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

FORM S	-8
--------	----

REGISTRATION STATEMENT Under the Securities Act of 1933

BIODRAIN MEDICAL, INC.

(Exact Name of Registrant as Specified in its Charter)

Minnesota	33-1007393
(State or Other Juris-	(I.R.S. Employer
diction of Incorporation	Identification Number)
or Organization)	

2060 Centre Pointe Boulevard, Suite 7 Mendota Heights, Minnesota 55120

(Address of Principal Executive Office and Zip Code)

BioDrain Medical, Inc. 2008 Equity Incentive Plan, as amended

(Full Title of the Plan)

Kevin R. Davidson Chief Executive Officer BioDrain Medical, Inc. 2060 Centre Pointe Boulevard, Suite 7 Mendota Heights, Minnesota 55120 (651) 389-4800

(Name, Address and Telephone Number, Including Area Code, of Agent for Service)

Copies to:

Ryan C. Brauer, Esq. Fredrikson & Byron, P.A. 200 South Sixth Street, Suite 4000 Minneapolis, MN 55402

Fax: (612) 492-7077

Accelerated filer

Smaller Reporting Company

X

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.

Large accelerated filer

Non-accelerated filer

CALC	ULATION OF REGIS	TRATION FEE		
Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Common Stock Issuable under the 2008 Equity Incentive	Registereu(1)	r er Share(2)	Offering Price(2)	Registration ree
Plan	3,000,000	\$ 19	\$ 570,000	\$ 41

- (1) Pursuant to Rule 416, this Registration Statement also covers an indeterminate number of additional shares of Common Stock that may be offered or sold as a result of any adjustments based on stock splits, stock dividends or similar events provided under the Plan.
- (2) Estimated pursuant to Rule 457(h) solely for the purpose of calculating the registration fee and based upon the average of the high and low prices of the Registrant's Common Stock as reported by the Over-the-Counter Bulletin Board on September 21, 2010.

PART I

The information specified in Items 1 and 2 of Part I of this Registration Statement is omitted from this filing in accordance with the provisions of Rule 428 under the Securities Act and the instructions to Form S-8. The documents containing the information specified in Part I will be delivered to the participants in the plan covered by this Registration Statement as required by Rule 428.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, previously filed with the Securities and Exchange Commission (the "Commission"), are hereby incorporated by reference herein:

- 1. Annual Report on Form 10-K for the fiscal year ended December 31, 2009, filed with the Commission by the Registrant on March 31, 2010, as amended by the Registrant's Annual Report on Form 10-K/A filed with the Commission on April 28, 2010.
- 2. All other reports filed by the Registrant pursuant to Sections 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") since December 31, 2009.
- 3. The description of the Registrant's common stock set forth in the prospectus filed with the Commission by the Registrant pursuant to Rule 424(b) of the Securities Act on May 7, 2010, and all amendments and reports filed by the Registrant to update that 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 offered have been sold or which deregisters all such securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of such documents.

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

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Richardson & Patel LLP ("R&P"), an outside law firm for the Registrant, issued an opinion to the Registrant relating to the securities registered pursuant to the Registrant's registration statement on Form S-1, as amended (File No. 333-155299). R&P owns 60,714 shares of the Registrant's common stock. Nimish Patel, a principal of R&P, holds 481,194 shares of the Registrant's common stock and 45,595 shares of common stock of the Registrant underlying certain warrants. Erick Richardson, a principal of R&P, holds 468,326 shares of the Registrant's common stock and 45,595 shares of common stock of the Registrant underlying certain warrants. RP Capital, a limited liability company owned by Messrs. Richardson and Patel, holds 206,277 shares of the Registrant's common stock and warrants to purchase 142,857 shares of the Registrant's common stock. Other R&P employees and principals beneficially own 325,315 shares of the Registrant's common stock and warrants to purchase 28,571 shares of common stock of the Registrant.

Nimish Patel and Erick Richardson, both principals of R&P, held notes in the amount of \$12,500 each, as participants in the Registrant's convertible bridge loan financing from on or around July 23, 2007. These notes and accrued interest were satisfied upon issuance of 68,783 shares of the Registrant's common stock to each of Messrs. Richardson and Patel.

Item 6. Indemnification of Directors and Officers.

Section 302A.521 of the Minnesota Business Corporation Act provides that unless prohibited or limited by a corporation's articles of incorporation or bylaws, the corporation must indemnify its current and former officers, directors, employees and agents against expenses (including attorneys' fees), judgments, penalties, fines and amounts paid in settlement and which were incurred in connection with actions, suits, or proceedings in which such persons are parties by reason of the fact that they are or were an officer, director, employee or agent of the corporation, if they:

- have not been indemnified by another organization;
- acted in good faith;
- received no improper personal benefit;
- in the case of a criminal proceeding, had no reasonable cause to believe the conduct was unlawful; and
- reasonably believed that the conduct was in the best interests of the corporation.

Section 302A.521 requires payment by a corporation, upon written request, of reasonable expenses in advance of final disposition of the proceeding in certain instances. A decision as to whether indemnification is required is made by a disinterested majority of the board of directors present at a meeting at which a disinterested quorum is present, or by a designated committee of the board, by special legal counsel, by the shareholders, or by a court. Section 302A.521 also permits a corporation to purchase and maintain insurance on behalf of its officers, directors, employees and agents against any liability which may be asserted against, or incurred by, such persons in their capacities as officers, directors, employees and agents of the corporation, whether or not the corporation would have been required to indemnify the person against the liability under the provisions of such section.

Pursuant to the Registrant's By-Laws, the Registrant may indemnify its directors and executive officers to the fullest extent not prohibited by any applicable law; provided, however, that the Registrant may modify the extent of such indemnification by individual contracts with its directors and executive officers. The Registrant is not required to indemnify any director or executive officer in connection with any proceeding (or part thereof) initiated by such person unless: (i) such indemnification is expressly required to be made by law; (ii) the proceeding was authorized by the Registrant's Board of Directors; or (iii) such indemnification is provided by the Registrant, in its sole discretion, pursuant to the powers vested in the Registrant under any applicable law. The Registrant may indemnify its other officers, employees and agents as provided under any applicable law.

In addition, the Registrant's By-Laws provide that it will advance to any person who was or is a party to a threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is or was a director or executive officer, of the Registrant, prior to the final disposition of the proceeding, promptly following request therefore, all expenses incurred by any director or executive officer in connection with such proceeding; provided, however, that the advancement of expenses shall be made only upon delivery to the Registrant of an undertaking by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that such indemnitee is not entitled to be indemnified for such expenses. Notwithstanding the foregoing, unless otherwise determined, no advance shall be made by the Registrant to an officer of the Registrant (except by reason of the fact that such officer is or was a director of the Registrant) in any action, suit or proceeding, whether civil, criminal, administrative or investigative, if a determination is reasonably and promptly made: (i) by a majority vote of directors who are not parties to the proceeding; (ii) by a committee of such directors designated by a majority vote of such directors; or (iii) if there are no such directors, or such directors so direct, by a written opinion from independent legal counsel, that the facts known to the decision-making party at the time such determination is made demonstrate clearly and convincingly that such person acted in bad faith or in a manner that such person did not believe to be in the best interests of the Registrant.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

- 5.1 Opinion of Fredrikson & Byron, P.A.
- 23.1 Consent of Fredrikson & Byron, P.A. (included in Exhibit 5.1).
- 23.2 Consent of Olsen Thielen & Co., Ltd.
- 24.1 Power of Attorney (included on signature page hereof).
- 99.1 2008 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.35 to the Registrant's registration statement on Form S-1 (Registration No. 333-155299) filed with the Commission on November 12, 2008).
- 99.2 Amendment No. 1 to 2008 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on June 23, 2010).

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;
 - (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 periodic reports filed 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 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to 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 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 final adjudication of such issue.

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-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Mendota Heights, State of Minnesota, on September 23, 2010.

BIODRAIN MEDICAL, INC.

By: /s/ Kevin R. Davidson

Kevin R. Davidson
President, Chief Executive Officer, Chief
Financial Officer and Director

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

Each of the undersigned constitutes and appoints Lawrence W. Gadbaw and Kevin R. Davidson his true and lawful attorney-in-fact and agent, each acting alone, with full powers of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign the Form S-8 Registration Statement of BioDrain Medical, Inc. relating to the Registrant's 2008 Equity Incentive Plan, as amended, and any or all amendments or post-effective amendments to the Form S-8 Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, each acting alone, 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 to all intents and purposes as the undersigned might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, each acting alone, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the date listed below.

Signature	Title	Date
/s/ Lawrence W. Gadbaw Lawrence W. Gadbaw	Chairman of the Board of Directors	September 23, 2010
/s/ Kevin R. Davidson Kevin R. Davidson	President, Chief Executive Officer, Chief Financial Officer and Director (Principal Executive Officer and Principal Financial Officer)	September 23, 2010
/s/ Chad A. Ruwe Chad A. Ruwe	Chief Operating Officer and Director	September 23, 2010
/s/ James E. Dauwalter James E. Dauwalter	Director	September 23, 2010
/s/ Peter L. Morawetz Peter L. Morawetz	Director	September 23, 2010
/s/ Thomas J. McGoldrick Thomas J. McGoldrick	Director	September 23, 2010
/s/ Andrew P. Reding Andrew P. Reding	Director	September 23, 2010

EXHIBIT INDEX

Exhibit Number	Exhibit Description
5.1	Opinion of Fredrikson & Byron, P.A.
23.1	Consent of Fredrikson & Byron, P.A. (included in Exhibit 5.1).
23.2	Consent of Olsen Thielen & Co., Ltd.
24.1	Power of Attorney (included on signature page hereof).
99.1	2008 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.35 to the Registrant's registration statement on Form S-1 (Registration No. 333-155299) filed with the Commission on November 12, 2008).
99.2	Amendment No. 1 to 2008 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on June 23, 2010).

FREDRIKSON & BYRON, P.A. 200 South Sixth Street, Suite 4000 Minneapolis, Minnesota 55402

Telephone: (612) 492-7000 Facsimile: (612) 492-7077

September 22, 2010

BioDrain Medical, Inc. 2060 Centre Pointe Boulevard, Suite 7, Mendota Heights, MN 55120

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We are acting as corporate counsel to BioDrain Medical, Inc. (the "Company") in connection with the original registration by the Company on Form S-8 (the "Registration Statement") under the Securities Act of 1933, as amended (the "Act") of 3,000,000 shares of Common Stock (the "Shares") issuable pursuant to the Company's 2008 Equity Incentive Plan, as amended (the "Plan").

In acting as such counsel and for the purpose of rendering this opinion, we have reviewed copies of the following, as presented to us by the Company: (i) the Company's Articles of Incorporation, as amended; (ii) the Company's By-Laws, as amended; (iii) certain corporate resolutions certified by the Secretary of the Company as having been adopted by the Board of Directors and shareholders of the Company pertaining to the approval and amendment of the Plan; (iv) the Plan; and (v) the Registration Statement.

Based on, and subject to, the foregoing and upon representations and information provided by the Company or its officers or directors, it is our opinion as of this date that, upon issuance and delivery of the Shares against receipt by the Company of the consideration for the Shares pursuant to the terms of the Plan, the Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules and regulations of the Securities and Exchange Commission.

Very truly yours,

FREDRIKSON & BYRON, P.A.

By: /s/ Melodie R. Rose

Melodie R. Rose, Vice President

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 31, 2010, which expresses an unqualified opinion and includes an explanatory paragraph relating to the Company's ability to continue as a going concern, appearing in the Annual Report on Form 10-K of BioDrain Medical, Inc, for the year ended December 31, 2009.

/s/ Olsen Thielen & Co., Ltd.

Minneapolis, Minnesota September 23, 2010