INTERNATIONAL ISOTOPES INC

Form S-3/A June 24, 2010

As filed with the Securities and Exchange Commission on June 24, 2010.

Registration No. 333-167566

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

INTERNATIONAL ISOTOPES INC.

(Exact name of registrant as specified in its charter)

Texas 74-2763837

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification Number)

4137 Commerce Circle Idaho Falls, Idaho 83401 (208) 524-5300

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Steve T. Laflin

President and Chief Executive Officer

International Isotopes Inc.

4137 Commerce Circle

Idaho Falls, Idaho 83401

(208) 524-5300

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

Copies to:

Sonny Allison Perkins Coie LLP 1899 Wynkoop Street, Suite 700 Denver, CO 80202

(303) 291-2300

reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer [] Accelerated filer []

Approximate date of commencement of proposed sale to the public: From time to time after this Registration Statement becomes effective as determined by market conditions and other factors. 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. [X] If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933, 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 of 1933, 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 of 1933, 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 of 1933, 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

Non-accelerated filer []

(Do not check if a smaller reporting company)

Smaller reporting company [X]

CALCULATION OF REGISTRATION FEE

		Proposed Maximum	Proposed Maxim
	Amount to Be	Offering Price Per Unit	Aggregate Offering
Title of Each Class of Securities to Be Registered (3)	Registered (1)	(1)	(1)
Common stock, par value \$0.01			
Preferred stock, par value \$0.01			
Debt securities			
Convertible debt securities			
Warrants			
Total			\$100,000,000

(1) No additional securities are being registered and registration fees were paid upon filing of the original Form S-3 Registration Statement with the Securities and Exchange Commission on June 16, 2010 (Registration No. 333-167566). Therefore, no further registration fee is required.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant 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, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

The Registrant s Form S-3 Registration Statement filed with the Securities and Exchange Commission on June 16, 2010 (Registration No. 333-167566) (the Registration Statement) is hereby amended to reflect that the securities being registered pursuant to the Registration Statement are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 by checking the proper box on the cover page, and to remove the inadvertently checked box on the cover page of the Registration Statement with respect to filings for additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933. Due to an error in the original edgarization process, the checked boxes were inadvertently switched. Except as described herein, there are no changes to the Registration Statement.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 amendment to registration statement to be signed on its behalf by the undersigned, there under duly authorized, in the City of Idaho Falls, State of Idaho, on the 24th day of June, 2010.

International Isotopes Inc.

/s/ Laurie A McKenzie-Carter
By: Laurie A McKenzie-Carter
Chief Financial Officer

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

Signature	Title	Date June 24, 2010
* Ralph M. Richart	Chairman of the Board	
* Steve T. Laflin	Director, President, and Chief Executive Officer (Principal Executive Officer)	June 24, 2010
/s/ Laurie A. McKenzie-Carter Laurie A. McKenzie-Carter	Chief Financial Officer (Principal Finance and Accounting Officer)	June 24, 2010

* Director June 24, 2010

Christopher Grosso

/s/ Laurie A. McKenzie-Carter Laurie A. McKenzie-Carter Attorney-in-fact