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

SCHEDULE 14A (Rule 14a-101)

INFORMATION REQUIRED IN PROXY STATEMENT SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the registrant $\ensuremath{\mathbf{x}}$

Filed by a party other than the registrant o

Check the appropriate box:

o Preliminary Proxy Statement.

o Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2)).

o Definitive Proxy Statement.

o Definitive Additional Materials.

x Soliciting Material Under Rule 14a-12.

AngioDynamics, Inc.

(Name of Registrant as Specified in Its Charter)

(Name of Person(s) Filing Proxy Statement if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- x No fee required.
- o Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
 - (1) Title of each class of securities to which transaction applies:
 - (2) Aggregate number of securities to which transaction applies:
 - (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):
 - (4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

- o Fee paid previously with preliminary materials.
- O Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
- (1) Amount Previously Paid:
- (2) Form, Schedule or Registration Statement No.:
- (3) Filing Party:
- (4) Date Filed:

ANGIODYNAMICS®

Acquisition of Navilyst Medical

Supplemental Information | February 7, 2012

Notice Regarding Forward-Looking Statements

This presentation includes "forward-looking statements" intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. Investors can identify these statements by the fact that they do not relate strictly to historical or current facts. These statements contain words such as "expect," "reaffirm," "anticipate," "plan," "believe," "estimate," "may," "will," "predict," "project," "might," "intend," "potential," "could," "would," "should," "optimistic," "seek," "continue," "pursue," or "our future success depends," or the negative or other variations thereof or comparable terminology, are intended to identify such forward-looking statements. In particular, they include statements relating to, among other things, future actions, strategies, future performance and future financial results of AngioDynamics. These forward-looking statements are based on current expectations and projections about future events. The forward-looking statements in this presentation include those with respect to the expected timing of the completion of the transaction.

Investors are cautioned that forward-looking statements are not guarantees of future performance or results and involve risks and uncertainties that cannot be predicted or quantified and, consequently, the actual performance or results of AngioDynamics may differ materially from those expressed or implied by such forward-looking statements. Such risks and uncertainties include, but are not limited to, the factors described from time to time in AngioDynamics' reports filed with the SEC, including AngioDynamics' Form 10-K for the fiscal year ended May 31, 2011 and AngioDynamics' Form 10-Q for the quarterly period ended November 30, 2011; the ability of AngioDynamics to develop its existing and new products; financial community and rating agency perceptions of AngioDynamics; third-party relations and approvals; technological advances and patents attained by competitors; challenges inherent in new product development, including obtaining regulatory approvals; the ability of AngioDynamics to develop its products; future actions by the FDA or other regulatory agencies; domestic and foreign health care reforms and governmental laws and regulations; results of pending or future clinical trials; overall economic conditions; the results of ongoing litigation; the effects of economic, credit and capital market conditions on the economy in general, and on medical device companies in particular; general market conditions; market acceptance; foreign currency exchange rate fluctuations; the effects on pricing from group purchasing organizations and competition and the ability of AngioDynamics to integrate purchased businesses, including Navilyst. Risk and uncertainties related to the proposed transaction include, but are not limited to delays in or failure to obtain any required governmental and regulatory approvals with respect to the transaction; failure to obtain stockholder approval of the issuance of the AngioDynamics common stock in connection with the transaction; failure to consummate or delay in consummating the transaction for other reasons; the possibility that the expected benefits of the transaction, including projected synergies and tax benefits, may not materialize as expected; disruption from the proposed transaction making it more difficult to maintain business and operational relationships; and the failure to successfully integrate the products, R&D capabilities, infrastructure and employees of AngioDynamics and Navilyst.

Any forward-looking statements are made pursuant to the Private Securities Litigation Reform Act of 1995 and, as such, speak only as of the date made. AngioDynamics disclaims any obligation to update the forward-looking statements. Investors are cautioned not to place undue reliance on these forward-looking statements which speak only as of the date stated, or if no date is stated, as of the date of this presentation.

Certain Financial Projections

This presentation includes certain financial forecasts regarding AngioDynamics and Navilyst as well as certain pro forma financial forecasts for the combined companies. These forecasts were prepare solely for purposes of evaluating the transaction based on information available as of the date of preparation. There can be no assurance that these financial forecasts will be realized or that actual results will not be significantly higher or lower than forecasted. The financial forecasts cover multiple years and such information by its nature becomes less predictive with each successive year. These financial forecasts were based on numerous variables and assumptions. Such assumptions are inherently uncertain and may be beyond the control of AngioDynamics. Important factors that may affect actual results and cause these financial forecasts to not be achieved include, but are not limited to, the factors described or referenced under the heading "Notice Regarding Forward-Looking Statements." Neither AngioDynamics nor any other party makes any representation to any stockholder regarding the information included in the financial forecasts set forth herein. Readers of this presentation are cautioned not to rely on the forecasted financial information.

AngioDynamics & Navilyst Medical

Creating a World-Class Platform for Growth

Scale

Significantly Enhanced Presence in Vascular Access

#1 in Fluid Management

Entrée for peripheral vascular portfolio in Catheterization Lab

Technology

PASV® BioFlo® Xcela® and Vaxcel®

Operational Excellence

Lean Manufacturing; Six Sigma Ops Quality Management System Injection Molding; Customization Fully-Integrated ERP High-Caliber R&D Organization

Improved Financial Performance

EPS Accretion Increased Profitability Stronger Sales & Earnings Growth Significant Free Cash Flow Generation

The Acquisition of Navilyst Medical A Compelling Deal Expected to Drive Significant Shareholder Value

- The Navilyst purchase price of \$372mm is meaningfully reduced by the value of the identified cost savings and the acquired tax assets
 - The Economic Value⁽¹⁾ paid for Navilyst is estimated to be \$202 \$217mm
- The combination will drive significantly improved financial performance based on the following estimates:
 - At least \$0.08 EPS accretion in FY13; Increasingly more accretive through FY16
 - FY13 net cost savings of \$5-7mm; Fully-implemented annual net cost savings of \$10-15mm by FY15
 - FY13 Pro Forma Adjusted EBITDA⁽²⁾ of \$60mm; Run-rate Adjusted-EBITDA⁽³⁾ of \$70mm

- Mid-teen growth in Pro Forma Adjusted EBITDA⁽²⁾ from FY13 to FY16; 200-300 bps accretion in EBITDA margin by FY16

- The transaction will optimize AngioDynamics' capital structure and preserve liquidity, with at least \$50mm of free cash flow expected in FY13, including \$11.5mm of free cash flow estimated to be generated annually through FY24 from acquired tax assets
- There is potential for revenue synergies and additional longer-term cost savings, which have not been included in current forward-looking estimates

• Updated guidance will be provided at the transaction closing, which is expected in Q4 FY12

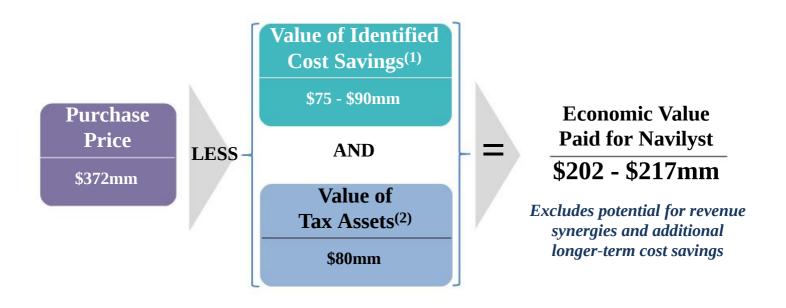
Adjusted EBITDA excludes transaction-related and non-recurring costs.
Bup rate Adjusted EBITDA includes fully implemented cost savings and as

⁽¹⁾ Economic value is equal to the purchase price, less the estimated value of identified cost savings and the acquired tax assets.

⁽³⁾ Run-rate Adjusted EBITDA includes fully-implemented cost savings and excludes the Medical Device Tax and transaction-related and non-recurring costs.

Driving Long-Term Shareholder Value...

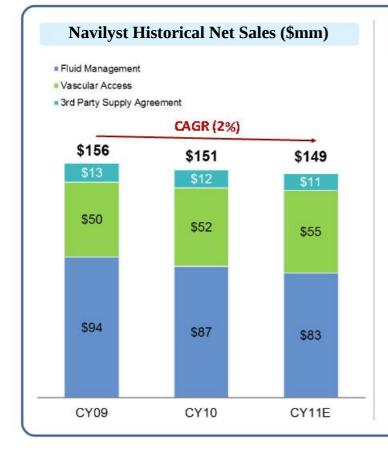
Analyzing the Value Drivers



Significant Value Creation Opportunity for AngioDynamics' Shareholders

(1)

Based on the low and high cases for expected cost savings. There can be no assurance that cost savings will be realized as currently expected. Assumes (i) the pro forma company will have sufficient taxable income to fully utilize the tax assets and (ii) the full realization of Navilyst reported NOLs. There can be no assurance that the tax benefits will be realized as currently expected. (2)



Key Performance Drivers

- Strong PICC sales growth (+10% in CY11E) driven by robust demand for PASV technology and Xcela®/Vaxcel® product lines
- Fluid Management sales in CY10 and CY11 negatively impacted by Oracle implementation
- Oracle implementation has since been completed and the Fluid Management business has stabilized
- Fluid Management sales +3% in Q4 CY11E



Key Performance Drivers

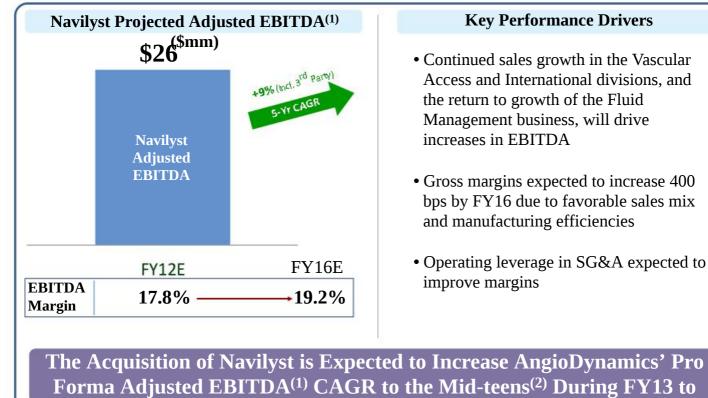
- Fluid Management business expected to be stable in FY13 and return to modest growth in FY14, led by increased international penetration
- PICCs expected to continue strong growth trends led by demand for PASV® technology and several new BioFlo® product launches⁽¹⁾
- Other sales to be driven by new product introductions, including microcatheters, ministicks and drainage products

With the Acquisition of Navilyst, AngioDynamics is Expected to Have a Mid-to-high Single Digit Pro Forma Net Sales CAGR from FY13 to FY16

7

(1) BioFlo® is currently pending FDA approval.

Navilyst Standalone EBITDA Forecast



Adjusted EBITDA excludes transaction-related and non-recurring costs. Includes expected cost savings. (1)(2)

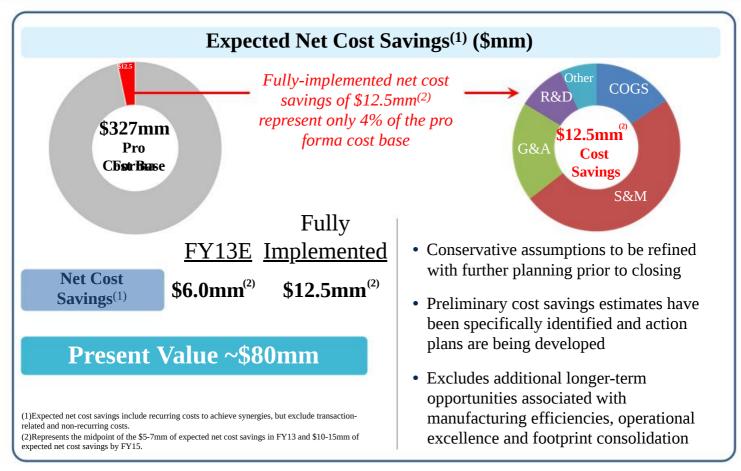
• Continued sales growth in the Vascular Access and International divisions, and the return to growth of the Fluid Management business, will drive

• Gross margins expected to increase 400 bps by FY16 due to favorable sales mix and manufacturing efficiencies

• Operating leverage in SG&A expected to

Overview of Net Cost Savings

A Preliminary View of Achievable Cost Savings



Overview of Net Cost Savings (cont'd)

Potential for Additional Cost Savings



Revenue Synergies

Optimizing Our U.S. Go-to-Market Strategies

| CALL POINTS | Peripheral Vascular Channel | Vascular Access Channel | Oncology Channel | |
|-------------------------------------|---|---|---|--|
| IV Radiologist | \checkmark | \checkmark | √ | |
| IV Nurse | | \checkmark | | |
| IV Cardiologist | \checkmark | | | |
| Vascular Surgeon | ✓ | | | |
| General Surgeon | | ✓ | ~ | |
| Surgical Oncologist | | | ~ | |
| # OF REPS | 65-70 reps | 45-50 reps | 20-25 reps | |
| ANNUAL U.S. SALES | \$135 million | \$110 million | \$30 million | |
| PRODUCTS IN "BAG" ⁽¹⁾ | EVLT / Sotradecol Fluid Management Micro Access Thrombus Core PV Products | PICCs / BioFlo® Ports / BioFlo® Dialysis / BioFlo® Micropuncture | NanoKnife RFA Habib Drainage Microcatheters | |

THREE SALES CHANNELS

Commercial Focus and Scale Offer Compelling Opportunities for

(1) BioFlo® is currently pending FDA approval.

Significant Acquired Tax Assets Increased Free Cash Flow Generates Real Shareholder Value

Amortization of Tax Basis⁽¹⁾

~\$380mm in asset basis expected to generate
\$25mm of annual tax-deductible amortization

• \$9.4mm in estimated annual cash savings through FY24

Acquired Net Operating Losses⁽¹⁾

• ~\$90mm federal NOLs subject to a usage limitation

• \$5.8mm reduction in taxable income expected to

generate \$2.1mm of cash savings annually

Significant Increases in Cash Flow

- \$130mm in expected cumulative cash savings or \$3.65 per share, through FY24
- \$11.5mm of expected annual cash savings
- Reduces the effective purchase price by approximately \$80mm, to \$292mm
- Benefits of tax asset not reflected in P&L, but offer immediate, recurring cash value

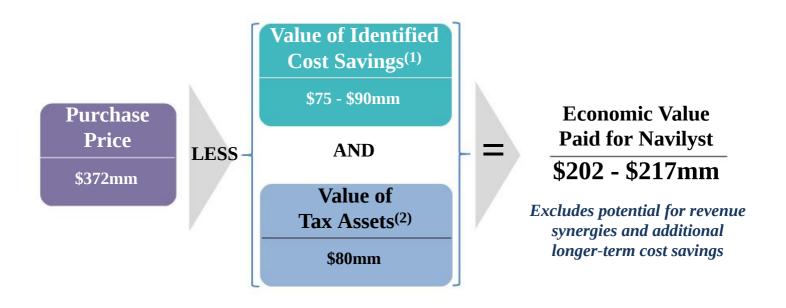
At Least \$50mm, or \$1.40 per Share, of Free Cash Flow⁽¹⁾ Expected to be Generated in FY13 and Growing at a Double-Digit Rate

(1) Excludes transaction-related and non-recurring costs.

Valuation assumes (i) the pro forma company will have sufficient taxable income to fully utilize the tax assets and (ii) the full realization of Navilyst reported NOLs.

Driving Long-Term Shareholder Value...

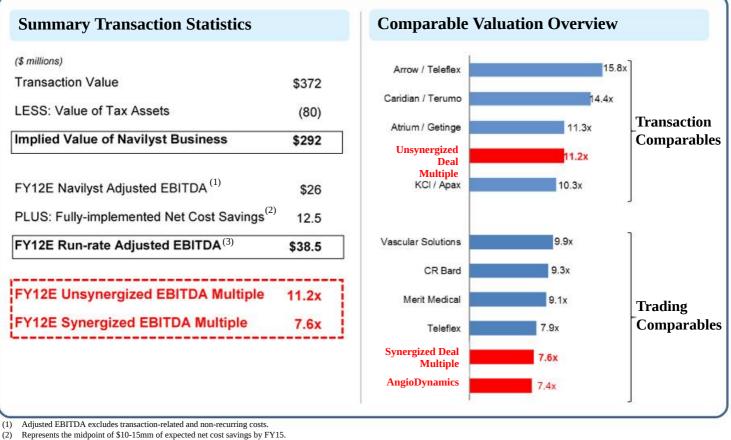
Analyzing the Value Drivers



Significant Value Creation Opportunity for AngioDynamics' Shareholders

(1)

Based on the low and high cases for expected cost savings. There can be no assurance that cost savings will be realized as currently expected. Assumes (i) the pro forma company will have sufficient taxable income to fully utilize the tax assets and (ii) the full realization of Navilyst reported NOLs. There can be no assurance that the tax benefits will be realized as currently expected. (2)



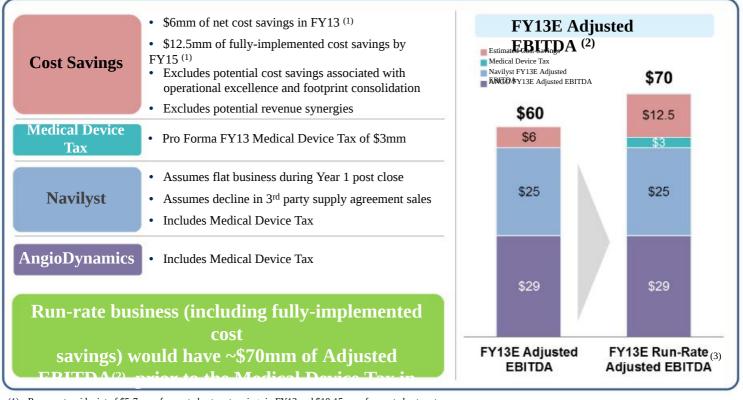
(3) Run-rate Adjusted EBITDA includes fully-implemented cost savings and excludes the Medical Device Tax and transaction-related and non-recurring costs.

14

Significant Integration Planning Underway Increasing Shareholder Value After the Acquisition

- Integration planning is our top priority and is well underway
 - Retained outside experts to assist in the process
 - Established an Integration Management Office
 - Creating an Operational Excellence group to ensure long-term commitment to best practices
 - Focused on achieving operational efficiencies across combined company
- Go-to-market strategies will be optimized with newly focused sales channels
- IT systems will be integrated in a single, worldwide platform
- R&D spend will be focused on high-return product and technology innovations

Pro Forma FY13 Guidance Reviewing the Components of Pro Forma Adjusted EBITDA ⁽²⁾



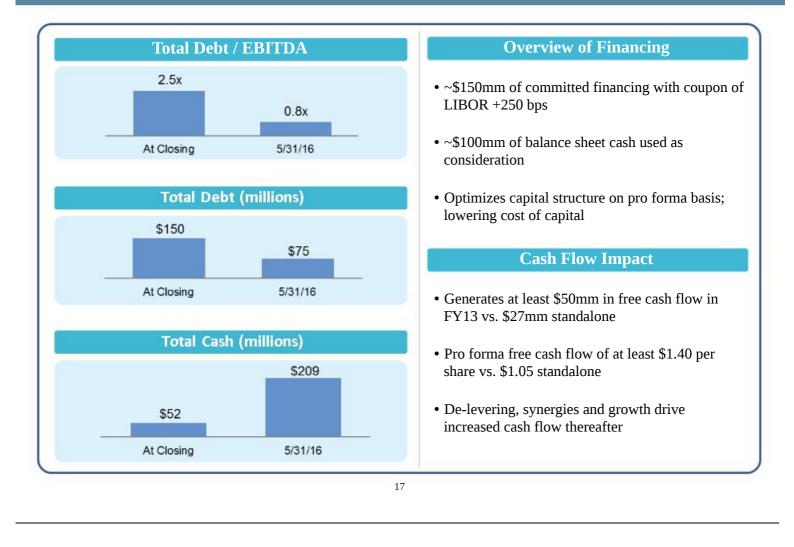
Represents midpoint of \$5-7mm of expected net cost savings in FY13 and \$10-15mm of expected net cost (1) savings by FY15.

Excludes transaction-related and non-recurring expenses. (2)

(3) Run-rate Adjusted EBITDA includes fully-implemented cost savings and excludes the Medical Device Tax. 16

Optimized Capital Structure and Cash Flow

Impact on the Balance Sheet



Summary Estimated Financial Impact

Driving Shareholder Value in the Near- and Long-term

| Net Sales | ~\$360mm Net Sales in FY13 Annual net sales growth in the mid-to-high single digits from FY13 to FY16 |
|--------------------------------|--|
| EBITDA | ~\$60mm Pro Forma Adjusted EBITDA* in FY13 ~\$70mm Run-rate Adjusted EBITDA** Expands EBITDA margins by 200-300 bps by FY16 Mid-teen CAGR in Pro Forma Adjusted EBITDA* from FY13 to FY16 |
| Substantial Cost Savings | \$5-7mm of net cost savings in FY13 \$10-15mm of fully-implemented net cost savings by FY15 |
| Significant Earnings Accretion | At least \$0.08/share accretive to FY13 Non-GAAP EPS* Increasingly more accretive through FY16 |
| Tax Benefits | NPV of tax asset ~\$80mm expected to reduce transaction value to \$292mm Estimated cumulative cash tax savings of \$130mm, or \$3.65/share |
| Improved Cash Flow | Expected to generate at least \$50mm in free cash flow in FY13 Pro Forma Free Cash Flow of at least \$1.40/share vs. standalone of \$1.05 |
| Capital Structure | Net Debt to FY12 Pro Forma Adjusted EBITDA* of ~1.6x |

* Excludes transaction-related costs and nonrecurring costs.

** Includes fully-implemented estimated net cost savings and excludes transaction-related and nonrecurring costs and the Medical Device Tax.

AngioDynamics intends to file with the Securities and Exchange Commission (the "SEC") a proxy statement regarding the issuance of the AngioDynamics common stock in connection with the proposed transaction. The proxy statement will be mailed to AngioDynamics' stockholders. INVESTORS AND STOCKHOLDERS ARE ENCOURAGED TO READ THE PROXY STATEMENT AND OTHER

RELEVANT MATERIALS WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT

INFORMATION ABOUT ANGIODYNAMICS AND THE PROPOSED TRANSACTION. Investors and

stockholders will also be able to obtain a free copy of these documents (when they are available), as well as other filings made by AngioDynamics, without charge, at the SEC's web site at

Attgi/ODynamics Sand In addition, the decimants filed by Angio Dynamics with the SEG to be participants of the sage in toronor the sage in the order of the sage in the property of the property of the sage in the property of th