

SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

SCHEDULE 13D
Under the Securities Exchange Act of 1934
(Amendment No. ___)*

ANGIODYNAMICS, INC.
(Name of Issuer)

Common Stock
(Title of Class of Securities)

03475V 10 1
(CUSIP Number)

Scott M. Tayne, Esq.
Davies Ward Phillips & Vineberg LLP
625 Madison Ave, 12th Floor, New York, NY 10022
(212) 308-8866

(Name, Address and Telephone Number
of Person Authorized to Receive Notices and Communications)

October 11, 2004
(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), Rule 13d-1(f) or Rule 13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7(b) for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP NO. 03475V 10 1

1 NAME OF REPORTING PERSON
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSON (ENTITIES ONLY)

Howard S. Stern

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)
(a)
(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

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5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED
PURSUANT TO ITEMS 2(d) OR 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

7 SOLE VOTING POWER

1,723,115

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH
8 SHARED VOTING POWER
0

9 SOLE DISPOSITIVE POWER
1,723,115

10 SHARED DISPOSITIVE POWER
0

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
1,723,115

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES
(SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
15.1%

14 TYPE OF REPORTING PERSON*
IN

Item 1. Security and Issuer.

This statement on Schedule 13D relates to the common stock, par value \$0.01 per share (the "Common Stock"), of AngioDynamics, Inc. ("AngioDynamics"), a Delaware corporation with its principal executive offices at 603 Queensbury Avenue, Queensbury, New York 12804 .

Item 2. Identity and Background.

- (a) This Schedule 13D is being filed by Howard S. Stern, a natural person.
- (b) Mr. Stern's business address is 717 Main Street, Westbury, New York 11590-5021.
- (c) Mr. Stern's present principal occupation is serving as Chairman of the Board and director of E-Z-EM, Inc. ("E-Z-EM"), a Delaware corporation primarily engaged in developing, manufacturing and marketing diagnostic products used by radiologists and other physicians during image-assisted procedures to detect anatomic abnormalities and disease.
- (d) During the past five years, Mr. Stern has not been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) During the past five years, Mr. Stern has not been a party to any civil proceeding as a result of which he has been subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws, or finding any violation with respect to such laws.
- (f) Mr. Stern is a United States citizen.

Item 3. Source and Amount of Funds or Other Consideration.

On August 17, 2004, the E-Z-EM board of directors approved the spin-off of AngioDynamics by means of a dividend payable to holders of E-Z-EM common stock. E-Z-EM holds 9,200,000 shares of AngioDynamics Common Stock, all of which will be distributed, pro rata, to the E-Z-EM stockholders in the spin-off. On October 30, 2004, holders of record of E-Z-EM common stock as of 5:00 p.m. New York Time on October 11, 2004, will receive 0.856377 of a share of AngioDynamics Common Stock for each share of E-Z-EM common stock held. Mr. Stern will acquire the shares of AngioDynamics Common Stock described herein in such spin-off transaction. No cash or other consideration is required from any E-Z-EM stockholder, including Mr. Stern, in connection with the dividend.

Item 4. Purpose of Transaction

As a shareholder of E-Z-EM, Mr. Stern will receive his pro rata share of the dividend of shares of AngioDynamics Common Stock being distributed by E-Z-EM.

Under a trading plan to be adopted by Mr. Stern pursuant to Rule 10b5-1 under the Securities Exchange Act of 1934 ("Rule 10b5-1") following completion of E-Z-EM's distribution of its AngioDynamics Common Stock to its stockholders, Mr. Stern intends to sell monthly over a two-year period, in open market transactions on The Nasdaq Stock Market, shares of AngioDynamics Common Stock in amounts proportionate to his sales of E-Z-EM Common Stock. Based on the numbers of currently outstanding shares of AngioDynamics Common Stock and E-Z-EM Common Stock, approximately 8,500 shares of AngioDynamics Common Stock would be sold each month. Further, Mr. Stern may make gifts of AngioDynamics Common Stock to family members and charitable institutions, in accordance with his past practice of making such gifts of E-Z-EM common stock.

Additionally, Mr. Stern expects to evaluate on an ongoing basis AngioDynamics' financial condition, business operations and prospects, the market price of the AngioDynamics Common Stock, conditions in securities markets generally, general economic and industry conditions and other factors. Accordingly, Mr. Stern reserves the right to change his plans and intentions at any time, as he deems appropriate. In particular, Mr. Stern may acquire additional shares of AngioDynamics Common Stock, dispose of additional shares of AngioDynamics Common Stock and/or enter into privately negotiated derivative transactions with institutional counterparties to hedge the market risk of some or all of his positions in the Common Stock. However, Mr. Stern intends to limit his sales of AngioDynamics Common Stock in each of the next two years to no more than 1% of the outstanding shares of AngioDynamics Common Stock, as contemplated in the Internal Revenue Service private letter ruling obtained by E-Z-EM in connection with its spin-off of AngioDynamics. Any such transactions may be effected at any time and, from time to time, subject to any applicable limitations of the Securities Act of 1933, as amended.

As of the date of filing of this statement, Mr. Stern has no other plan or proposal that relates to or would result in any of the actions set forth in parts (a) through (j) of Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer.

- (a) As of October 11, 2004, Mr. Stern beneficially owned 2,012,099 shares of E-Z-EM common stock. On October 30, 2004, Mr. Stern will receive, and thus is currently deemed to beneficially own, 1,723,115 shares of AngioDynamics Common Stock as part of the distribution of AngioDynamics Common Stock by E-Z-EM to its stockholders, based on a distribution ratio of .856377 of a share of AngioDynamics Common Stock for each outstanding share of E-Z-EM common stock. Such shares represent 15.1% of the 11,442,500 shares of AngioDynamics Common Stock outstanding as of October 11, 2004. These shares do not include the 6,851 shares described in Item 5(c), below, or the shares subject to the options described in Item 6, below.
- (b) Mr. Stern has the sole voting and dispositive rights with respect to the shares of AngioDynamics Common Stock that he will acquire on October 30, 2004, pursuant to the distribution by E-Z-EM.

- (c) On October 15, 2004, Mr. Stern sold an aggregate of 8,000 shares of E-Z-EM common stock in 13 transactions at prices ranging from \$17.64 to \$18.95 per share under a trading plan adopted pursuant to Rule 10b5-1. The shares were sold in the regular way market on the American Stock Exchange and, accordingly, carried due bills for an aggregate of 6,851 shares of AngioDynamics Common Stock to be received by Mr. Stern in the distribution by E-Z-EM of its AngioDynamics Common Stock.

During the last sixty days there have been no other transactions in the AngioDynamics Common Stock effected by Mr. Stern.

- (d) Not Applicable.
- (e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer.

In connection with the initial public offering (the "IPO") of AngioDynamics effected in May 2004, the officers and directors of AngioDynamics, including Mr. Stern, agreed with the underwriters of the IPO that they would not, without the prior written consent of the managing underwriter, directly or indirectly, offer, sell or otherwise dispose of any AngioDynamics Common Stock or any securities that may be converted into or exchanged or exercised for any AngioDynamics Common Stock for a period of 180 days from May 26, 2004.

Mr. Stern holds options to acquire an aggregate of 86,773 shares of AngioDynamics Common Stock granted under the AngioDynamics 1997 Stock Option Plan. All of the options are exercisable at \$4.35 per share. Options for 85,519 shares become exercisable on December 30, 2004 and expire at various dates in 2007 through 2011. The options for the remaining 1,254 shares become exercisable in June 2005 (836 shares) and June 2006 (418 shares) and expire in June 2010 (418 shares) and June 2011 (836 shares).

Item 7. Material to be Filed as Exhibits.

- 10.1 Lock Up Agreement
- 10.2 Form of Option Agreement under the AngioDynamics 1997 Stock Option Plan.
- 10.3 AngioDynamics 1997 Stock Option Plan (incorporated by reference to Exhibit 10.2 to the Registration Statement on Form S-1 (Reg. No. 333-113329) of AngioDynamics, Inc.).

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, the undersigned hereby certifies that the information contained in this statement is true, complete and correct.

Dated: October 21, 2004.

/s/ Howard S. Stern

HOWARD S. STERN

LOCK UP AGREEMENT

April 15, 2004

RBC Capital Markets Corporation
Adams, Harkness & Hill

c/o RBC Capital Markets Corporation
One Liberty Plaza
165 Broadway
NY, NY 10006

Re: AngioDynamics, Inc. (the "Company")

Ladies and Gentlemen:

The undersigned is an owner of record or beneficially, or a pledgee of, certain shares of common stock of the Company ("Common Stock") or securities convertible into or exchangeable or exercisable for Common Stock. The Company proposes to carry out a public offering of Common Stock (the "Offering") for which you will act as representatives (the "Representatives") of the several underwriters (the "Underwriters"). The undersigned recognizes that the Offering will be of benefit to the undersigned and will benefit the Company by, among other things, raising additional capital for its operations. The undersigned acknowledges that you will be relying upon the representations and agreements of the undersigned contained in this letter in carrying out the Offering and in entering into underwriting arrangements with the Company with respect to the Offering (the "Underwriting Agreement").

In consideration of the foregoing, the undersigned hereby agrees that for a period of 180 days from the date of the final prospectus relating to the Offering the undersigned will not, without the prior written consent of RBC Capital Markets Corporation (which such consent may be withheld in its sole discretion), directly or indirectly, (i) sell, offer to sell, contract to sell, hypothecate, pledge, loan, grant any option to purchase or otherwise transfer or dispose of, or file (or participate in the filing of) a registration statement with the Securities and Exchange Commission (the "Commission") in respect of, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission promulgated thereunder with respect to, any Common Stock of the Company or any securities convertible into or exercisable or exchangeable for Common Stock, (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, whether any such transaction is to be settled by delivery of Common Stock or such other securities, in cash or otherwise, or (iii) publicly announce an intention to effect any transaction specified in clause (i) or (ii).

Notwithstanding the foregoing, this letter agreement (this "Agreement") shall not apply to (a) the sale of any Common Stock to the Underwriters pursuant to Underwriting Agreement, (b)

a bona fide gift or gifts, provided the recipient or recipients thereof agree in writing to be bound by the terms of this Agreement, (c) dispositions to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned, provided that such trust agrees in writing to be bound by the terms of this Agreement or (d) dispositions effected to the heirs or assigns of the undersigned, provided that such heir or assign agrees in writing to be bound by the terms of this Agreement. For purposes of this paragraph, "immediate family" shall mean the undersigned and the spouse, lineal descendant, father, mother, brother or sister of the undersigned.

The undersigned agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of shares of Common Stock or securities convertible into or exchangeable or exercisable for Common Stock held by the undersigned except in compliance with the foregoing restrictions.

The undersigned understands that the Company, the Underwriters and the Representatives will proceed with the Offering in reliance on this Agreement. If (i) the Company notifies you in writing that it does not intend to proceed with the Offering, (ii) the registration statement filed with the Securities and Exchange Commission with respect to the Offering (the "Registration Statement") is withdrawn or (iii) for any reason the Underwriting Agreement shall be terminated prior to the time of purchase (as defined in the Underwriting

Agreement), this Agreement shall be terminated and the undersigned shall be released from its obligations hereunder. The undersigned acknowledges that the Company's intentions with respect to the Offering represent confidential information of the Company, and the undersigned agrees to keep this information confidential prior to the filing of the Registration Statement.

This Agreement is irrevocable and will be binding on the undersigned and the respective successors, heirs, personal representatives, and assigns of the undersigned.

Yours very truly,

/s/ Howard S. Stern

Signature

Howard S. Stern
Printed Name of Holder

Printed Name of Person Signing
(and indicate capacity of person signing as if
signing custodian, trustee, or on behalf of an entity)

NON-QUALIFIED STOCK OPTION AGREEMENT

THIS AGREEMENT is made as of _____, between AngioDynamics, Inc., ("Company") and _____ ("Optionee"). Terms used herein have the same meaning as in the Company's 1997 Stock Option Plan ("Plan").

1. The Company hereby grants to Optionee a Non-Qualified Stock Option to purchase _____ Shares of Class B Non-Voting Common Stock pursuant and subject to the terms of the Plan, a copy of which has been delivered to Optionee and which is incorporated herein by reference.
2. The option price per share shall be _____. (Total proceeds - _____).
3. The Option shall expire on _____, unless earlier terminated.
4. In the event Optionee becomes employed by, associated in any way with, or the beneficial owner of more than 1% of the equity of any business which competes, directly or indirectly, with the Company's business in any geographical area where the Company then does business, the Option shall immediately expire and Optionee shall have no rights hereunder.
5. Except as provided hereinafter and in Section 8, the Option shall be exercisable as to the Shares covered hereby, 20% on the first anniversary of this grant and 20% on each anniversary thereafter provided a Threshold Event occurs. A Threshold Event is defined as the earlier of (a) fourteen months after either an Initial Public Offering ("IPO") of the Company or the spin-off of all of the Company's stock owned by E-Z-EM to E-Z-EM's shareholders, or (b) two months after the occurrence of both such an IPO and such a spin-off.

Notwithstanding the foregoing, the Option shall be exercisable as to all Shares covered hereby on either _____, or upon a Change of Control. A Change of Control for the purpose of this Agreement shall mean a sale of more than 50% of the Company's voting shares, or a sale of substantially all of the Company's assets or the consolidation of the Company with or merger with Or into any other entity after which the Company ceases to exist.

6. The Option shall not be transferable otherwise than by will or by the laws of descent and distribution and during the lifetime of Optionee shall be exercisable only by Optionee.
7. In the event Optionee ceases to be a director of or consultant to the Company for any reason other than death or disability, the Option may be exercised (if it has not expired under Sections 3 or 4 and is exercisable under Section 5) only during the period ending three months from the date of such cessation.

Notwithstanding the foregoing, in the event the Optionee ceases to be a director of or consultant to the Company for cause, the Option shall expire at the time of such termination and Optionee shall have no rights hereunder.

8. In the event Optionee ceases to be a director of or consultant to the Company by reason of death or disability, the Option may be exercised (if it has not expired under Sections 3 or 4 but regardless of whether it is exercisable under Section 5) only during the period beginning on the date of such cessation and ending one year from the date of such cessation.
9. Nothing herein or in the Plan shall confer upon any director or consultant of the Company any right to continue in the service of the Company.
10. The Option and the Plan are subject to adjustments, modifications and amendments as provided in the Plan.
11. Subject to the Plan, this Agreement shall bind and inure to the benefit of the Company, Optionee and their respective successors, assigns and personal representatives.
12. This Agreement will be governed by and construed under the laws of

New York.

13. Any disputes, claims or interpretive issues arising hereunder shall be resolved by the Committee in its sole and absolute discretion, and the Committee's determinations shall be final and incontestable.

IN WITNESS WHEREOF, the undersigned have executed this Agreement to be effective from the date first above written.

AngioDynamics, Inc.

By:

By: