

CYTRX CORP  
Form S-4  
July 11, 2008

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As filed with the Securities and Exchange Commission on July 11, 2008

Reg. No. \_\_\_\_\_

**SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**FORM S-4  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

**CYTRX CORPORATION**  
(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**58-1642750**  
(I.R.S. Employer  
Identification No.)

**CytRx Corporation**  
**11726 San Vicente Boulevard, Suite 650**  
**Los Angeles, California 90049**

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

**Steven A. Kriegsman**  
**President and Chief Executive Officer**  
**CytRx Corporation**  
**11726 San Vicente Boulevard., Suite 650**  
**Los Angeles, California 90049**  
**(310) 826-5648**

(Name, address, including zip code, and telephone number, including area code, of agent for service)  
With copies to:

**Benjamin S. Levin, Esq.**  
**CytRx Corporation**  
**11726 San Vicente Boulevard,**  
**Suite 650**  
**Los Angeles, California 90049**  
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**Alexander M. Donaldson, Esq.**  
**Wyrick Robbins Yates & Ponton**  
**LLP**  
**4101 Lake Boone Trail, Suite 300**  
**Raleigh, North Carolina 27607**  
**Fax: (919) 781-4865**

**Approximate date of commencement of proposed sale to public:** As soon as practicable after this Registration Statement becomes effective and upon completion of the merger described in the enclosed proxy statement/prospectus.

If the securities being registered on this form are to be offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. o

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective

registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company   
 (Do not check if a smaller reporting company)

**CALCULATION OF REGISTRATION FEE**

Title of each class of securities to be registered	Proposed maximum aggregate offering price	Amount of registration fee
Common Stock, par value \$.001 per share <sup>(1)</sup>	\$21,253,462 <sup>(2)</sup>	\$ 835.27

(1) Pursuant to Registrant's Shareholder Protection Rights Agreement dated April 16, 1997, as amended, each share of common stock will be accompanied by one Series A Junior Participating Preferred Stock Purchase Right that trades with the common stock. Prior to the occurrence of certain events, none of which has occurred as of the date of this registration statement, the rights will not be exercisable

or separable  
from the  
common stock.

- (2) Estimated solely  
for the purpose  
of calculating  
the registration  
fee pursuant to  
Rule 457(o)  
under the  
Securities Act  
of 1933 and  
based upon the  
maximum  
amount of  
shares of  
common stock  
that may be  
issued as initial  
merger  
consideration  
and earnout  
merger  
consideration as  
described in this  
registration  
statement.

**THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THIS REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.**

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**The information in this proxy statement/prospectus is not complete and may be changed. CytRx may not issue the shares of CytRx common stock described herein until the registration statement of which this proxy statement/prospectus is a part has been declared effective by the Securities and Exchange Commission. This proxy statement/prospectus is not an offer to sell, or solicitation of an offer to buy, these securities, or the solicitation of a proxy, in any jurisdiction where such offer or solicitation is not permitted.**

**SUBJECT TO COMPLETION, July \_\_2008  
MERGER PROPOSED YOUR VOTE IS VERY IMPORTANT**

Dear Stockholders:

We cordially invite you to attend a special meeting of stockholders of Innovive Pharmaceuticals, Inc., a Delaware corporation, at our offices located at 555 Madison Avenue, 25<sup>th</sup> Floor, New York, New York, on \_\_\_\_\_, 2008, at 10:00 a.m., local time.

At the special meeting, we will ask you to consider and vote upon a proposal to approve an Agreement and Plan of Merger, dated as of June 6, 2008, pursuant to which CytRx Corporation, a Delaware corporation, has agreed to acquire Innovive as a wholly owned subsidiary. The acquisition will be effected by the merger of Innovive with CytRx Merger Subsidiary, Inc., with Innovive as the surviving corporation. CytRx Merger Subsidiary, Inc. was formed by CytRx solely for purposes of entering into the merger agreement and completing the transactions contemplated by the merger agreement.

A copy of the merger agreement is attached as Appendix A to the accompanying proxy statement/prospectus. Pursuant to the terms of the merger agreement, Merger Subsidiary will merge with and into Innovive with Innovive to be the surviving corporation in the merger. As a result of the merger, Innovive will become a wholly owned subsidiary of CytRx and will change its corporate name to CytRx Oncology Corporation. Shares of Innovive common stock will no longer be publicly traded after the merger.

In the merger, CytRx will pay initial merger consideration of \$3,000,000 in the form of shares of CytRx common stock valued at \$0.94 per share, which equals the average daily volume-weighted closing price of CytRx common stock as reported on The Nasdaq Capital Market over the 10 trading days prior to the signing of the merger agreement. CytRx also will pay future earnout merger consideration of up to \$18,253,462, subject to the achievement of specified net sales under Innovive's existing license agreements. Subject to specified conditions, any earnout merger consideration will be payable in shares of CytRx common stock or, at CytRx's election, in cash, or by a combination of shares of CytRx common stock and cash. CytRx common stock will be valued for purposes of any earnout merger consideration based upon the average of the daily market price during the 10-trading day period ending on the second trading day prior to payment of the earnout merger consideration. If Innovive's stockholders approve the merger agreement and the merger is completed, all of the outstanding shares of Innovive common stock immediately prior to the effective time of the merger (other than shares held by Innovive, CytRx and Merger Subsidiary and by Innovive stockholders, if any, who properly exercise their rights as dissenting stockholders under Delaware law) will be converted into the right to receive an allocable portion of the merger consideration based upon the fully diluted shares of Innovive at the effective time of the merger.

After careful consideration, Innovive's board of directors, by a unanimous vote of the directors, has determined that the merger agreement is advisable, fair to, and in the best interests of the stockholders of Innovive, has approved and authorized in all respects the merger agreement, and recommends that you vote **FOR** the approval of the merger agreement.

The accompanying proxy statement/prospectus provides you with detailed information about the proposed merger and the special meeting. Please give this material your careful attention. You may also obtain more information about Innovive and CytRx from documents filed with the Securities and Exchange Commission. We encourage you to obtain current market quotations for CytRx common stock, which is traded on The Nasdaq Capital Market under the symbol **CYTR**.

We would like you to attend the special meeting. **HOWEVER, WHETHER OR NOT YOU PLAN TO ATTEND THE SPECIAL MEETING, IT IS IMPORTANT THAT YOUR SHARES BE REPRESENTED.** Accordingly, please sign, date, and return the enclosed proxy card in the postage-paid envelope or submit your proxy by the Internet prior to the special meeting. If you attend the special meeting and vote in person, your vote by ballot will revoke any proxy

previously submitted. If your shares are held in street name, you must instruct your broker in order to vote. Remember, failing to vote has the same effect as a vote against the approval of the merger agreement.

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We look forward to seeing you on \_\_\_\_\_, 2008.

Sincerely,

Steven Kelly

President and Chief Executive Officer

See Risk Factors on page 11 for a discussion of important factors that you should consider before you return your proxy or vote at the special meeting.

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

This proxy statement/prospectus is dated \_\_\_\_\_, 2008 and is first being mailed to Innovive stockholders on or about \_\_\_\_\_, 2008.

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**INNOVIVE PHARMACEUTICALS, INC.**  
**555 Madison Avenue, 25<sup>th</sup> Floor**  
**New York, New York 10022**  
**NOTICE OF SPECIAL MEETING OF STOCKHOLDERS**  
**To Be Held on \_\_\_\_\_, 2008**

To our Stockholders:

Notice is hereby given that a special meeting of stockholders of Innovive Pharmaceuticals, Inc., a Delaware corporation, will be held on \_\_\_\_\_, 2008, at 10:00 a.m., local time, at our offices located at 555 Madison Avenue, 25<sup>th</sup> Floor, New York, New York, in order to:

(1) Consider and vote upon a proposal to approve the Agreement and Plan of Merger, dated as of June 6, 2008, among Innovive, CytRx Corporation, a Delaware corporation, CytRx Merger Subsidiary, Inc., a Delaware corporation and a wholly owned subsidiary of CytRx, which we refer to as Merger Subsidiary, and Steven Kelly, as stockholder representative. A copy of the merger agreement is attached as Appendix A to the accompanying proxy statement/prospectus. Pursuant to the terms of the merger agreement, Merger Subsidiary will merge with and into Innovive, with Innovive to be the surviving corporation in the merger. As a result of the merger, Innovive will become a wholly owned subsidiary of CytRx and will change its corporate name to CytRx Oncology Corporation. Shares of Innovive common stock will no longer be publicly traded after the merger.

In the merger, CytRx will pay initial merger consideration of \$3,000,000 in the form of shares of CytRx common stock valued at \$0.94 per share, which equals the average daily volume-weighted closing price of CytRx common stock as reported on The Nasdaq Capital Market over the 10 trading days prior to the signing of the merger agreement. CytRx also will pay future earnout merger consideration of up to \$18,253,462, subject to the achievement of specified net sales under Innovive's existing license agreements. Subject to specified conditions, any earnout merger consideration will be payable in shares of CytRx common stock or, at CytRx's election, in cash, or by a combination of shares of CytRx common stock and cash. CytRx common stock will be valued for purposes of any earnout merger consideration based upon the average of the daily market price during the 10-trading day period ending on the second trading day prior to payment of the earnout merger consideration. If Innovive's stockholders approve the merger agreement and the merger is completed, all of the outstanding shares of Innovive common stock immediately prior to the effective time of the merger (other than those shares held by Innovive, CytRx and Merger Subsidiary and by Innovive stockholders, if any, who properly exercise their rights as dissenting stockholders under Delaware law) will be converted into the right to receive an allocable portion of the merger consideration based upon the fully-diluted shares of Innovive at the effective time of the merger; and

(2) Approve the adjournment of the special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting to approve the merger agreement; and

(3) Transact such other business that may properly come before the special meeting or any adjournment or postponement of the special meeting.

Only stockholders of record of our common stock at the close of business on \_\_\_\_, 2008 are entitled to notice of and to vote at the special meeting and at any adjournment or postponement of the special meeting. All stockholders of record are cordially invited to attend the special meeting in person.

The approval of the merger agreement requires the approval of the holders of a majority of the outstanding shares of Innovive common stock entitled to vote, with each share having a single vote for this purpose. Directors and officers of Innovive and their affiliates who own beneficially an aggregate of approximately 22% of the shares of Innovive common stock entitled to vote at the special meeting have agreed to vote all shares that they control in favor of the merger agreement.

Whether or not you plan to attend the special meeting, we urge you to vote your shares by completing, signing, dating, and returning the proxy card as promptly as possible in the postage-paid envelope and thus ensure that your shares will be

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represented at the special meeting if you are unable to attend. If you sign, date, and mail your proxy card without indicating how you wish to vote, your proxy will be voted in favor of the approval of the merger agreement. If you fail to return your proxy card or fail to submit your proxy by the Internet and do not vote in person at the special meeting, it will have the same effect as a vote against the approval of the merger agreement. Any stockholder attending the special meeting may vote in person even if he or she has returned a proxy card; such vote by ballot will revoke any proxy previously submitted. If, however, you hold your shares through a bank or broker or other custodian, you must obtain a legal proxy issued from such custodian in order to vote your shares in person at the special meeting.

Each Innovive stockholder who does not vote in favor of the approval of the merger agreement will have the right to require Innovive to purchase his or her shares, in cash, for the fair value of the shares, but only if (i) the merger is completed and (ii) the stockholder complies with the requirements of Delaware law for the exercise of dissenters rights that are summarized in the accompanying proxy statement/prospectus. The completion of the merger is subject to the condition, among others, that the holders of not more than 5% of Innovive's common stock properly exercise their rights as dissenting stockholders.

By Order of the Board of Directors

Eric Poma, Ph.D.  
Corporate Secretary

\_\_\_\_\_, 2008

**Please do not send your stock certificates at this time.** If the merger is completed, the disbursing agent will provide you with instructions regarding the surrender of your stock certificates

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THE SPECIAL MEETING AND THE MERGER**

*The following questions and answers address briefly some questions you may have regarding the special meeting and the proposed merger. These questions and answers may not address all questions that may be important to you. Please refer to the more detailed information contained elsewhere in this proxy statement/prospectus, the appendices to this proxy statement/prospectus, and the documents referred to in this proxy statement/prospectus. References in this proxy statement/prospectus to **you** refer to Innovive stockholders and references to **we**, **us**, or **our** mean Innovive. References in this proxy statement/prospectus to **CytRx** mean CytRx before the merger, or CytRx and its subsidiaries, including Innovive, after the merger, as the context requires.*

**Q: What is the proposed transaction?**

A: We are proposing that Innovive be acquired by CytRx pursuant to the merger agreement. If the merger agreement is approved by Innovive's stockholders and the other closing conditions under the merger agreement have been satisfied or waived, Merger Subsidiary, a wholly owned subsidiary of CytRx, will merge with and into Innovive, with Innovive to be the surviving corporation in the merger. As a result of the merger, Innovive will become a wholly owned subsidiary of CytRx and will change its corporate name to CytRx Oncology Corporation. Shares of Innovive's common stock will no longer be publicly traded after the merger.

**Q: What is the consideration payable in the merger?**

A: In the merger, CytRx will pay initial merger consideration of \$3,000,000 in the form of shares of CytRx common stock valued at \$0.94 per share, which equals the average daily volume-weighted closing price of CytRx common stock as reported on The Nasdaq Capital Market over the 10 trading days prior to the signing of the merger agreement. CytRx also will pay future earnout merger consideration of up to \$18,253,462, subject to the achievement of specified net sales under Innovive's existing license agreements, as follows:

Net Sales	Earnout Merger Consideration
\$ 2,000,000	\$2,000,000
\$15,000,000	\$5,000,000
\$30,000,000	\$5,000,000
\$40,000,000	\$6,253,462

Subject to specified conditions, any earnout merger consideration will be payable in shares of CytRx common stock or, at CytRx's election, in cash, or by a combination of shares of CytRx common stock and cash. CytRx common stock will be valued for purposes of any earnout merger consideration based upon the average of the daily market price during the 10-trading day period ending on the second trading day prior to payment of the earnout merger consideration.

**Q: What is my share of the merger consideration?**

A: In the merger, you will be entitled to receive for each share of Innovive common stock you hold immediately prior to the effective time of the merger an amount equal to the quotient determined by dividing the sum of the initial merger consideration and the earnout merger consideration (to the extent the earnout merger consideration becomes payable) by the fully diluted shares immediately prior to the effective time of the merger. For purposes of the merger agreement, **fully diluted shares** means the sum of all issued and outstanding shares (including any dissenting shares) of Innovive common stock and all shares of Innovive common stock issuable upon the exercise, in full,



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of all outstanding Innovive warrants that, by their terms, will remain outstanding following the merger. As of the date of this proxy statement/prospectus, there were 19,509,833 fully diluted shares. The initial merger consideration and any earnout merger consideration paid or payable for each share of Innovive common stock are sometimes collectively referred to in this proxy statement/prospectus as the **merger consideration**. Your right to receive any earnout merger consideration will not be transferable, except by operation of law. No fractional shares of CytRx common stock will be issued in the merger. In lieu of any fractional share, you will receive cash equal to the value in the merger of such fractional share, less any applicable withholding.

**Q: What is this document?**

A: This document constitutes a proxy statement and a notice of meeting with respect to the special meeting of Innovive stockholders at which you will be asked to consider and vote on the proposal to approve the merger agreement. This document also constitutes a prospectus of CytRx with respect to the shares of CytRx common stock to be issued to you pursuant to the merger agreement.

**Q: Where and when is the special meeting?**

A: The special meeting will be held at 10:00 a.m., local time, on \_\_\_\_\_, 2008, at our offices located at 555 Madison Avenue, 25<sup>th</sup> Floor, New York, New York.

**Q: Are all Innovive stockholders as of the record date entitled to vote at the special meeting?**

A: Yes. All stockholders who own Innovive common stock at the close of business on \_\_\_\_\_, 2008, the record date for the special meeting, are entitled to receive notice of the special meeting and to vote the shares of Innovive common stock that they held on that date at the special meeting, or at any adjournments or postponements of the special meeting.

**Q: Are all Innovive stockholders as of the record date entitled to attend the special meeting?**

A: Yes. Innovive stockholders as of the record date, or their legally authorized proxies named in the proxy card, may attend the special meeting. Seating, however, is limited. Cameras, recording devices, and other electronic devices will not be permitted at the meeting. If your shares are held in the name of a broker, trust, bank, or other nominee, you should bring a proxy or letter from the broker, trustee, bank, or nominee confirming your beneficial ownership of the shares.

**Q: What vote of Innovive's stockholders is required to approve the merger agreement?**

A: For us to complete the merger, stockholders holding a majority of the outstanding shares of Innovive common stock at the close of business on the record date must vote **FOR** the approval of the merger agreement, with each share having a single vote for these purposes. Accordingly, failure to vote or abstaining from voting will have the same effect as a vote against the merger agreement.

**Q: How do the Innovive insiders intend to vote their shares?**

Steven Kelly, Neil Herskowitz, J. Jay Lobell and Eric Poma, M.D., each of whom is a director or officer of Innovive, and their affiliates, Lindsay A. Rosenwald, M.D., and Lester Lipshutz, as investment manager or trustee of trusts established for the benefit of Dr. Rosenwald and his family, along with Angelo De Caro, who recently resigned as a director, have agreed pursuant to support agreements that they have entered into with CytRx and

Merger Subsidiary to vote all Innovive shares that they control in favor of the merger agreement. These directors and officers and their affiliates own beneficially an aggregate of approximately 22% of the shares of common stock entitled to vote at

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the special meeting. To facilitate the support agreements, these beneficial owners also granted CytRx proxies to vote their shares with respect to the merger and the merger agreement.

**Q: Does our board of directors recommend that our stockholders vote FOR the approval of the merger agreement?**

A: Yes. After careful consideration, the board of directors, by a unanimous vote of the directors, recommends that you vote FOR the approval of the merger agreement. You should read The Merger Innovive's Reasons for the Merger beginning on page 49 of this proxy statement/prospectus for a discussion of the factors that our board of directors considered in deciding to recommend the approval of the merger agreement.

In considering the recommendation of the board of directors with respect to the merger agreement, you should be aware that some of Innovive's directors and executive officers who participated in meetings of the board of directors have interests in the merger that are different from, or in addition to, the interests of our stockholders generally. See The Merger Interests of Certain Persons in the Merger beginning on page 47.

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

A: We urge you to read this proxy statement/prospectus carefully, including its appendices, and to consider how the merger affects you. If you are a stockholder as of the record date, then you can ensure that your shares are voted at the special meeting by completing, signing, dating, and returning each proxy card in the postage-paid envelope provided or submitting your proxy by the Internet prior to the special meeting.

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

A: Your broker will vote your shares on your behalf only if you provide instructions to your broker on how to vote. You should follow the directions provided by your broker regarding how to instruct your broker to vote your shares. Without those instructions, your shares will not be voted, which will have the same effect as voting against the merger.

**Q: How do I change or revoke my vote?**

A: You can change your vote at any time before your proxy is voted at the special meeting. You may revoke your proxy prior to the special meeting by notifying us in writing or by submitting a later-dated new proxy by the Internet or by mail to Innovive Pharmaceuticals, Inc., 555 Madison Avenue, 25<sup>th</sup> Floor, New York, New York 10022, Attention: Corporate Secretary. You also may revoke your proxy by attending the special meeting and voting in person. Simply attending the special meeting, however, will not be sufficient to revoke your proxy. If you have instructed a broker to vote your shares, these options for changing your vote do not apply, and instead you must follow the instructions received from your broker to change your vote.

**Q: What does it mean if I get more than one proxy card or vote instruction card?**

A: If your shares are registered differently and are in more than one account, you will receive more than one proxy card. Please sign, date, and return all of the proxy cards you receive (or submit your proxy by the Internet) to ensure that all of your shares are voted.

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**Q: When do you expect the merger to be completed?**

A: We are working toward completing the merger as quickly as possible, and we anticipate that it will be completed in September 2008, assuming satisfaction or waiver of all of the conditions to the merger described under The Merger Agreement Conditions to the Merger beginning on page 70 of this proxy statement/prospectus. However, because the merger is subject to certain conditions, the exact timing of the completion of the merger and the likelihood of the consummation of the merger cannot be predicted with certainty. If any of the conditions in the merger agreement is not satisfied, the merger agreement may terminate as a result.

**Q. Are there risks associated with the merger?**

A. Yes. The merger involves risks, including the following:

the merger is subject to a number of conditions, and there is no assurance that the merger will be completed;

the expected benefits of the merger to the combined company are subject to post-merger challenges, including maintaining the listing of CytRx common stock on The Nasdaq Capital Market to promote liquidity for stockholders of the combined company and potentially greater access to capital and using the assets and resources of the combined company to successfully develop the existing product candidates of the combined company, and these and benefits may not be realized;

if the costs associated with the merger exceed the benefits, the combined company may experience adverse financial results, including increased losses;

CytRx expects to continue to incur operating losses, and the combined company will need to raise additional funds to cover the cost of operating or it may have to reduce or stop operations;

the merger agreement limits our ability to pursue alternatives to the merger, and CytRx will be entitled to exercise its option to purchase Innovive common stock if we do so, which would be materially dilutive to our stockholders;

the support agreements may deter competing bids;

because the market price of CytRx common stock may fluctuate, you cannot be sure of the market value of CytRx common stock that you will receive in the merger;

you cannot be sure when you will receive any earnout merger consideration, and you may never receive any earnout merger consideration;

the merger may be a taxable transaction for U.S. federal income tax purposes, in which case you will recognize taxable gain or loss to the extent that the value of the merger consideration you receive is greater or less than your tax basis in your Innovive shares, and even if the merger otherwise qualifies as a tax-free reorganization for U.S. federal income tax purposes, you will recognize taxable income or gain to the extent of any earnout merger consideration characterized as imputed interest and to the extent the balance of any earnout merger consideration received in the form of cash is greater than your tax basis in your Innovive shares allocable to that earnout merger consideration;



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if the merger is not completed, we will have incurred substantial expenses without realizing the expected benefits of the merger and will have to repay CytRx for advances under the loan and security agreement, which we may not be able to do;

our officers and directors have financial interests in the merger that may be different from, or in addition to, the interests of our stockholders, generally;

if the merger is not consummated by September 30, 2008, either we or CytRx may choose not to proceed with the merger;

the fairness opinion obtained by us from our financial advisor will not reflect changes in circumstances subsequent to the date of the merger agreement; and

the shares of CytRx common stock to be received in the merger will have different rights from the shares of Innovive common stock that you now hold.

**Q: Who will bear the cost of this solicitation?**

A: The expenses of preparing, printing, and mailing this proxy statement/prospectus and the proxies solicited hereby will be borne by Innovive. Additional solicitation may be made by telephone, facsimile, or other contact by certain directors, officers, employees, or agents of Innovive, none of whom will receive additional compensation for those activities. Innovive will, upon request, reimburse brokerage houses and other custodians, nominees, and fiduciaries for their reasonable expenses for forwarding material to the beneficial owners of shares held of record by others.

**Q: Will a proxy solicitor be used?**

A: No. However, the directors, officers, employees, and other agents of Innovive may solicit proxies on our behalf from stockholders by telephone, by other electronic means, or in person.

**Q: Should I send in my stock certificates now?**

A: No. Shortly after the merger is completed, you will receive a letter of transmittal with instructions informing you how to surrender your stock certificates or book-entry shares to the disbursing agent in order to receive the merger consideration. **Please do not send in your stock certificates with your proxy card.**

**Q: Who can help answer my other questions?**

A: If you have more questions about the merger, need assistance in submitting your proxy or voting your shares, or need additional copies of the proxy statement/prospectus or the enclosed proxy card, you can call our Chief Financial Officer, J. Gregory Jester, at (212) 716-1814. If your broker holds your shares, you should also call your broker for additional information.

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**SUMMARY OF THE PROXY STATEMENT/PROSPECTUS**

*This summary highlights selected information from the proxy statement/prospectus and may not contain all of the information that is important to you. You should carefully read the entire proxy statement/prospectus to fully understand the proposed transaction. We encourage you to read the merger agreement that is attached as Appendix A, because it is the legal document that governs the parties' agreement pursuant to which CytRx will acquire Innovive in a merger if all of the conditions to the merger are satisfied or waived. Certain items in this summary include page references directing you to a more complete description of the items in this proxy statement/prospectus.*

**The Parties to the Merger (pages 40, 79 and 127)**

***CytRx Corporation***

CytRx Corporation was organized in 1985 as a Delaware corporation. CytRx is a clinical-stage biopharmaceutical company engaged in developing human therapeutic products based primarily upon its small-molecule molecular chaperone amplification technology. Through February 2008, CytRx owned a majority of the outstanding shares of common stock of RXi Pharmaceuticals Corporation, which CytRx refers to as **RXi**. RXi was founded in April 2006 by CytRx and four researchers in the field of ribonucleic acid interference, or RNAi, including Dr. Craig Mello, recipient of the 2006 Nobel Prize for Medicine for his co-discovery of RNAi. In March 2008, CytRx distributed to its stockholders approximately 36% of RXi's outstanding shares, which reduced CytRx's ownership to less than 50% of RXi. RXi is focused solely on developing and commercializing therapeutic products based upon RNAi technologies for the treatment of human diseases.

CytRx's executive officers are located at 11726 San Vicente Boulevard, Suite 650, Los Angeles, California 90049, and its telephone number is (310) 826-5648. CytRx common stock is listed for trading on The Nasdaq Capital Market under the symbol **CYTR**. The common stock of RXi is listed on The Nasdaq Capital Market under the symbol **RXII**.

***Innovive Pharmaceuticals, Inc.***

Innovive Pharmaceuticals, Inc. was organized in 2004 as a Delaware corporation. Innovive is a development-stage biopharmaceutical company engaged in the development of compounds for the treatment of cancer. Innovive's executive offices are located at 555 Madison Avenue, 25<sup>th</sup> Floor, New York, New York 10022, and its telephone number is (212) 716-1810. Innovive common stock is quoted on the Over-the-Counter Bulletin Board, or OTCBB, under the symbol **IVPH**.

***CytRx Merger Subsidiary, Inc.***

CytRx Merger Subsidiary, Inc. was organized in 2008 as a Delaware corporation and wholly owned subsidiary of CytRx. Merger Subsidiary was formed by CytRx solely for purposes of entering into and completing the transactions contemplated by the merger agreement. It has not conducted any activities to date other than activities incidental to its organization and in connection with the transactions contemplated by the merger agreement. Merger Subsidiary's business address and telephone number are the same as those of CytRx.

**The Merger (page 40)**

You are being asked to vote your shares of Innovive to approve the merger agreement. The merger agreement provides that Merger Subsidiary wi