

As filed with the Securities and Exchange Commission on November 15, 2010

**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)*

**AngioDynamics, Inc. Employee Stock Purchase Plan**

*(Full titles of plans)*

Copies to:

**D. Joseph Gersuk**

**Executive Vice President, Chief Financial Officer**

**AngioDynamics, Inc.**

**14 Plaza Drive**

**Latham, New York 12110**

**(518) 798-1215**

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

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 definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Non-accelerated filer

Accelerated filer

Smaller reporting company

**CALCULATION OF REGISTRATION FEE**

Title of each class of securities to be registered	Amount to be registered	Proposed maximum offering price per share (1)	Proposed maximum aggregate offering price (1)	Amount of registration fee
Common Stock, par value \$0.01	300,000(2)	\$14.47	\$4,341,000	\$309.52

(1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement shall be deemed to cover an indeterminate number of additional shares that may become issuable as a result of stock splits, stock dividends or similar transactions pursuant to the anti-dilution provisions of the AngioDynamics, Inc. Employee Stock Purchase Plan (the "Purchase").

(2) Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(c) under the Securities Act, based upon the average of the high and low prices reported on the Nasdaq Global Select Market on November 12, 2010.

(3) Consists of shares of common stock available for issuance under the Purchase Plan.

### EXPLANATORY NOTE

On October 28, 2004, we registered 1,000,000 shares of our common stock par value \$0.01 per share issuable under our AngioDynamics, Inc. 2004 Stock and Incentive Award Plan (the "2004 Plan") and 200,000 shares of our common stock issuable under the AngioDynamics, Inc. Employee Stock Purchase Plan (the "Purchase Plan"), pursuant to a Registration Statement on Form S-8 (File No. 333-120057). On November 6, 2006, we filed a Registration Statement on Form S-8 (File No. 333-138456) to register an additional 1,000,000 shares of our common stock under the 2004 Plan. On August 14, 2009 we filed a Registration Statement on Form S-8 (File No. 333-161355) to register an additional 1,000,000 shares of our common stock under the 2004 Plan and an additional 200,000 shares of our common stock under the Purchase Plan. On November 3, 2009, we filed a Registration Statement on Form S-8 (File No. 333-162844) to register an additional 750,000 shares of our common stock under the 2004 Plan. This Registration Statement on Form S-8 is being filed pursuant to General Instruction E to Form S-8 to register an additional 300,000 shares of common stock issuable under the Purchase Plan.

### INCORPORATION OF DOCUMENTS BY REFERENCE.

Pursuant to General Instruction E to Form S-8, the contents of our Registration Statement on Form S-8 (File No. 333-120057) filed with the Securities and Exchange Commission on October 28, 2004, the contents of our Registration Statement on Form S-8 (File No. 333-138456) filed with the Securities and Exchange Commission on November 6, 2006, the contents of our Registration Statement on Form S-8 (File No. 333-161355) filed with the Securities and Exchange Commission on August 14, 2009, and the contents of our Registration Statement on Form S-8 (File No. 333-162844) filed with the Securities and Exchange Commission on November 3, 2009, including, with respect to each registration statement, each of the documents filed by us with the Securities and Exchange Commission and incorporated or deemed to be incorporated by reference therein and including each of the documents filed as Exhibits to such registration statement, are incorporated herein by reference.

### PART II

#### ITEM 8. EXHIBITS.

<u>Exhibit Number</u>	<u>Exhibit Description</u>
5.1	Opinion of Stephen A. Trowbridge as to the legality of shares being registered.
23.1	Consent of PricewaterhouseCoopers LLP, an independent registered public accounting firm.
23.2	Consent of Stephen A. Trowbridge (included in Exhibit 5.1).
24.1	Power of Attorney (included in the signature page and incorporated herein by reference).

(Signatures on following page)

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, AngioDynamics, Inc. 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 Latham, State of New York, on November 15, 2010.

ANGIODYNAMICS, INC.

By: /s/ Jan Keltjens

Name: Jan Keltjens

Title: Chief Executive Officer and President

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below authorizes Jan Keltjens and D. Joseph Gersuk, 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 AngioDynamics, Inc. (the "Registrant") to comply with the Securities Act, and any rules, regulations and requirements of the Securities and Exchange 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 on November 15, 2010 in the capacities and on the dates indicated.

Signature

Title

/s/ Vincent A. Bucci  
Vincent A. Bucci

Chairman of the Board, Director

/s/ Jan Keltjens  
Jan Keltjens

President, Director and Chief Executive Officer  
(Principal Executive Officer)

/s/ D. Joseph Gersuk  
D. Joseph Gersuk

Executive Vice President – Chief Financial Officer, Treasurer  
(Principal Financial and Chief Accounting Officer)

/s/ Howard W. Donnelly  
Howard W. Donnelly

Director

/s/ Kevin J. Gould  
Kevin J. Gould

Director

/s/ Jeffrey G. Gold  
Jeffrey G. Gold

Director

/s/ Wesley E. Johnson, Jr.  
Wesley E. Johnson, Jr.

Director

/s/ Steve LaPorte  
Steve LaPorte

Director

/s/ Dennis S. Meteny  
Dennis S. Meteny

Director

/s/ Charles T. Orsatti  
Charles T. Orsatti

Director

## **EXHIBIT INDEX**

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November 15, 2010

AngioDynamics, Inc.  
14 Plaza Drive  
Latham, NY 12110

Ladies and Gentlemen:

I am General Counsel of AngioDynamics, Inc., a Delaware corporation (the "Company"), and have acted as counsel to the Company in connection with its Registration Statement on Form S-8 (the "Registration Statement") filed pursuant to the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration of 300,000 shares (the "Shares") of the Company's common stock, par value \$0.01 per share (the "Common Stock"), which may be issued pursuant to the AngioDynamics, Inc. Employee Stock Purchase Plan (the "ESPP").

For purposes of the opinion expressed in this letter, I have examined copies of the Registration Statement and the ESPP, the Certificate of Incorporation and Bylaws of the Company, records of the corporate proceedings of the Company and such other documents and records of the Company as I have deemed necessary or appropriate as a basis for such opinion. In making my examination, I have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to me as originals and the conformity to the originals of all documents submitted to me as photostatic or conformed copies.

Based on the foregoing, and having regard to such legal considerations as I have deemed relevant, I am of the opinion that the Shares have been duly authorized and, upon the issuance thereof and payment therefor in accordance with the terms of the ESPP, will be legally issued, fully paid and nonassessable.

I express no opinion as to any matter which may be, or which purports to be, governed by the laws of any jurisdiction other than the General Corporation Law of the State of Delaware and the federal laws of the United States of America, in each case as in effect on the date of this letter.

I hereby consent to the inclusion of this letter as an exhibit to the Registration Statement and to the use of my name wherever appearing in the Registration Statement and any amendment thereto. In giving such consent, I do not thereby concede that I am within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations promulgated thereunder.

Very truly yours,

/s/ Stephen A. Trowbridge  
Stephen A. Trowbridge

**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 6, 2010 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting of AngioDynamics, Inc., which appears in AngioDynamics' Annual Report on Form 10-K for the year ended May 31, 2010.

/s/ PricewaterhouseCoopers LLP

Albany, New York  
November 15, 2010