

As filed with the Securities and Exchange Commission on February 12, 2007

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

AngioDynamics, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

11-3146460

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

**603 Queensbury Avenue
Queensbury, New York
(518) 798-1215**

(Address and telephone number of principal executive offices)

12804

(Zip Code)

**RITA MEDICAL SYSTEMS, INC. 2005 STOCK AND INCENTIVE PLAN
RITA MEDICAL SYSTEMS, INC. 2000 STOCK PLAN
RITA MEDICAL SYSTEMS, INC. 2000 DIRECTORS' STOCK OPTION PLAN
RITA MEDICAL SYSTEMS, INC. 1994 INCENTIVE STOCK PLAN
HORIZON MEDICAL PRODUCTS, INC. 1998 STOCK INCENTIVE PLAN**

(Full titles of plans)

Copies to:

Robert B. Pincus, Esq.
Skadden, Arps, Slate, Meagher &
Flom LLP
One Rodney Square
Wilmington, Delaware 19801
(302) 651-3000

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED (1)	PROPOSED MAXIMUM OFFERING PRICE PER SHARE	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE	AMOUNT OF REGISTRATION FEE (2)
Common Stock, par value \$0.01	1,050,000	\$25.93	\$27,226,500	\$2,914

(1) In addition, pursuant to Rule 416 (c) under the Securities Act of 1933, this Registration Statement also covers an indeterminate amount of interests to be offered or sold pursuant to the employee benefit plans described herein.

(2) The registration fee for the securities registered hereby has been calculated pursuant to Rule 457 (h) under the Securities Act and is based upon the average of the high and low prices per share of the Common Stock on the New York Stock Exchange as of a date (February 7, 2007) within five business days prior to filing this Registration Statement.

Pursuant to a certain Agreement and Plan of Merger, dated as of November 27, 2006, as amended on December 7, 2006, as further amended January 16, 2007, by and among AngioDynamics, Inc. (the "Company" or the "Registrant"), Royal I, LLC, and RITA Medical Systems, Inc. ("RITA"), on January 29, 2007 the Registrant assumed all options to purchase RITA common stock then outstanding under the Rita Medical Systems, Inc. 2005 Stock and Incentive Plan (the "2005 Plan"), the Rita Medical Systems, Inc. 2000 Stock Plan (the "2000 Plan"), the Rita Medical Systems, Inc. 2000 Directors' Stock Option Plan (the "2000 Directors' Plan"), the Rita Medical Systems, Inc. 1994 Incentive Stock Plan (the "1994 Plan"), and the Horizon Medical Products, Inc. 1998 Stock Incentive Plan (the "1998 Plan" and, together with the 2005 Plan, the 2000 Plan, the 2000 Directors' Plan, and the 1994 Plan, the "Plans"). In conjunction with its assumption of those options, the Registrant is registering on this Registration Statement an aggregate of 400,000 shares under the 2005 Plan, an aggregate of 460,000 shares under the 2000 Plan, an aggregate of 110,000 shares under the 2000 Directors' Plan, an aggregate of 10,000 shares under the 1994 Plan, and an aggregate of 70,000 shares under the 1998 Plan.

PART I

INFORMATION REQUIRED IN SECTION 10(a) PROSPECTUS

(a) The documents constituting Part I of this Registration Statement will be sent or given to participants in the Plans as specified by Rule 428(b)(1) under the Securities Act. The Part I Information is not filed with the Securities and Exchange Commission (the "Commission") either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to the note to Part I of Form S-8.

(b) Upon written or oral request, the Registrant will provide, without charge, the documents incorporated by reference in Item 3 of Part II of this Registration Statement. The documents are incorporated by reference in the Section 10(a) prospectus. The Registrant will also provide, without charge, upon written or oral request, other documents required to be delivered to employees pursuant to Rule 428(b). Requests for the above-mentioned information should be directed to Gregory J. Champion, the Registrant's Secretary, at the address and telephone number on the cover of this Registration Statement.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

The Registrant is permitted by the Commission to "incorporate by reference" the information filed with or furnished to them. The information incorporated by reference is considered to be part of this Registration Statement, and later information that the Registrant files with or, to the extent designated therein, furnishes to the Commission will automatically update and supersede this information. The documents listed below have been filed with or furnished to the SEC by the Registrant, and are incorporated herein by reference to the extent filed or furnished:

(a) The Registrant's Annual Report on Form 10-K for the year ended June 3, 2006, filed pursuant to Sections 13(a) or 15(d) of the Securities Exchange Act of 1934 on August 11, 2006, as amended September 21, 2006.

(b) All other reports furnished by the Registrant or filed by the Registrant pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") since the end of the fiscal year covered by the Registrant's annual report referred to in (a) above.

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(c) The description of the Registrant's common stock, par value \$0.01 per share, contained in the Registration Statement on Form 8-A filed with the Commission on May 13, 2004, including any amendments or reports filed for the purpose of updating such description.

(d) The description of the Registrant's preferred stock purchase rights contained in the Registration Statement on Form 8-A filed with the Commission on October 27, 2004, including any amendments or reports filed for the purpose of updating such description.

All documents subsequently furnished to the Commission or filed by the Registrant with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities covered by this Registration Statement have been sold or which deregisters all of the securities then remaining unsold, will be deemed to be incorporated by reference in this Registration Statement and to be a part of this document from the date of filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference in this document will be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained in this document or in any other subsequently filed documents that also is or is deemed to be incorporated by reference in this document modifies or supersedes such statement. Any such statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

ITEM 4. DESCRIPTION OF SECURITIES.

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL

Not applicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 145 of the Delaware General Corporation Law (the "DGCL") provides, in summary, that directors and officers of Delaware corporations are entitled, under certain circumstances, to be indemnified against all expenses and liabilities (including attorneys' fees) incurred by them as a result of suits brought against them in their capacity as directors or officers, if they acted in good faith and in a manner they reasonably believed to be in or not opposed to the Registrant's best interests, and, with respect to any criminal action or proceeding, if they had no reasonable cause to believe their conduct was unlawful; provided that no indemnification may be made against expenses in respect of any claim, issue, or matter as to which they shall have been adjudged to be liable to the Registrant, unless and only to the extent that the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, they are fairly and reasonably entitled to indemnity for such expenses as the court shall deem proper. Any such indemnification may be made by the Registrant only as authorized in each specific case upon a determination by the stockholders, disinterested directors or independent legal counsel that indemnification is proper because the indemnitee has met the applicable standard of conduct.

Section 102(b)(7) of the DGCL permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability for any breach of the director's duty of loyalty to the corporation or its stockholders, for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, for unlawful payments of dividends or unlawful stock repurchases, redemptions or other distributions, or for any transaction from which the director derived an improper personal benefit.

The Company's amended and restated certificate of incorporation ("COI") provides for the elimination of the personal liability of its directors to the Company and its stockholders for monetary damages for breach

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of their fiduciary duties as directors, subject to the exceptions set forth in DGCL Section 102. The Company's COI and bylaws provide that the Company will indemnify its directors and officers to the fullest extent permitted by the DGCL. The Company's COI and bylaws also authorize it to indemnify its employees and other agents to the fullest extent permitted by the DGCL.

The Company maintains a directors and officers liability insurance and company reimbursement policy. The policy insures directors and officers, subject to various exclusions, against unindemnified losses arising from certain wrongful acts in their capacities and reimburses the Company for such losses for which the Company has lawfully indemnified the directors and officers. The policy contains various exclusions, none of which relate to the offering hereunder.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED.

Not applicable.

ITEM 8. EXHIBITS.

See Exhibit Index attached hereto.

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 this 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 this 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 a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in this Registration Statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) above 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 this Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, 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.

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(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 this 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 the final adjudication of such issue.

(Signatures on following page)

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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 Queensbury, State of New York, on February 12, 2007.

ANGIODYNAMICS, INC.

By: /s/ Eamonn P. Hobbs
Name: Eamonn P. Hobbs
Title: Chief Executive Officer and President

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below authorizes Eamonn P. Hobbs and Joseph G. Gerardi, and each or any of them, as his attorney in fact and agent, with full power of substitution and resubstitution, to execute, in his name and on his behalf, in any and all capacities, this Registration Statement on Form S-8 and any amendments thereto (and any additional registration statement related thereto permitted by Rule 462(b) promulgated under the Securities Act of 1933 (and all further amendments including post-effective amendments thereto)) necessary or advisable to enable the Registrant to comply with the Securities Act, and any rules, regulations and requirements of the Commission, in respect thereof, in connection with the registration of the securities which are the subject of such Registration Statement, which amendments may make such changes in such Registration Statement as such attorney may deem appropriate, and with full power and authority to perform and do any and all acts and things whatsoever which any such attorney or substitute may deem necessary or advisable to be performed or done in connection with any or all of the above-described matters, as fully as each of the undersigned could do if personally present and acting, hereby ratifying and approving all acts of any such attorney or substitute.

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

Signature

Title

Date

<u>/s/ Paul S. Echenberg</u>	Chairman of the Board, Director	February 8, 2007
Paul S. Echenberg		
<u>/s/ Eamonn P. Hobbs</u>	President, Director and Chief Executive Officer (Principal Executive Officer)	February 9, 2007
Eamonn P. Hobbs		
<u>/s/ Joseph G. Gerardi</u>	Vice President – Chief Financial Officer, Treasurer (Principal Financial and Chief Accounting Officer)	February 12, 2007
Joseph G. Gerardi		

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<u>/s/ Vincent Bucci</u>	Director	February 12, 2007
Vincent Bucci		
<u>/s/ Howard W. Donnelly</u>	Director	February 12, 2007
Howard W. Donnelly		
<u>/s/ Jeffrey G. Gold</u>	Director	February 12, 2007
Jeffrey G. Gold		
<u>/s/ Dennis S. Meteny</u>	Director	February 8, 2007
Dennis S. Meteny		
<u>/s/ Wesley E. Johnson, Jr.</u>	Director	February 12, 2007
Wesley E. Johnson, Jr.		
<u>/s/ Steve LaPorte</u>	Director	February 9, 2007
Steve LaPorte		

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EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Exhibit Description</u>
4.1	Amended and Restated Certificate of Incorporation of AngioDynamics, Inc. (incorporated by reference to the exhibit of the same number to the Registrant's quarterly report on Form 10-Q for the quarterly period ended August 27, 2005).
4.2	Amended and Restated Bylaws of AngioDynamics, Inc. (incorporated by reference to the exhibit of the same number to the Registrant's quarterly report on Form 10-Q for the quarterly period ended August 27, 2005).
5.1	Opinion of Skadden, Arps, Slate, Meagher & Flom LLP as to the legality of shares being registered.
23.1	Consent of Skadden, Arps, Slate, Meagher & Flom LLP (included in Exhibit 5.1).
23.2	Consent of PricewaterhouseCoopers LLP.
23.3	Consent of Grant Thornton LLP.
24.1	Power of Attorney (included in the signature page and incorporated herein by reference).

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February 12, 2006

AngioDynamics, Inc.
603 Queensbury Avenue
Queensbury, New York 12804

Re: AngioDynamics, Inc.
Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as special counsel to AngioDynamics, Inc., a Delaware corporation (the "Company"), and are delivering this opinion in connection with the Registration Statement on Form S-8 of the Company (the "Registration Statement") being filed with the Securities and Exchange Commission (the "Commission") on the date hereof, relating to the registration by the Company of 1,050,000 shares (the "Plan Shares") of common stock, par value \$0.01 per share (the "Common Stock"), of the Company authorized for issuance pursuant to the Company's Rita Medical Systems, Inc. 2005 Stock and Incentive Plan (the "2005 Plan"), the Company's Rita Medical Systems, Inc. 2000 Stock Plan (the "2000 Plan"), the Company's Rita Medical Systems, Inc. 2000 Directors' Stock Option Plan (the "2000 Directors' Plan"), the Company's Rita Medical Systems, Inc. 1994 Incentive Stock Plan (the "1994 Plan"), and the Company's Horizon Medical Products, Inc. 1998 Stock Incentive Plan (the "1998 Plan" and, together with the 2005 Plan, the 2000 Plan, the 2000 Directors' Plan, and the 1994 Plan, the "Plans").

This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Act.

In connection with this opinion, we have examined originals or copies, certified or otherwise identified to our satisfaction, of (i) the Plans; (ii) the Registration Statement; (iii) certain resolutions of the Board of Directors of the Company, dated November 27, 2006; (iv) the Company's Amended and Restated Certificate of Incorporation; (v) the Company's Bylaws; and (vi) specimen certificates representing the Common Stock. We have also examined originals or copies, certified or otherwise identified to our satisfaction, of such records of the Company and such agreements, certificates and receipts of public officials, certificates of officers or other representatives of the Company and others, and such other documents, certificates and records as we have deemed necessary or appropriate as a basis for the opinions set forth herein.

In our examination, we have assumed the legal capacity of all natural persons, the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as facsimile, electronic, certified, or photostatic copies and the authenticity of the originals of such copies. In making our examination of executed documents, we have assumed that the parties thereto, other than the Company, had the power, corporate or other, to enter into and perform all obligations thereunder and have also assumed the due authorization by all requisite action, corporate or other, and the due execution and delivery by such parties of such documents and the validity and binding effect thereof on such parties. As to any facts material to the opinions expressed herein that we did not independently establish or verify, we have relied upon statements and representations of officers and other representatives of the Company and others and of public officials. In rendering the opinion set forth below, we have assumed that the certificates evidencing the Plan Shares in the form examined by us will be manually signed by an authorized officer of the transfer agent and registrar for the Common Stock and registered by such transfer agent and registrar.

We do not express any opinion as to the laws of any jurisdiction other than the laws of the State of Delaware.

Based on and subject to the foregoing, we are of the opinion that the Plan Shares have been duly authorized by the Company and, when the Plan Shares are issued and paid for by the plan participants as contemplated by the Plans and in accordance with the terms and conditions of the Plans and the applicable stock option agreements, the Plan Shares will be validly issued, fully paid and non-assessable.

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

Very truly yours,

/s/ Skadden, Arps, Slate, Meagher & Flom LLP

SKADDEN, ARPS, SLATE, MEAGHER &
FLOM LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated August 10, 2006 relating to the financial statements, financial statement schedule, management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting, which appears in AngioDynamics, Inc.'s Annual Report on Form 10-K for the year ended June 3, 2006.

/s/ PricewaterhouseCoopers LLP

PRICEWATERHOUSECOOPERS LLP

Albany, New York
February 12, 2007

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our report dated July 13, 2004, except for Note A as to which the date is August 17, 2004, accompanying the consolidated financial statements and schedule for the fifty-two weeks ended May 29, 2004 included in the Annual Report on Form 10-K of AngioDynamics, Inc. for the fiscal year ended June 3, 2006 which is incorporated by reference in this Registration Statement. We consent to the incorporation by reference in the Registration Statement of the aforementioned report.

/s/ Grant Thornton LLP

GRANT THORNTON LLP

Melville, New York
February 8, 2007