

As filed with the Securities and Exchange Commission on June 20, 2017

Registration No. 333-_____

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

FORM S-8

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ISORAY, INC.

(Exact name of registrant as specified in its charter)

Minnesota

(State or other jurisdiction of incorporation or
organization)

41-1458152

(I.R.S. Employer Identification No.)

**350 Hills Street, Suite 106
Richland, Washington 99354**

(Address of principal executive offices) (Zip Code)

2017 Equity Incentive Plan
(Full title of the plan)

**Thomas C. LaVoy
Chief Executive Officer
IsoRay, Inc.
350 Hills Street, Suite 106
Richland, Washington 99354
(509) 375-1202**

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

Copy to:

Stephen R. Boatwright
Gallagher & Kennedy, P.A.
2575 E. Camelback Road
Phoenix, Arizona 85016
(602) 530-8000

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

Large accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Accelerated filer

Smaller reporting company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act o

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee(3)
2017 Equity Incentive Plan Common Stock, \$0.001 par value	4,000,000	\$0.561	\$2,244,000	\$0

- (1) Represents shares issuable pursuant to the IsoRay, Inc. 2017 Equity Incentive Plan (the "Plan"), including any additional shares that may become issuable in accordance with the adjustment provisions of the Plan. In addition, pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of the Registrant's common stock which become issuable under the Plan by reason of any stock dividend, stock split, recapitalization or any other similar transaction effected without the Registrant's receipt of consideration which results in an increase in the number of the Registrant's outstanding shares of common stock.
- (2) Estimated in accordance with Rule 457(h) under the Securities Act solely for the purpose of calculating the registration fee. The computation is based on the average of the high and low prices of the Registrant's common stock, as reported by the NYSE MKT, on June 15, 2017 (which is within five business days prior to the date of filing).
- (3) In accordance with Rule 457(p) of the Securities Act of 1933, as amended, \$299.02 was previously paid and is offset against the currently due filing fee. The file number of the earlier registration statement from which the filing fee is offset is 333-214371. The registrant was IsoRay, Inc. The initial filing date of the earlier registration statement is November 1, 2016. The filing fee for this registration before taking into account the offset would be \$260.08.

PART I
INFORMATION REQUIRED IN THE SECTION 10(A) PROSPECTUS

The purpose of this Registration Statement is to register under the Securities Act of 1933, as amended (the "Securities Act"), 4,000,000 shares of the Registrant's common stock, issuable pursuant to the IsoRay, Inc. 2017 Equity Incentive Plan (the "Plan"). The documents containing the information required by Part I of Form S-8 will be sent or given to participants as specified by Rule 428(b)(1) of the Securities Act. Such documents need not be filed with the Securities and Exchange Commission (the "Commission") either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 of the Securities Act. These documents and the documents incorporated by reference in this Registration Statement pursuant to Item 3 of Part II, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

In this registration statement, IsoRay, Inc. is sometimes referred to as the "Registrant," "we," "us," or "our."

Item 3. Incorporation of Documents by Reference.

The following documents of the Company filed with the Commission under File No. 001-33407 are incorporated herein by reference (excluding any portions of such documents that have been "furnished" but not "filed" for purposes of the Securities Exchange Act of 1934, as amended (the "Exchange Act")):

(a) Our Annual Report on Form 10-K for the fiscal year ended June 30, 2016 (filed September 9, 2016), which contains audited financial statements for our latest fiscal year for which such statements have been filed.

(b) Our Current Reports on Form 8-K filed on July 8, 2016, September 8, 2016, September 27, 2016, October 21, 2016, November 9, 2016, December 5, 2016, December 20, 2016, December 28, 2016, January 17, 2017, January 23, 2017, February 3, 2017, February 6, 2017, February 8, 2017, March 3, 2017, March 10, 2017, May 10, 2017, June 8, 2017, and June 20, 2017 and our Quarterly Reports on Form 10-Q filed on November 9, 2016, February 9, 2017, and May 10, 2017.

(c) The description of our common stock contained in our Registration Statement on Form S-3, filed with the Commission on August 25, 2015, including any amendments or reports filed for the purpose of updating such description.

All documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all securities registered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such documents.

Unless expressly incorporated into this Registration Statement, a report furnished on Form 8-K prior or subsequent to the date hereof shall not be incorporated by reference into this Registration Statement, except as to specific sections of such statements as set forth therein. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document which also is or is 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 Registration Statement.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, other than exhibits to those documents. You should direct any requests for documents to Thomas LaVoy, CEO, IsoRay, Inc., 350 Hills Street, Suite 106, Richland, Washington 99354.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Our 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 us or our 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.

In addition, the Company has entered into indemnification agreements with each of its directors and executive officers, pursuant to which the Company has agreed to indemnify such individuals for any claims made against such individuals based on any act, omission or breach of duty committed while acting as director or officer, except under certain circumstances such as cases involving dishonesty or improper personal benefit.

The Company also maintains an insurance policy under which its directors and officers are insured against certain liabilities which might arise out of their relationship with the Company as directors and officers. The directors and officers of the Company also are insured against certain liabilities, including certain liabilities arising under the Securities Act and the Exchange Act, which might be incurred by them in such capacities and against which they may or may not be indemnified by the Company.

The above discussion of Minnesota law, of our articles of incorporation and bylaws and of the indemnification agreements is not intended to be exhaustive and is qualified in its entirety by such statutes, articles of incorporation, bylaws and form of indemnification agreement.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

For a list of exhibits, see the Exhibit Index to this Registration Statement, which is incorporated into this Item by reference.

Item 9. 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;
 - ii. 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.
 - iii. 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) and (a)(1)(ii) 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 Exchange Act that are incorporated by reference in the registration statement.

2. That, for the purpose of determining any liability under the Securities Act, each such post-effective 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) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act 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.

(c) Insofar as indemnification for liabilities arising under the Securities Act 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 Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act 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 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 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 this 19th day of June, 2017.

ISORAY, INC.

By: /s/ Thomas C. LaVoy
Thomas C. LaVoy, Chairman and Chief
Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Thomas C. LaVoy, his attorney-in-fact and agent, with the power of substitution, for him and in his name, place or stead, in any and all capacities, to sign any amendments to this Registration Statement on Form S-8, and to file such amendments, together with exhibits and other documents in connection therewith, with the Securities and Exchange Commission, granting to Thomas C. LaVoy full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully as he might or could do in person, and ratifying and confirming all that the attorney-in-fact and agent, or his substitute or substitutes, may do or cause to be done by virtue hereof.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Thomas C. LaVoy</u> Thomas C. LaVoy	Chief Executive Officer and Chairman	June 19, 2017
<u>/s/ Matthew Branson</u> Matthew Branson	Principal Financial Officer and Controller	June 20, 2017
<u>/s/ Philip J. Vitale</u> Philip J. Vitale	Director	June 17, 2017
<u>/s/ Michael W. McCormick</u> Michael W. McCormick	Director	June 19, 2017
<u>/s/ Alan Hoffmann</u> Alan Hoffmann	Director	June 16, 2017

INDEX TO EXHIBITS

<u>Exhibit Number</u>	<u>Exhibit</u>
4.1	Restated and Amended Articles of Incorporation (incorporated by reference from Exhibit 3.3 to the Form 10-KSB filed on October 11, 2005)
4.2	Amended and Restated By-Laws of the Company dated as of January 8, 2008 (incorporated by reference from Exhibit 3.5 to the Form 8-K filed on January 14, 2008)
4.3	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)
5.1	Opinion of Gallagher & Kennedy, P.A.
10.1	2017 Equity Incentive Plan (incorporated by reference from Appendix B to the Registrant's definitive proxy statement, filed with the Commission on May 16, 2017)
23.1	Consent of Gallagher & Kennedy, P.A. (included in Exhibit 5.1)
23.2	Consent of DeCoria, Maichel & Teague, P.S.
24.1	Power of Attorney (see signature page)
