota law, a director will not be personally liable for monetary damages to the Company or its shareholders for breach of his or her fiduciary duty as a director, except for liability for certain actions that may not be limited under Minnesota law. The Company has entered into Indemnification Agreements with each of its directors and executive officers, and the Company intends to enter into substantially identical agreements with any officers and directors who take office in the future. The purpose of the Indemnification Agreements is to provide all officers and directors with indemnification to the fullest extent permitted under the Minnesota Business Corporations Act. The Registrant maintains a directors' and officers' insurance policy. The policy insures directors and other officers against unindemnified losses arising from certain wrongful acts in their capacities as directors and officers and reimburses the Registrant for those losses for which the Registrant has lawfully

indemnified its directors and officers. The policy contains various exclusions.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable.

Item 16. Exhibits.

| Exhibit Number | Description |
|-----------------------|---|
| 1.2 | Form of Underwriting Agreement.* |
| 3.3 | Restated and Amended Articles of Incorporation incorporated by reference to the Form 10-KSB filed on October 11, 2005. |
| 3.5 | Amended and Restated By-Laws of the Company dated as of January 8, 2008, incorporated by reference to the Form 8-K filed on January 14, 2008. |
| 3.6 | Certificate of Designation and Preferences, Rights and Limitations of Series D Convertible Preferred Stock dated August 9, 2013 of IsoRay, Inc., incorporated by reference to the Form 8-K filed on August 29, 2013. |
| 4.19 | Rights Agreement, dated as of February 1, 2007, between the Computershare Trust Company N.A., as Rights Agent, incorporated by reference to Exhibit 1 to the Company's Registration Statement on Form 8-A filed on February 7, 2007. |
| 4.20 | Certificate of Designation of Rights, Preferences and Privileges of Series C Junior Participating Preferred Stock, incorporated by reference to Exhibit 1 to the Company's Registration Statement on Form 8-A filed February 7, 2007. |
| 4.34 | Specimen Common Stock Certificate* |
| 4.35 | Form of Certificate of Designation.* |
| 4.36 | Form of Preferred Stock Certificate.* |
| 4.37 | Form of Warrant Agreement.* |
| 4.38 | Form of Warrant Certificate.* |
| 4.39 | Form of Stock Purchase Agreement.* |
| 4.40 | Form of Unit Agreement.* |
| 5.1 | Opinion of Gallagher & Kennedy, P.A. |
| 12.1 | Statement of Computation of Ratios.* |
| 23.1 | Consent of Gallagher & Kennedy, P.A. (included in its opinion filed as Exhibit 5.1 hereto). |
| 23.2 | Consent of DeCoria, Maichel & Teague, P.S., independent registered public accounting firm. |
| 24.1 | Power of Attorney (included on signature page); incorporated by reference to the Form S-3 filed on August 25, 2015. |

*To be filed by amendment or by a Current Report on Form 8-K and incorporated by reference herein.

Item 17. Undertakings.

- a. The undersigned registrant hereby undertakes:

1. To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

- i. To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

ii. To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided however, that: Paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective
2. amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

3. To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

b. That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

If the Registrant is relying on Rule 430B: Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be
1. deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

If the Registrant is relying on Rule 430B: Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at
2. that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to
c. sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

i. Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

- ii. Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- iii. The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- iv. Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

The undersigned registrant hereby undertakes to deliver or cause to be delivered with the prospectus, to each person to whom the prospectus is sent or given, the latest annual report to security holders that is incorporated by reference in the prospectus and furnished pursuant to and meeting the requirements of Rule 14a-3 or Rule 14c-3 under the Securities Exchange Act of 1934; and, where interim financial information required to be presented by Article 3 of Regulation S-X are not set forth in the prospectus, to deliver, or cause to be delivered to each person to whom the prospectus is sent or given, the latest quarterly report that is specifically incorporated by reference in the prospectus to provide such interim financial information.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

g. The undersigned registrant hereby undertakes that:

For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933 shall be deemed to be part of this registration statement as of the time it was declared effective.

For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Richland, State of Washington, on October 9, 2015.

ISORAY, INC.

By: /s/ Dwight Babcock
 Dwight Babcock, Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

| Signatures | Title | Date |
|--------------------------------------|---|-----------------|
| /s/ Dwight Babcock Dwight Babcock | President, Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer) | October 9, 2015 |
| /s/ Brien Ragle Brien Ragle | Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer) | October 9, 2015 |
| * Thomas LaVoy | Director | October 9, 2015 |
| * Philip Vitale | Director | October 9, 2015 |
| * Michael McCormick | Director | October 9, 2015 |

*By: /s/ Dwight Babcock
 Dwight Babcock
 Attorney-in-Fact