

HOLOGIC INC  
Form 424B3  
September 12, 2007  
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DATED SEPTEMBER 12, 2007

Filed pursuant to Rule 424(b)(3)  
File No. 333-144238

**MERGER PROPOSED YOUR VOTE IS VERY IMPORTANT**

The boards of directors of Hologic, Inc., or Hologic, and Cytyc Corporation, or Cytyc, have approved a business combination of the two companies pursuant to the terms of an Agreement and Plan of Merger dated as of May 20, 2007. Pursuant to the terms of the merger agreement, Cytyc will be merged into a wholly owned subsidiary of Hologic. Following the completion of the merger, Cytyc stockholders will own approximately 55% of the outstanding common stock of the combined company and Hologic stockholders will own approximately 45% of the outstanding common stock of the combined company.

The combined company will be named Hologic, Inc., and the shares of the combined company will be traded on the Nasdaq Global Select Market, under the symbol HOLX.

Under the terms of the merger agreement, Cytyc's stockholders will receive 0.52 of a share of Hologic common stock and \$16.50 in cash for each share of Cytyc common stock. Cytyc stockholders will receive cash for any fractional shares which they would otherwise receive in the merger. Hologic stockholders will continue to own their existing shares after the merger. Hologic common stock is traded on the Nasdaq Global Select Market under the symbol HOLX. On September 11, 2007, the last practicable day before the mailing of this joint proxy statement/prospectus, the closing price per share of Hologic common stock as reported by the Nasdaq Global Select Market was \$53.74.

**YOUR VOTE IS IMPORTANT.** The merger cannot be completed unless, among other things, Cytyc stockholders adopt the merger agreement, and Hologic stockholders approve an amendment to Hologic's certificate of incorporation, which we refer to as the Hologic charter, and approve the issuance of Hologic common stock to Cytyc stockholders in the merger.

**The Hologic board of directors unanimously recommends that Hologic stockholders vote FOR the amendment to the Hologic charter to increase the number of authorized shares of Hologic common stock and FOR the issuance of Hologic common stock to Cytyc stockholders in the merger. The Cytyc board of directors unanimously recommends that Cytyc stockholders vote FOR the adoption of the merger agreement and the transactions contemplated thereby, including the merger.**

Hologic and Cytyc will each hold a special meeting of their respective stockholders to vote on these proposals. Whether or not you plan to attend your company's special meeting, please take the time to vote by completing and mailing the enclosed proxy card or submitting your proxy by telephone or through the Internet using the procedures in the proxy voting instructions included with your proxy card. Even if you return the proxy, you may attend your company's special meeting and vote your shares in person.

This joint proxy statement/prospectus describes the proposed merger and related transactions in more detail. **Hologic and Cytyc encourage you to read the entire joint proxy statement/prospectus carefully, including the merger agreement, which is attached as Annex A, and the section entitled Risk Factors beginning on page 26.**

We strongly support the combination of our companies and join with our respective boards of directors in recommending that you vote in favor of the proposals presented in this joint proxy statement/prospectus.

Sincerely,

Sincerely,

John W. Cumming

Patrick J. Sullivan

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Chairman and Chief Executive Officer

Chairman, Chief Executive Officer and President

HOLOGIC, INC.

CYTYC CORPORATION

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the securities to be issued under this joint proxy statement/prospectus or determined if this joint proxy statement/prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

**This joint proxy statement/prospectus is dated September 12, 2007 and, together with the accompanying proxy card, is first being mailed or otherwise distributed to stockholders of Hologic and Cytac on or about September 17, 2007.**

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**THIS JOINT PROXY STATEMENT/PROSPECTUS INCORPORATES**

**ADDITIONAL INFORMATION**

**Hologic**

This joint proxy statement/prospectus incorporates by reference important business and financial information about Hologic from other documents filed with the Securities and Exchange Commission, which is referred to as the SEC, that are not included in or delivered with this joint proxy statement/prospectus. This information is available to you without charge upon your written or oral request. For a list of the documents incorporated by reference into this joint proxy statement/prospectus, see *Where You Can Find More Information* beginning on page 197. You can obtain the documents that are incorporated by reference into this joint proxy statement/prospectus, without charge, from the Investor Relations section of Hologic's website at [www.hologic.com](http://www.hologic.com) or by requesting them in writing or by telephone as set forth below:

By Mail: Hologic, Inc.  
35 Crosby Drive  
Bedford, MA 01730

By Telephone: (781) 999-7300

**If you would like to request any documents, please do so by October 11, 2007 in order to receive them before the Hologic special meeting.**

**Cytc**

Cytc is subject to the informational filing requirements of the Securities Exchange Act of 1934, as amended, which is referred to as the Exchange Act, and, in accordance therewith, is obligated to file reports, proxy statements and other information with the SEC relating to its business, financial condition and other matters. The information filed by Cytc with the SEC may be inspected at the SEC's public reference library at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Copies of such information may be obtained by mail, upon payment of the SEC's customary charges, by writing to the SEC's principal office at 100 F Street, N.E., Washington D.C. 20549. The SEC also maintains a website at [www.sec.gov](http://www.sec.gov) that contains the information that Cytc has filed with the SEC via the EDGAR system. Documents filed with the SEC by Cytc also are available free of charge on the investor relations portion of the Cytc website at [www.cytc.com](http://www.cytc.com). At the present time, Cytc is not eligible to incorporate by reference the information filed with the SEC into this joint proxy statement/prospectus and accordingly has included the required business and financial information in this joint proxy statement/prospectus. The business and financial information about Cytc is attached hereto as Annex B.

**Use of Non-GAAP Financial Measures**

This joint proxy statement/prospectus includes non-GAAP financial measures, such as adjusted earnings per share, or adjusted EPS, and EBITDA. Adjusted EPS excludes the write-off and amortization of acquisition-related intangible assets, and tax provisions/benefits related thereto. EBITDA is defined as net earnings (loss) before interest, taxes, depreciation and amortization expense. Hologic and Cytc believe that the use of these non-GAAP measures helps investors to gain a better understanding of our respective core operating results and future prospects, consistent with how management measures and forecasts our respective performance, especially when comparing such results to previous periods or forecasts. When analyzing Hologic's operating performance, investors should not consider these non-GAAP financial measures as a substitute for net income prepared in accordance with U.S. generally accepted accounting principles, referred to as U.S. GAAP or GAAP.

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**VOTING ELECTRONICALLY, BY TELEPHONE, BY MAIL OR IN PERSON**

Hologic stockholders of record as of the close of business on August 22, 2007 may submit their proxies:

through the Internet, by visiting the website established for that purpose at [www.voteproxy.com](http://www.voteproxy.com) and following the instructions set forth therein;

by telephone, by calling toll-free 1-800-PROXIES (1-800-776-9437) in the United States, Canada or Puerto Rico on a touch-tone phone and following the recorded instructions; or

by mail, by marking, signing, and dating your proxy card and returning it in the postage-paid envelope provided or pursuant to the instructions set out in the proxy card.

In addition, a Hologic stockholder may attend the Hologic special meeting in person and vote in person. If your shares are held in street name, you must request a legal proxy from your nominee as proof of ownership in order to vote in person at the special meeting.

Cytc stockholders of record as of the close of business on August 22, 2007 may submit their proxies:

through the Internet, by visiting the website established for that purpose at [www.investorvote.com](http://www.investorvote.com) and following the instructions set forth therein;

by telephone, by calling toll-free 1-800-652-VOTE (1-800-652-8683) in the United States, Canada or Puerto Rico on a touch-tone phone and following the recorded instructions; or

by mail, by marking, signing, and dating your proxy card and returning it in the postage-paid envelope provided or pursuant to the instructions set out in the proxy card.

In addition, a Cytc stockholder may attend the Cytc special meeting and vote in person. If your shares are held in street name, you must request a legal proxy from your nominee as proof of ownership in order to vote in person at the special meeting.

*If you hold your shares in street name, please refer to your proxy card or the information forwarded by your bank, broker or other holder of record to see which options are available to you.*

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**NOTICE OF SPECIAL MEETING OF STOCKHOLDERS**

**To Be Held On October 18, 2007**

Dear Stockholder:

NOTICE IS HEREBY GIVEN that a special meeting of stockholders of Hologic, Inc. will be held on October 18, 2007 at 9:00 a.m., local time, at Hologic's principal executive offices located at 35 Crosby Drive, Bedford, Massachusetts 01730 (the "Hologic special meeting").

The purpose of the Hologic special meeting is to consider and to vote on the following proposals:

to approve an amendment to Hologic's Certificate of Incorporation, as amended, which is referred to as the Hologic charter, effective immediately prior to the effective time of the merger, to increase the authorized number of shares of Hologic common stock from 90,000,000 to 300,000,000;

to approve the issuance of shares of Hologic common stock to stockholders of Cytac Corporation in connection with the merger contemplated by the Agreement and Plan of Merger dated as of May 20, 2007, among Hologic, Cytac and Nor-easter Corp., a wholly owned subsidiary of Hologic formed for the purpose of the merger;

to approve the Hologic, Inc. Senior Executive Short-Term Incentive Plan;

to approve an amendment to Hologic's Second Amended and Restated 1999 Equity Incentive Plan, which amendment will become effective if the merger is completed; and

if submitted to a vote of Hologic stockholders, to approve an adjournment of the special meeting, including, if necessary, to solicit additional proxies in favor of the foregoing proposals if there are not sufficient votes for those proposals.

The Hologic board of directors has unanimously determined that the merger agreement, the merger and the other transactions contemplated therein, including the amendment to the Hologic charter and the issuance of Hologic common stock in the merger, are advisable and in the best interests of Hologic and its stockholders. The Hologic board of directors recommends that Hologic stockholders vote **FOR** the amendment to the Hologic charter, **FOR** the issuance of Hologic common stock in the merger, **FOR** the approval of the Hologic, Inc. Senior Executive Short-Term Incentive Plan, **FOR** the approval of an amendment to Hologic's Second Amended and Restated 1999 Equity Incentive Plan and **FOR** the adjournment of the special meeting, including, if necessary, to solicit additional proxies in favor of any of the proposals to be acted upon at the Hologic special meeting.

Hologic and Cytac cannot complete the merger unless:

the proposed amendment to the Hologic charter is approved by the affirmative vote of a majority of the outstanding shares of Hologic common stock entitled to vote on the proposal; and

the issuance of shares of Hologic common stock to Cytac stockholders in the merger is approved by the affirmative vote of a majority of the votes cast in person or by proxy on the proposal.

**Your failure to vote will have the same effect as a vote against the approval of the Hologic charter amendment.**

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The close of business on August 22, 2007 has been fixed as the record date, which is referred to as the Hologic record date, for the determination of Hologic stockholders who are entitled to notice of, and to vote at, the Hologic special meeting or any adjournments or postponements of the Hologic special meeting. Only holders of Hologic common stock of record at the close of business on August 22, 2007 are entitled to notice of, and to vote at, the Hologic special meeting or any adjournments or postponements of the Hologic special meeting. A

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complete list of the holders of Hologic common stock entitled to vote at the Hologic special meeting will be available for examination by any Hologic stockholder, for any purpose germane to the Hologic special meeting, at Hologic's principal executive offices at 35 Crosby Drive, Bedford, Massachusetts 01730, for a period of ten days before the Hologic special meeting, between the hours of 9:00 a.m. and 4:00 p.m., local time, and at the Hologic special meeting during the entire time of the meeting.

We direct your attention to the joint proxy statement/prospectus accompanying this notice for a more complete statement regarding the matters proposed to be acted upon at the Hologic special meeting. **We encourage you to read the entire joint proxy statement/prospectus carefully, including the merger agreement, which is attached as Annex A to the joint proxy statement/prospectus, and the section entitled Risk Factors beginning on page 26.**

**YOUR VOTE IS VERY IMPORTANT. WHETHER OR NOT YOU PLAN TO ATTEND THE HOLOGIC SPECIAL MEETING, PLEASE VOTE AS SOON AS POSSIBLE BY MAIL, BY TELEPHONE OR THROUGH THE INTERNET. INSTRUCTIONS ON THESE DIFFERENT WAYS TO VOTE YOUR PROXY ARE FOUND ON THE ENCLOSED PROXY CARD. YOU MAY REVOKE YOUR PROXY AT ANY TIME BEFORE IT IS VOTED AT THE HOLOGIC SPECIAL MEETING BY FOLLOWING THE PROCEDURES SET FORTH IN THE ACCOMPANYING JOINT PROXY STATEMENT/PROSPECTUS. REMEMBER, YOUR VOTE IS IMPORTANT, SO PLEASE VOTE PROMPTLY!**

By Order of the Board of Directors,

*John W. Cumming*

*Chairman of the Board and Chief Executive Officer*

September 12, 2007

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**NOTICE OF SPECIAL MEETING OF STOCKHOLDERS**

**To Be Held On October 18, 2007**

To the Stockholders of Cytac Corporation:

Cytac Corporation ( Cytac ) is pleased to invite you to attend a special meeting of the stockholders of Cytac which will be held on October 18, 2007 at 9:00 a.m., local time, at The Hilton Boston Logan Airport, One Hotel Drive, Boston, Massachusetts 02128 (the Cytac special meeting ).

The purpose of the Cytac special meeting is to consider and to vote on the following proposals:

to adopt the Agreement and Plan of Merger, dated as of May 20, 2007, among Cytac, Hologic, Inc. ( Hologic ) and Nor easter Corp., a wholly owned subsidiary of Hologic formed for the purpose of the merger ( MergerSub ), a copy of which is attached as Annex A to the joint proxy statement/prospectus, and the transactions contemplated thereby, including the merger, pursuant to which Cytac will merge with and into MergerSub, with MergerSub continuing as the surviving corporation under the name Cytac Corporation and as a wholly owned subsidiary of Hologic; and

if submitted to a vote of Cytac stockholders, to approve an adjournment of the Cytac special meeting, including, if necessary, to solicit additional proxies in favor of the proposal to adopt the merger agreement if there are not sufficient votes for that proposal at the time of the meeting.

The Cytac board of directors has unanimously determined that the merger agreement and the transactions contemplated thereby are advisable and fair to and in the best interests of Cytac and its stockholders, unanimously authorized, adopted and approved the merger agreement and the transactions contemplated thereby, including the merger, and recommends that Cytac stockholders vote **FOR** the adoption of the merger agreement and the transactions contemplated thereby, including the merger, and **FOR** the adjournment of the Cytac special meeting, including, if necessary, to solicit additional proxies in favor of the adoption of the merger agreement.

Hologic and Cytac cannot complete the merger unless the proposal to adopt the merger agreement is approved by the affirmative vote of a majority of the outstanding shares of Cytac common stock entitled to vote at the Cytac special meeting.

**Your failure to vote will have the same effect as a vote against the adoption of the merger agreement. Therefore, your vote is very important.**

The close of business on August 22, 2007 has been fixed as the record date, which is referred to as the Cytac record date, for the determination of Cytac stockholders entitled to notice of, and to vote at, the Cytac special meeting or any adjournments or postponements of the Cytac special meeting. Only holders of record of Cytac common stock at the close of business on the Cytac record date are entitled to notice of, and to vote at, the Cytac special meeting. A complete list of stockholders entitled to vote at the Cytac special meeting will be available for examination by any Cytac stockholder, during normal business hours, at Cytac s headquarters at 250 Campus Drive, Marlborough, Massachusetts 01752 for purposes pertaining to the Cytac special meeting for a period of ten days before the Cytac special meeting, and at the Cytac special meeting during the entire time of the meeting.



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We direct your attention to the joint proxy statement/prospectus accompanying this notice for more detailed information regarding the matters proposed to be acted upon at the Cytoc special meeting. **You are encouraged to read the entire joint proxy statement/prospectus carefully, including the merger agreement, which is attached as Annex A to the joint proxy statement/prospectus, and the section entitled Risk Factors beginning on page 26 of the joint proxy statement/prospectus.**

Holders of Cytoc common stock who do not vote in favor of adopting the merger agreement and who otherwise comply with the requirements of Delaware law will be entitled to appraisal rights. A summary of the applicable Delaware law provision, including the requirements a Cytoc stockholder must follow in order to exercise his or her appraisal rights, is contained in the accompanying joint proxy statement/prospectus.

SO THAT YOUR SHARES WILL BE REPRESENTED WHETHER OR NOT YOU PLAN TO ATTEND THE CYTYC SPECIAL MEETING, PLEASE VOTE AS SOON AS POSSIBLE BY: (1) ACCESSING THE INTERNET WEBSITE SPECIFIED ON YOUR PROXY CARD; (2) CALLING THE TOLL-FREE NUMBER SPECIFIED ON YOUR PROXY CARD; OR (3) SIGNING, DATING AND MAILING THE ENCLOSED PROXY CARD. YOU MAY REVOKE YOUR PROXY AT ANY TIME BEFORE IT IS VOTED AT THE CYTYC SPECIAL MEETING BY FOLLOWING THE PROCEDURES SET FORTH IN THE ACCOMPANYING JOINT PROXY STATEMENT/PROSPECTUS. **REMEMBER, YOUR VOTE IS IMPORTANT, SO PLEASE ACT PROMPTLY.**

By Order of the Board of Directors,

*Patrick J. Sullivan*

*Chairman, Chief Executive Officer and President*

September 12, 2007

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**QUESTIONS AND ANSWERS ABOUT THE MERGER**

*The following are some questions that you, as a stockholder of Hologic or Cytyc, may have regarding the merger and the other matters being considered at the stockholders' meetings and the answers to those questions. Hologic and Cytyc urge you to read carefully the entire joint proxy statement/prospectus because the information in this section does not provide all the information that might be important to you with respect to the merger and the other matters being considered at the stockholders' meetings. Additional important information is also contained in the annexes to and the documents incorporated by reference into this joint proxy statement/prospectus.*

***Q: Why am I receiving this joint proxy statement/prospectus?***

**A:** Hologic and Cytyc are proposing to combine the two companies in a merger transaction pursuant to the terms of a merger agreement that is described in this joint proxy statement/prospectus. In the merger, Cytyc will be merged with and into a wholly owned subsidiary of Hologic that was formed for the purpose of the merger, with the Hologic subsidiary surviving the merger and remaining a wholly owned subsidiary of Hologic under the name Cytyc Corporation. A copy of the merger agreement is attached to this joint proxy statement/prospectus as Annex A.

In order to complete the merger, Hologic stockholders must approve an amendment to Hologic's charter to increase the number of authorized shares of Hologic common stock and approve the issuance of shares of Hologic common stock in connection with the merger, and Cytyc stockholders must adopt the merger agreement and the transactions contemplated thereby, including the merger. In addition, all other conditions to the merger must be satisfied or waived.

Neither the amendment to the Hologic charter nor the issuance of Hologic common stock in connection with the merger will take place unless both of these proposals are approved by Hologic stockholders and the merger is completed. Hologic will hold a special meeting of its stockholders, referred to as the Hologic special meeting, to obtain the required approvals of Hologic stockholders, and Cytyc will hold a special meeting of its stockholders, referred to as the Cytyc special meeting, to obtain the required approval of Cytyc stockholders.

***Q: What will I receive in the merger?***

**A:** *Hologic stockholders.* Each share of Hologic common stock held by Hologic stockholders immediately before the merger will continue to represent one share of Hologic common stock after the effective time of the merger. In other words, Hologic stockholders will receive no consideration in the merger and the merger will not change the number of shares a Hologic stockholder currently owns.

*Cytyc stockholders.* For each share of Cytyc common stock held immediately before the effective time of the merger, Cytyc stockholders will have the right to receive 0.52 of a share of Hologic common stock and \$16.50 in cash without interest. Cytyc stockholders will also receive cash for any fractional shares of Hologic common stock that they would otherwise receive in the merger. The amount of cash for fractional shares will be calculated by multiplying the fraction of a share of Hologic common stock to which the Cytyc stockholder would be entitled to receive in the merger by the closing sale price of a share of Hologic common stock on the closing date of the merger.

Hologic and Cytyc expect that, upon completion of the merger, assuming conversion of all of Cytyc's outstanding 2.25% Senior Convertible Notes due 2024, approximately 55% of the outstanding common stock of Hologic will be held by former Cytyc stockholders, and approximately 45% of the outstanding common stock of Hologic will be held by current Hologic stockholders.

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***Q: How will Hologic pay for the cash portion of the merger consideration?***

A: Hologic has received a firm financing commitment from Goldman Sachs Credit Partners L.P., Bank of America, N.A., Banc of America Securities LLC, Banc of America Bridge LLC, Citigroup Global Markets Inc., JPMorgan Chase Bank, N.A., and J.P. Morgan Securities Inc., collectively referred to as the arrangers, in which the arrangers committed to provide, in the aggregate, financing of up to approximately \$2.55 billion to pay for the cash portion of the merger consideration, for repayment of existing debt of Hologic and Cytac, for expenses relating to the merger and for working capital following the completion of the merger. For a more detailed description of the terms of the financing and the commitment letter, see *The Merger Financing of the Merger* beginning on page 59, and for information about certain risks related to the financing, see *Risk Factors Risks Related to Indebtedness of the Combined Company* beginning on page 30.

***Q: Is the merger expected to be taxable to stockholders?***

A: Hologic and Cytac intend for the merger to qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended, which we refer to as the Code. If you are a Cytac stockholder, you generally will recognize income or gain for U.S. federal income tax purposes equal to the lesser of (i) the amount of cash (excluding cash that you receive in lieu of fractional shares of Hologic common stock) that you receive and (ii) the amount of gain that you realize, which generally is equal to the sum of (a) the amount of cash that you receive plus (b) the fair market value of any Hologic common stock that you receive, over your tax basis in the shares of Cytac common stock that you surrender pursuant to the merger. In addition, if you receive cash in lieu of a fractional share of Hologic common stock, you will recognize gain or loss based on the difference between the cash you receive for such fractional share and your tax basis allocable to the fractional share.

You should read *Material United States Federal Income Tax Consequences of the Merger* beginning on page 111 for a more complete discussion of the United States federal income tax consequences of the merger.

If you are a Hologic stockholder, you will simply retain your shares of Hologic common stock, and the merger therefore will not be taxable to you.

Tax matters can be complicated and the tax consequences of the merger to you will depend on your particular tax situation. We recommend that you consult your tax advisor to determine the tax consequences of the merger to you.

***Q: When and where are the Hologic and Cytac special meetings?***

A: *Hologic special meeting.* The Hologic special meeting will be held on October 18, 2007 at 9:00 a.m., local time, at Hologic's principal executive offices located at 35 Crosby Drive, Bedford, Massachusetts 01730, to consider and vote on the proposals related to the merger and certain other proposals.

*Cytac special meeting.* The Cytac special meeting will be held on October 18, 2007 at 9:00 a.m., local time, at The Hilton Boston Logan Airport, One Hotel Drive, Boston, Massachusetts 02128 to consider and vote on the proposals related to the merger.

***Q: What are Hologic stockholders being asked to vote on?***



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- A: Hologic stockholders are being asked to vote (i) to approve an amendment to the Hologic charter to increase the number of authorized shares of Hologic common stock, (ii) to approve the issuance of shares of Hologic common stock to Cytoc stockholders in connection with the merger, (iii) to approve the Hologic, Inc. Senior Executive Short-Term Incentive Plan, (iv) to approve an amendment to Hologic's Second Amended and Restated 1999 Equity Incentive Plan, and (v) if submitted to a vote of Hologic stockholders, to approve the adjournment of the Hologic special meeting, including, if necessary, to solicit additional proxies in favor of any of the foregoing proposals.

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***Q: Why are Hologic stockholders being asked to approve the Hologic, Inc. Senior Executive Short-Term Incentive Plan?***

A: Hologic is submitting the Hologic, Inc. Senior Executive Short-Term Incentive Plan for stockholder approval as required by Section 162(m) of the Code. If the plan is approved by stockholders and the terms of the plan are satisfied, the payment of bonuses to certain executive officers of Hologic will be fully deductible by Hologic as qualified performance-based compensation under Section 162(m) of the Code.

***Q: Why are Hologic stockholders being asked to approve an amendment to Hologic's Second Amended and Restated 1999 Equity Incentive Plan?***

A: Hologic is submitting the amendment to Hologic's Second Amended and Restated 1999 Equity Incentive Plan for stockholder approval for the purpose of increasing the number of shares of common stock available for issuance under that plan by 4,000,000 shares effective upon completion of the merger. Following completion of the merger, the combined company will be a much larger company with significantly more employees. The Hologic board of directors believes the combined company will need a significant number of shares available to provide equity-based incentive compensation to the directors, officers and other employees of the combined company following the merger.

***Q: What are Cytyc stockholders being asked to vote on?***

A: Cytyc stockholders are being asked to vote (i) to adopt the merger agreement and the transactions contemplated thereby, including the merger, and (ii) if submitted to a vote of the Cytyc stockholders, to approve the adjournment of the Cytyc special meeting, including, if necessary, to solicit additional proxies in favor of the proposal to adopt the merger agreement.

***Q: What vote by Hologic stockholders is required to approve the proposals to be submitted to Hologic stockholders at the Hologic special meeting?***

A: The affirmative vote of a majority of the outstanding shares of Hologic common stock entitled to vote at the Hologic special meeting is required for approval of the amendment to Hologic's charter to increase the number of authorized shares of Hologic common stock from 90,000,000 to 300,000,000.

The affirmative vote of a majority of the votes cast in person or by proxy at the Hologic special meeting is required to approve the proposals relating to the issuance of Hologic common stock to Cytyc stockholders in the merger, the approval of the Hologic, Inc. Senior Executive Short-Term Incentive Plan and the approval of the amendment to Hologic's Second Amended and Restated 1999 Equity Incentive Plan.

The affirmative vote of a majority of votes cast in person or by proxy, whether or not a quorum is present at the Hologic special meeting, is required for stockholders to approve the proposal to adjourn the Hologic special meeting.

***Q: What vote by Cytyc stockholders is required to approve the proposals to be submitted to Cytyc stockholders at the Cytyc special meeting?***

A:

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The affirmative vote of a majority of the outstanding shares of Cytoc common stock entitled to vote at the Cytoc special meeting is required to adopt the merger agreement and the transactions contemplated thereby, including the merger.

The affirmative vote of a majority of votes cast in person or by proxy, whether or not a quorum is present at the Cytoc special meeting, is required for stockholders to approve the proposal to adjourn the Cytoc special meeting.

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***Q: Who can vote at the Hologic special meeting?***

A: Hologic stockholders can vote at the Hologic special meeting if they owned shares of Hologic common stock at the close of business on August 22, 2007, the record date for the Hologic special meeting. As of the close of business on that day, 53,947,712 shares of Hologic common stock were outstanding.

***Q: Who can vote at the Cytyc special meeting?***

A: Cytyc stockholders can vote at the Cytyc special meeting if they owned shares of Cytyc common stock at the close of business on August 22, 2007, the record date for the Cytyc special meeting. As of the close of business on that day, 117,627,349 shares of Cytyc common stock were outstanding.

***Q: Why is my vote important?***

A: In order to complete the merger, Hologic stockholders must approve the amendment to the Hologic charter to increase the number of authorized shares of Hologic common stock and the issuance of Hologic common stock to Cytyc stockholders in the merger, and Cytyc stockholders must adopt the merger agreement and the transactions contemplated thereby, including the merger.

*Hologic stockholders.*

If you abstain from voting or do not vote (either in person or by proxy), or fail to direct your broker how to vote, it will have the same effect as a vote AGAINST the proposal to approve the amendment to the Hologic charter.

If you abstain from voting or do not vote (either in person or by proxy), or fail to direct your broker how to vote, it will have NO EFFECT on the proposals to approve the issuance of shares of Hologic common stock to Cytyc stockholders in the merger, the Hologic, Inc. Senior Executive Short-Term Incentive Plan, the amendment to Hologic's Second Amended and Restated 1999 Equity Incentive Plan or to adjourn the Hologic special meeting to solicit additional proxies in favor of any of the foregoing proposals to be acted upon at the Hologic special meeting.

*Cytyc stockholders.*

If you abstain from voting or do not vote (either in person or by proxy), or fail to direct your broker how to vote, it will have the same effect as a vote AGAINST the proposal to adopt the merger agreement and the transactions contemplated thereby, including the merger.

If you abstain from voting or do not vote (either in person or by proxy), or fail to direct your broker how to vote, it will have NO EFFECT on the proposal to adjourn the Cytyc special meeting to solicit additional proxies in favor of the proposal to adopt the merger agreement.

***Q: If my shares are held in street name by my broker, will my broker vote my shares for me?***

A:

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Your broker is not permitted to decide how your shares should be voted. Your broker will only vote your shares on a proposal if you provide your broker with voting instructions on that proposal. You should instruct your broker to vote your shares by following the directions that your broker provides you. **Please check the voting information form used by your broker to see if it offers telephone or Internet voting.**

***Q: What if I fail to instruct my broker?***

**A:** If you fail to instruct your broker to vote your shares, they will not be voted at your company's special meeting and will have the consequences set forth under Why is my vote important?

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***Q: What will happen if I return my proxy card without indicating how to vote?***

A. If you sign and send in your proxy and do not indicate how you want to vote on any particular proposal, the Hologic or Cytyc common stock represented by your proxy will be voted **FOR** that proposal.

***Q: What do I do if I want to change my vote?***

A. You can change your vote at any time before your proxy is voted at your company's special meeting. You can do this in one of four ways:

you can send a signed notice of revocation;

you can grant a new, valid proxy by executing a new proxy card bearing a later date;

you can vote at a later time by telephone or through the Internet; or

if you are a holder of record, you can attend the applicable special meeting and vote in person, but your attendance alone will not revoke any proxy that you have previously given.

If you choose either of the first two methods, your notice of revocation or your new proxy must be received by your company's corporate secretary at the address provided under *The Companies* beginning on page 7 no later than the beginning of the applicable special meeting. If you are a Hologic stockholder, you can find further details on how to revoke your proxy in *The Hologic Special Meeting Revocation of Proxies* beginning on page 139. If you are a Cytyc stockholder, you can find further details on how to revoke your proxy in *The Cytyc Special Meeting Revocation of Proxies* beginning on page 142.

If you hold your shares in street name, please refer to your proxy card or the information forwarded by your bank, broker or other holder of record to see which options are available to you.

***Q: Can I dissent and require appraisal of my shares?***

A: *Hologic stockholders.* Under Delaware law, Hologic stockholders have no right to an appraisal of the fair value of their shares in connection with the merger.

*Cytyc stockholders.* Under Delaware law, instead of receiving the merger consideration, Cytyc stockholders are entitled to demand to have the fair value of their shares at the effective time of the merger judicially determined and paid to them in cash. A stockholder who desires to exercise appraisal rights must (i) not vote in favor of the merger, (ii) deliver a written demand for appraisal of his or her shares to the corporate secretary of Cytyc before the vote on the merger at the Cytyc special meeting and (iii) otherwise comply with the provisions of Delaware law. You should carefully read and follow the instructions under *The Merger Appraisal Rights* beginning on page 107 if you wish to exercise your appraisal rights.

***Q: What do I do now?***

**A:** Carefully read and consider the information contained in and incorporated by reference into this joint proxy statement/prospectus, including its annexes.

In order for your shares to be represented at your special stockholders meeting:

you can vote by telephone or through the Internet by following the instructions included on your proxy card;

you can indicate on the enclosed proxy card how you would like to vote and sign and return the proxy card in the accompanying pre-addressed postage paid envelope; or

you can attend your special meeting and vote in person.

If you hold your shares in street name, please refer to your proxy card or the information forwarded by your bank, broker or other holder of record to see which options are available to you.

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***Q: Should stockholders send in their stock certificates with their proxies?***

A: No. Cytyc stockholders should not send in their stock certificates at this time. If the merger is completed, Hologic's exchange agent will send former Cytyc stockholders a letter of transmittal and written instructions explaining what they must do to exchange their Cytyc stock certificates or transfer uncertificated shares for the merger consideration payable to them.

Hologic stockholders will retain their current stock certificates after the merger and should not send in their stock certificates.

***Q: When do you expect to complete the merger?***

A: Hologic and Cytyc are working to complete the merger as quickly as practicable. However, Hologic and Cytyc cannot assure you when or if the merger will be completed. Completion of the merger is subject to satisfaction or waiver of the conditions specified in the merger agreement, including receipt of the necessary approvals of each of Hologic's and Cytyc's stockholders at their respective special meetings and any necessary regulatory approvals. It is possible that factors outside the control of both companies could result in the merger being completed later than expected. Although the exact timing of completion of the merger cannot be predicted with certainty, Hologic and Cytyc anticipate completing the merger in mid-October 2007. See "The Merger Agreement - Conditions to Completion of the Merger" beginning on page 129.

***Q: Whom should I call with questions?***

A: *Hologic Stockholders.* If you have additional questions about the merger or the other matters to be voted on at the Hologic special meeting or if you desire additional copies of this joint proxy statement/prospectus or you need assistance voting your shares, you should contact:

105 Madison Avenue

New York, NY 10016

(212) 929-5500 (Call Collect)

or

**Call Toll-Free (800) 322-2885**

Email: [proxy@mackenziepartners.com](mailto:proxy@mackenziepartners.com)

*Cytyc Stockholders.* If you have additional questions about the merger or the other matters to be voted on at the Cytyc special meeting or if you desire additional copies of this joint proxy statement/prospectus or you need assistance voting your shares, you should contact:

**Morrow & Co., Inc.**

470 West Avenue

Stamford, CT 06902

(203) 658-9400



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Banks and Brokerage Firms, Please Call: (203) 658-9400

**Stockholders Call Toll-Free: (800) 607-0088**

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**SUMMARY**

*This summary highlights information contained elsewhere in this joint proxy statement/prospectus. It does not contain all of the information that may be important to you. You are urged to read carefully this entire joint proxy statement/prospectus, including the attached annexes, and the other documents to which this joint proxy statement/prospectus refers you in order for you to fully understand the proposed merger. See *Where You Can Find More Information* beginning on page 197. Each item in this summary refers to the page of this joint proxy statement/prospectus on which that subject is discussed in more detail.*

**The Companies**

**Hologic, Inc. (see page 115)**

Hologic, Inc.

35 Crosby Drive

Bedford, MA 01730

(781) 999-7300

<http://www.hologic.com><sup>1</sup>

Hologic is a leading developer, manufacturer and supplier of diagnostic and medical imaging systems primarily dedicated to serving the healthcare needs of women. Hologic focuses its resources on developing systems and subsystems offering superior image quality and diagnostic accuracy, which has enabled it to capture significant market share and customer loyalty, despite the presence of large competitors.

Hologic's core women's healthcare business units are focused on mammography and breast care, and osteoporosis assessment. Its mammography and breast care products include a broad product line of breast imaging and related products, including film-based and digital mammography systems, computer-aided detection (CAD), breast biopsy systems and breast biopsy and tissue extraction devices. Hologic's Lorad line of mammography systems and its bone densitometry product line are premier brands in their markets. Hologic's newly acquired CAD product lines from R2 Technology, Inc. and breast biopsy devices and tissue extraction product lines from Suros Surgical Systems, Inc. also hold positions of industry prominence in their areas of application. Hologic's osteoporosis assessment products primarily consist of dual-energy X-ray bone densitometry systems and an ultrasound-based osteoporosis assessment product. Hologic's other business unit includes: Fluoroscans mini C-arm imaging products, Esaote line of extremity MRI (Magnetic Resonance Imaging) systems which are manufactured by an original equipment manufacturer and photoconductor coating business, which Hologic acquired in connection with its acquisition of AEG Electrofotografie GmbH and its group of related companies. Hologic's customers include hospitals, imaging clinics and private practices, many of the leading healthcare organizations in the world and major pharmaceutical companies utilizing Hologic's products in conducting clinical trials.

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<sup>1</sup> The information contained on Hologic's website is expressly not incorporated by reference into this joint proxy statement/prospectus.

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**Nor easter Corp. (see page 115)**

Nor easter Corp.

35 Crosby Drive

Bedford, MA 01730

(781) 999-7300

Nor easter Corp. is a wholly owned subsidiary of Hologic that was incorporated in Delaware in May 2007. Nor easter does not engage in any operations and exists solely to facilitate the merger.

**Cytc Corporation (see page 116)**

Cytc Corporation

250 Campus Drive

Marlborough, MA 01752

(508) 263-2900

<http://www.cytc.com><sup>2</sup>

Cytc is a diversified diagnostic and medical device company that designs, develops, manufactures, and markets innovative and clinically effective diagnostic and surgical products. Cytc's products cover a range of cancer and women's health applications, including cervical cancer screening, pre-term birth risk assessment treatment of excessive menstrual bleeding, radiation treatment of early-stage breast cancer, and radiation treatment of patients with malignant brain tumors.

Cytc operates its business in three reportable segments: domestic diagnostic products, domestic surgical products and international. Cytc's domestic diagnostic products segment develops and markets the ThinPrep® System in the United States primarily for use in cytology testing applications, such as cervical cancer screening, and FullTerm®, The Fetal Fibronectin Test, acquired as part of Cytc's purchase of Adeza Biomedical Corporation, which offers clinical and cost benefits for the assessment of the risk of pre-term birth. Cytc's domestic surgical products segment develops and markets the NovaSure® System, an innovative endometrial ablation device to treat menorrhagia, or excessive menstrual bleeding, the MammoSite® Radiation Therapy System, a device for the treatment of early-stage breast cancer that positions radiation sources directly into the post-lumpectomy site to optimize radiation treatment delivery while minimizing damage to healthy tissue, and the GliaSite® Radiation Therapy System for the treatment of malignant brain tumors. The domestic surgical segment, as part of Cytc's purchase of Adiana Inc., acquired the Adiana Complete Transcervical Sterilization System®, TCS, which is a form of permanent female contraception intended as an alternative to tubal ligation and for which Cytc is in the process of seeking a pre-market approval from the U.S. Food and Drug Administration. The domestic surgical products segment markets these products in the United States. Cytc's international segment markets its diagnostic and surgical products outside of the United States.

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<sup>2</sup> The information contained on Cytc's website is expressly not incorporated by reference into this joint proxy statement/prospectus.

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### **The Merger**

The Agreement and Plan of Merger, dated as of May 20, 2007, among Hologic, Cytyc and Norwester Corp., which is referred to as the merger agreement, is attached as Annex A to this joint proxy statement/prospectus. Cytyc and Hologic encourage you to read carefully the merger agreement in its entirety because it is the principal legal agreement that governs the merger.

#### **Structure of the Merger (see page 117)**

Subject to the terms and conditions of the merger agreement, at the effective time of the merger, Cytyc will merge with and into Norwester Corp., a wholly owned subsidiary of Hologic that was formed for the purpose of the merger, with Norwester Corp. surviving the merger as a direct, wholly owned subsidiary of Hologic. At the effective time of the merger, Norwester Corp. will be renamed Cytyc Corporation.

#### **Merger Consideration (see page 117)**

*Cytyc stockholders.* As a result of the merger, Cytyc stockholders will be entitled to receive, for each issued and outstanding share of Cytyc common stock that they own immediately prior to the effective time of the merger, 0.52 of a share, referred to as the exchange ratio, of Hologic common stock, referred to as the stock merger consideration, and \$16.50 in cash without interest, referred to as the cash merger consideration. The combined company will not issue any fractional shares of Hologic common stock in the merger. Instead, Cytyc stockholders will receive cash in lieu of any fractional shares of Hologic common stock that they would have otherwise received in the merger. The amount of cash for fractional shares will be calculated by multiplying the fraction of a share of Hologic common stock to which the Cytyc stockholder would be entitled to receive in the merger by the closing sale price of a share of Hologic common stock on the closing date of the merger. The stock merger consideration, together with the cash merger consideration and any cash received in lieu of fractional shares, is referred to as the merger consideration.

*Hologic stockholders.* Hologic stockholders will continue to own their existing shares of Hologic common stock after the merger. Hologic stockholders should not send in their stock certificates in connection with the merger.

#### **Ownership of the Combined Company After the Merger**

Hologic will issue approximately 65.1 million shares of Hologic common stock to Cytyc stockholders in the merger based on the number of shares of Cytyc common stock outstanding on June 30, 2007, assuming conversion of all of Cytyc's outstanding 2.25% Senior Convertible Notes due 2024. At the completion of the merger, it is expected that there will be outstanding approximately 119.1 million shares of common stock of the combined company. The shares of Hologic common stock issued to former Cytyc stockholders in the merger will represent approximately 55% of the outstanding common stock of the combined company immediately after the merger. Shares of Hologic common stock held by current Hologic stockholders will represent approximately 45% of the outstanding common stock of the combined company immediately after the merger.

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**Recommendations to Stockholders**

*Recommendations to Hologic stockholders.* The Hologic board of directors has unanimously determined that the merger agreement and the merger and other transactions contemplated therein, including an amendment to the Hologic charter and the issuance of Hologic common stock in the merger are advisable to and in the best interests of Hologic and its stockholders. The Hologic board of directors recommends that Hologic stockholders vote:

**FOR** an amendment to the Hologic charter to increase the authorized number of shares of Hologic common stock from 90,000,000 to 300,000,000 shares;

**FOR** the issuance of Hologic common stock to Cytyc stockholders in the merger;

**FOR** the approval of the Hologic, Inc. Senior Executive Short-Term Incentive Plan;

**FOR** the approval of the amendment to the Hologic's Second Amended and Restated 1999 Equity Incentive Plan; and

**FOR** the adjournment of the special meeting, including, if necessary, to solicit additional proxies in favor of any of the foregoing proposals.

For additional information see The Hologic Special Meeting Board Recommendations beginning on page 135.

*Recommendations to Cytyc stockholders.* The Cytyc board of directors has unanimously determined that the merger agreement and the transactions contemplated thereby, including the merger, are advisable and fair to and in the best interests of Cytyc and its stockholders. The Cytyc board of directors recommends that Cytyc stockholders vote:

**FOR** the adoption of the merger agreement and the transactions contemplated thereby, including the merger; and

**FOR** the adjournment of the special meeting, including, if necessary, to solicit additional proxies in favor of the foregoing proposal. For additional information see The Cytyc Special Meeting Board Recommendations beginning on page 140.

**Opinions of Financial Advisors (see pages 62 and 84)**

*Hologic (See page 62)*

Hologic's financial advisors, Goldman, Sachs & Co., which is referred to as Goldman Sachs, and Jefferies & Company, Inc., which is referred to as Jefferies, each delivered their respective opinions to the Hologic board of directors that, as of the date of the fairness opinion and based upon and subject to the assumptions, procedures, factors, limitations and qualifications set forth therein, the merger consideration to be paid for each outstanding share of Cytyc common stock, taken in the aggregate, to be paid pursuant to the merger agreement was fair, from a financial point of view, to Hologic.

The full text of the written opinion of each of Goldman Sachs and Jefferies, each dated May 20, 2007, which sets forth assumptions made, procedures followed, matters considered and qualifications and limitations on the review undertaken in connection with each of their opinions, is attached hereto as Annex C and Annex D, respectively. Goldman Sachs and Jefferies provided their opinions for the information and assistance of the Hologic board of directors in connection with its consideration of the merger. The Goldman Sachs and Jefferies



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opinions are not a recommendation as to how any holder of Hologic common stock or Cytyc common stock should vote at any stockholders meeting to be held in connection with, or take any action with respect to, the merger.

*Cytyc (See page 84)*

Cytyc's financial advisors, Morgan Stanley & Co. Incorporated, which is referred to as Morgan Stanley, and J.P. Morgan Securities Inc., which is referred to as JPMorgan, each delivered their respective opinions to the Cytyc board of directors to the effect that, as of the date of the fairness opinion and based upon and subject to the factors and assumptions set forth therein, the merger consideration to be received by the holders of Cytyc common stock pursuant to the merger agreement was fair from a financial point of view to such holders.

The full text of the written opinion of each of Morgan Stanley and JPMorgan, each dated May 20, 2007, which sets forth assumptions made, procedures followed, matters considered and limitations on the review undertaken in connection with each of their opinions, is attached hereto as Annex E and Annex F, respectively. Morgan Stanley and JPMorgan provided their opinions for the information and assistance of the Cytyc board of directors in connection with its consideration of the merger. The Morgan Stanley and JPMorgan opinions are not recommendations as to how any holder of Cytyc common stock or Hologic common stock should vote on, or take any action with respect to, the merger.

### **Treatment of Cytyc Stock Options and Other Equity Based Awards (see page 118)**

Outstanding Cytyc stock options at the effective time of the merger will be converted into options to purchase Hologic common stock, with appropriate adjustments made to the number of shares and the exercise price under those options based on the value of the merger consideration. Outstanding Cytyc restricted stock units at the effective time of the merger will be converted into the right to receive, on the same terms and conditions as were applicable to the Cytyc restricted stock units, Hologic common stock, with appropriate adjustments made to the number of shares based on the value of the merger consideration. Outstanding Cytyc performance shares and accrued shares issuable to Cytyc directors will vest as of the effective time of the merger and the holders thereof will be entitled to receive the merger consideration on the same basis as all other shares of Cytyc common stock. Outstanding deferred shares granted under Cytyc's amended and restated director compensation plan will, at the effective time of the merger, be converted into shares of Hologic common stock based on the value of the merger consideration.

### **Interests of Hologic's and Cytyc's Executive Officers and Directors in the Merger (see pages 75 and 95)**

When you consider the Hologic and Cytyc board of directors' respective recommendations that stockholders vote in favor of the proposals described in this joint proxy statement/prospectus, you should be aware that (i) some Cytyc executive officers and directors may have interests that may be different from, or in addition to, Cytyc stockholders' interests, including but not limited to, their receipt of change of control payments under existing Cytyc change of control agreements in connection with the merger, entry into new change of control agreements and retention and severance agreements with Hologic, new employment arrangements with Hologic, accelerated vesting of Cytyc stock options and other equity awards at the effective time of the merger, and the right of Cytyc's executive officers and directors to continued indemnification and insurance coverage for acts or omissions occurring before the merger; and (ii) some Hologic executive officers and directors may have interests that may be different from, or in addition to, Hologic stockholders' interests, including but not limited to, accelerated vesting of stock options and other equity awards upon completion of the merger, payments under change of control agreements in connection with the merger, and a new retention and severance agreement for one executive officer.

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### **Appraisal Rights (see page 107)**

Under the General Corporation Law of the State of Delaware, referred to as the DGCL, instead of receiving the merger consideration, Cytyc stockholders are entitled to demand to have the fair value of their shares at the effective time of the merger judicially determined and paid to them in cash. A stockholder who desires to exercise appraisal rights must (i) not vote in favor of the merger, (ii) deliver a written demand for appraisal of his or her shares to the corporate secretary of Cytyc before the vote on the merger at the Cytyc special meeting and (iii) otherwise comply with the provisions of the DGCL. You should carefully read and follow the instructions under The Merger Appraisal Rights commencing on page 107 if you wish to exercise your appraisal rights.

Under the DGCL, Hologic stockholders have no right to an appraisal of the fair value of their shares in connection with the merger.

### **Material United States Federal Income Tax Consequences of the Merger (see page 111)**

Hologic and Cytyc intend for the merger to qualify as a reorganization within the meaning of Section 368(a) of the Code. If you are a Cytyc stockholder, you generally will recognize income or gain for U.S. federal income tax purposes equal to the lesser of (i) the amount of cash (excluding cash that you receive in lieu of fractional shares of Hologic common stock) that you receive and (ii) the amount of gain that you realize, which generally is equal to the sum of (a) the amount of cash that you receive plus (b) the fair market value of any Hologic common stock that you receive, over your tax basis in the shares of Cytyc common stock that you surrender pursuant to the merger. Your income or gain may vary if you acquired your Cytyc common stock in more than one transaction. In addition, if you receive cash in lieu of a fractional share of Hologic common stock, you will recognize gain or loss based on the difference between the cash you receive for such fractional share and your tax basis allocable to the fractional share.

You should read Material United States Federal Income Tax Consequences of the Merger beginning on page 111 for a more complete discussion of the U.S. federal income tax consequences of the merger.

If you are a Hologic stockholder, you will simply retain your shares of Hologic common stock, and the merger therefore will not be taxable to you.

Tax matters can be complicated and the tax consequences of the merger to you will depend on your particular tax situation. We recommend that you consult your tax advisor to determine the tax consequences of the merger to you.

### **Accounting Treatment (see page 105)**

Hologic prepares its financial statements in accordance with U.S. GAAP. The merger will be accounted for using the purchase method of accounting. As discussed under The Merger Accounting Treatment on page 105, based on the facts that Hologic board members and senior management will control and represent a majority of the board of directors and senior management of the combined company, as well as the terms of the exchange, pursuant to which Cytyc stockholders will receive a premium of approximately 32.5% (as of the date preceding the merger announcement) over the fair market value of their shares on such date and cash of \$16.50 per share (or approximately 36.0% of the merger consideration), Hologic is considered to be the acquirer of Cytyc for accounting purposes. This means that Hologic will allocate the purchase price to the fair value of Cytyc's assets and liabilities at the effective time of the merger, with the excess purchase price being recorded as goodwill. Under the purchase method of accounting, goodwill is not amortized but is tested for impairment at least annually.



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### **Regulatory Approvals (see page 114)**

Hologic and Cytac have each agreed to use their reasonable best efforts in order to obtain all regulatory approvals required in order to complete the merger. These approvals include approvals by the U.S. Federal Trade Commission, the U.S. Department of Justice and state antitrust authorities. Hologic and Cytac each submitted their antitrust filings with the U.S. Department of Justice and the U.S. Federal Trade Commission on June 1, 2007, which commenced the initial waiting period of 30 days. On July 2, 2007, the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, referred to as the HSR Act, expired without a request for additional information. Based on the review and analyses performed, Hologic and Cytac do not believe that any other antitrust related filings are required in any foreign jurisdictions.

### **Listing of Hologic Common Stock (see page 128)**

Hologic has agreed to use its commercially reasonable efforts to cause the shares of Hologic common stock to be issued in the merger to be approved for listing on the Nasdaq Global Select Market.

### **Conditions to Completion of the Merger (see page 129)**

The obligations of each of Hologic and Cytac to complete the merger are subject to the satisfaction at or before the effective time of the merger of a number of mutual conditions, including the following:

adoption of the merger agreement and the transactions contemplated thereby, including the merger, by Cytac stockholders;

approval of the amendment to the Hologic charter to increase the number of authorized shares of common stock and the issuance of the Hologic common stock in the merger, by Hologic stockholders;

absence of any applicable law, rule, order, injunction or judgment prohibiting or preventing the completion of the merger;

the applicable waiting period under the HSR Act or under any similar foreign statutes or regulations applicable to the merger shall have expired or terminated or, where applicable, approval shall have been obtained, except where the failure of which to expire, terminate or be obtained would not reasonably be expected to materially and adversely affect Cytac or Hologic, taken as a whole, or would not reasonably be expected to result in criminal liability;

Hologic's registration statement on Form S-4, which includes this joint proxy statement/prospectus, being effective and not subject to any SEC stop order;

approval for the listing on the Nasdaq Global Select Market of the shares of Hologic common stock to be issued in the merger subject to official notice of issuance;

receipt of all required approvals of any governmental body, agency, official or authority, except those that would not reasonably be expected to (i) materially and adversely diminish the benefits expected to be derived by the parties on the date of the merger agreement from the combination of Hologic and Cytac (the combined business to be taken as a whole); or (ii) otherwise have a regulatory material adverse effect as described in the merger agreement; and

absence of any applicable law, rule, order, injunction or judgment enacted or deemed applicable to the merger that would reasonably be expected to (i) materially and adversely diminish the benefits expected to be derived by the parties on the date of the merger agreement from the combination of Hologic and Cytac (the combined business to be taken as a whole); or (ii) otherwise have a

regulatory material adverse effect as described in the merger agreement.

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In addition, the obligations of each of Hologic and Cytyc to complete the merger are subject to the satisfaction or waiver at or before the effective time of the merger of the following additional conditions:

the other party shall have performed in all material respects all of its obligations required to be performed by it at or prior to the effective time;

the representations and warranties of the other party shall be accurate, to the extent specified in the merger agreement;

no material adverse effect, as defined in the merger agreement, shall have occurred and be continuing with respect to the other party since May 20, 2007; and

receipt of opinions of counsel to that party that the merger will qualify as a reorganization within the meaning of Section 368(a) of the Code, and that Hologic, Cytyc and Norwester Corp. will qualify as parties to a reorganization within the meaning of Section 368(b) of the Code.

The obligations of Hologic to complete the merger are further conditioned on the requirement that holders of no greater than 10% of the issued and outstanding common stock of Cytyc shall have demanded appraisal for such shares in accordance with the DGCL.

### **Termination of the Merger Agreement (see page 130)**

Hologic and Cytyc can mutually agree to terminate the merger agreement at any time. Either company may also terminate the merger agreement, under specified circumstances, if the merger is not completed by November 16, 2007, or under other circumstances described in this joint proxy statement/prospectus.

### **Expenses and Termination Fees (see page 132)**

Generally, all fees and expenses incurred in connection with the merger agreement and the transactions contemplated by the merger agreement will be paid by the party incurring those expenses, subject to the specific exceptions discussed in this joint proxy statement/prospectus. The merger agreement provides that, upon termination of the merger agreement under specified circumstances described elsewhere in this joint proxy statement/prospectus, Cytyc may be required to pay Hologic a termination fee of \$50 million (referred to as a Hologic reduced fee) or \$150 million (referred to as a Hologic rejection fee) or Hologic may be required to pay Cytyc a termination fee of \$33 million (referred to as a Cytyc reduced fee) or \$100 million (referred to as a Cytyc rejection fee), in each case, depending on the termination event.

### **Headquarters (see page 106)**

The combined company's corporate headquarters will be located at 35 Crosby Drive, Bedford, Massachusetts 01730. The headquarters of the Cytyc business will continue to be located in Marlborough, Massachusetts.

### **Executive Officers (see page 106)**

Hologic and Cytyc have agreed that at the effective time of the merger, John W. Cumming will be the chief executive officer of Hologic and Patrick J. Sullivan will be the chairman of the Hologic board of directors. In addition, at the effective time of the merger, Dr. Jay A. Stein, currently chairman emeritus, director and chief technical officer of Hologic, will serve as chairman emeritus and chief technical officer of Hologic.

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### **Board of Directors and Corporate Governance After the Merger (see page 105)**

In connection with the merger, the parties have reached certain agreements regarding the governance of Hologic at the effective time of the merger, including the following:

*Hologic Board of Directors.* The board of directors of Hologic will consist of eleven directors, six of whom will be designated by Hologic and five of whom will be designated by Cytyc. Four of the six persons designated by Hologic will be independent directors as defined under applicable Nasdaq listing standards, and the remaining two persons will be John W. Cumming, current chairman and chief executive officer of Hologic, and Glenn P. Muir, current chief financial officer of Hologic. Three of the five persons designated by Cytyc will be independent directors as defined under applicable Nasdaq listing standards, and the remaining two persons will be Patrick J. Sullivan, current chairman, chief executive officer and president of Cytyc, and Daniel J. Levangie, current executive vice president of Cytyc and president of Cytyc surgical products.

*Committees of the Hologic Board of Directors.* The board of directors of Hologic will have audit, compensation, nominating and corporate governance, and corporate development committees. The audit, nominating and corporate governance and corporate development committees will each consist of an odd number of directors, consisting of one more continuing Hologic director than continuing Cytyc directors, and the chairman of each of these committees will be a continuing Hologic director. The compensation committee will consist of an even number of directors, consisting of an equal number of continuing Cytyc directors and continuing Hologic directors, and the chairman of the compensation committee will be a continuing Cytyc director.

### **Hologic Bylaws Amendment (see page 156)**

In connection with approving the merger agreement, Hologic's board of directors approved amendments to Hologic's bylaws, which will become effective only upon completion of the merger. These amendments include provisions giving effect to the governance provisions described above under Board of Directors and Corporate Governance After the Merger and providing for mandatory indemnification for directors and officers to the extent permitted by Delaware law.

### **Special Meetings of Hologic and Cytyc Stockholders**

#### **Hologic Special Meeting (see page 135)**

*Meeting.* The Hologic special meeting will be held on October 18, 2007, at 9:00 a.m., local time, at Hologic's principal executive offices located at 35 Crosby Drive, Bedford, Massachusetts 01730. At the Hologic special meeting, Hologic stockholders will be asked:

to approve an amendment to Hologic's charter, effective immediately prior to the effective time of the merger, to increase the authorized number of shares of Hologic common stock from 90,000,000 to 300,000,000 shares;

to approve the issuance of Hologic common stock to Cytyc stockholders in the merger;

to approve the Hologic, Inc. Senior Executive Short-Term Incentive Plan;

to approve the amendment to Hologic's Second Amended and Restated 1999 Equity Incentive Plan; and

if submitted to a vote of Hologic stockholders, to approve an adjournment of the Hologic special meeting, including, if necessary, to solicit additional proxies in favor of any of the foregoing proposals.



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*Record Date; Votes.* Hologic has fixed the close of business on August 22, 2007 as the record date, which is referred to as the Hologic record date, for determining the Hologic stockholders entitled to receive notice of and to vote at the Hologic special meeting. Only holders of record of Hologic common stock on the Hologic record date are entitled to receive notice of and vote at the Hologic special meeting, and any adjournment or postponement thereof.

Each share of Hologic common stock is entitled to one vote. On the Hologic record date, there were approximately 53,947,712 shares of Hologic common stock entitled to vote at the Hologic special meeting.

*Required Vote.* The Hologic proposals require different percentages of votes for approval:

the proposal to amend the Hologic charter requires the affirmative vote of a majority of the outstanding shares of Hologic common stock entitled to vote on the proposal;

the proposal to issue shares of Hologic common stock to Cytac stockholders in the merger, the proposal to approve the Hologic, Inc. Senior Executive Short-Term Incentive Plan, and the proposal to approve the amendment to Hologic's Second Amended and Restated Equity Incentive Plan each require the affirmative vote of a majority of the votes cast in person or by proxy at the Hologic special meeting; and

the proposal to adjourn the Hologic special meeting, including, if necessary, to solicit additional proxies if there are not sufficient votes for the foregoing proposals requires the affirmative vote of a majority of votes cast in person or by proxy, whether or not a quorum is present at the Hologic special meeting.

**The proposal to amend the Hologic charter and the proposal to issue shares of Hologic common stock to Cytac stockholders in the merger are conditioned on one another and the approval of each of these proposals is a condition to the completion of the merger. Neither the amendment to the Hologic charter nor the issuance of the Hologic common stock to Cytac stockholders in the merger will take place unless both of these proposals are approved by the Hologic stockholders. Therefore, the merger cannot be completed without the approval of both proposals.**

*Stock Ownership of Hologic Directors and Executive Officers.* On August 22, 2007, the Hologic record date, directors and executive officers of Hologic and their respective affiliates owned and were entitled to vote approximately 331,330 shares of Hologic common stock, or approximately 0.6% of the shares of Hologic common stock outstanding on that date. To Hologic's knowledge, the directors and executive officers of Hologic and their respective affiliates intend to vote their shares of Hologic common stock in favor of all Hologic proposals at the Hologic special meeting.

### **Cytac Special Meeting (see page 140)**

*Meeting.* The Cytac special meeting will be held on October 18, 2007, at 9:00 a.m., local time, at The Hilton Boston Logan Airport, One Hotel Drive, Boston, Massachusetts 02128. At the Cytac special meeting, Cytac stockholders will be asked:

to adopt the merger agreement and the transactions contemplated thereby, including the merger, pursuant to which Cytac will become a wholly owned subsidiary of Hologic; and

if submitted to a vote of Cytac stockholders, to approve an adjournment of the Cytac special meeting, including, if necessary, to solicit additional proxies in favor of the adoption of the merger agreement if there are not sufficient votes for such proposal.

*Record Date; Votes.* Cytac has fixed the close of business on August 22, 2007 as the record date, which is referred to as the Cytac record date, for determining the Cytac stockholders entitled to receive notice of and to vote at the Cytac special meeting. Only holders of record of Cytac common stock on the Cytac record date are entitled to receive notice of and vote at the Cytac special meeting, and any adjournment or postponement thereof.



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Each share of Cytac common stock is entitled to one vote. On the Cytac record date, there were 117,627,349 shares of Cytac common stock entitled to vote at the Cytac special meeting.

*Required Vote.* The proposals require different percentages of votes in order to approve them:

the proposal for the adoption of the merger agreement and the transactions contemplated thereby, including the merger, requires the affirmative vote of a majority of the outstanding shares of Cytac common stock entitled to vote at the Cytac special meeting; and

the proposal to adjourn the Cytac special meeting, including, if necessary, to solicit additional proxies in favor of the proposal to adopt the merger agreement, requires the affirmative vote of a majority of the votes cast by stockholders present in person or represented by proxy, whether or not a quorum is present, at the Cytac special meeting.

**Adoption of the merger agreement and the transactions contemplated thereby, including the merger, by Cytac stockholders is a condition to the completion of the merger.**

*Stock Ownership of Directors and Executive Officers.* On August 22, 2007, the Cytac record date, directors and executive officers of Cytac and their respective affiliates owned and were entitled to vote 446,436 shares of Cytac common stock, or approximately 0.38% of the shares of Cytac common stock outstanding on that date. To Cytac's knowledge, the directors and executive officers of Cytac and their respective affiliates intend to vote their shares of Cytac common stock in favor of all Cytac proposals at the Cytac special meeting.



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The following tables set forth the selected historical consolidated financial and operating data for Hologic. The selected consolidated statement of income data for the fiscal years ended September 30, 2006, September 24, 2005 and September 25, 2004, and the selected balance sheet data as of September 30, 2006 and September 24, 2005 are derived from Hologic's audited consolidated financial statements incorporated by reference into this joint proxy statement/prospectus. The selected consolidated statement of income data for the fiscal years ended September 27, 2003 and September 28, 2002, and the selected balance sheet data as of September 25, 2004, September 27, 2003 and September 28, 2002 are derived from Hologic's audited consolidated financial statements not included or incorporated by reference into this joint proxy statement/prospectus. The selected consolidated statement of income data for the nine months ended June 30, 2007 and June 24, 2006, and the selected balance sheet data as of June 30, 2007 have been derived from Hologic's unaudited consolidated condensed financial statements incorporated by reference into this joint proxy statement/prospectus. The interim consolidated financial data, in the opinion of Hologic management, reflect all adjustments of a normal recurring nature necessary for a fair statement of Hologic's financial position and results of operations at the dates and for the periods indicated. The results for the nine months ended June 30, 2007 are not necessarily indicative of results that may be expected for any other interim period or the entire fiscal year.

Hologic's historical financial data may not be indicative of the results of operations or financial position to be expected in the future.

You should read this selected historical consolidated financial data of Hologic in conjunction with Hologic's consolidated financial statements and the related notes to those financial statements and the Management's Discussion and Analysis of Financial Condition and Results of Operations section included in Hologic's Annual Report on Form 10-K for the fiscal year ended September 30, 2006 and Hologic's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2007, which have been filed with the SEC and are incorporated by reference into this joint proxy statement/prospectus.

	Nine Months Ended		Fiscal Years Ended				
	June 30, 2007	June 24, 2006	September 30, 2006	September 24, 2005	September 25, 2004	September 27, 2003	September 28, 2002
(In thousands, except per share data)							
<b>Consolidated Statement of Income Data</b>							
Revenues:							
Product sales	\$ 457,337	\$ 257,604	\$ 388,111	\$ 229,075	\$ 177,936	\$ 156,734	\$ 144,684
Service and other revenue	78,467	51,021	74,569	58,609	50,769	47,301	45,508
	535,804	308,625	462,680	287,684	228,705	204,035	190,192
Costs and Expenses:							
Cost of product sales	193,526	124,642	186,862	116,478	94,762	86,506	84,230
Cost of product sales - amortization of intangible assets	8,335	2,113	4,784	911	911	911	911
Cost of service and other revenue	85,925	53,491	77,502	58,181	48,574	43,949	34,146
Research and development	33,221	18,288	28,294	18,617	16,659	18,381	20,362
Selling and marketing	61,660	34,838	55,910	34,199	31,761	29,978	28,319
General and administrative	47,738	27,156	42,551	26,667	23,452	21,285	17,997
Amortization of acquired intangible assets	4,145	518	1,631				
Net gain on sale of intellectual property			(5,093)				
Acquired research and development		4,800	19,900				
Restructuring and relocation							2,070
	434,550	265,846	412,341	255,053	216,119	201,010	188,035

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	Nine Months Ended		Fiscal Years Ended				
	June 30, 2007	June 24, 2006	September 30, 2006	September 24, 2005	September 25, 2004	September 27, 2003	September 28, 2002
	(In thousands, except per share data)						
Income from operations	101,254	42,779	50,339	32,631	12,586	3,025	2,157
Interest income	1,630	3,454	4,082	2,219	540	685	573
Interest/other expense	(2,126)	(536)	(1,198)				