GREAT POINT PARTNERS LLC Form SC 13D/A February 11, 2011

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

Schedule 13D/A Under the Securities Exchange Act of 1934 (Amendment No. 2)*

Infusystem Holdings, Inc. (Name of Issuer)

Common Stock, par value \$.0001 per share

(Title of Class of Securities)

45685k102 (CUSIP Number)

Dr. Jeffrey R. Jay Great Point Partners, LLC 165 Mason Street, 3rd Floor Greenwich, CT 06830. (203) 971-3300

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

February 8, 2011

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedule filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

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

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

CUSIP No. 45685k102

1 Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

Great Point Partners, LLC

- 2 Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) o
 - (b) o
- 3 SEC Use Only
- 4 Source of Funds (See Instructions) AF
- Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e) o
- 6 Citizenship or Place of Organization Delaware
 - 7 Sole Voting Power -0-
 - Number of Shares 8 Shared Voting Power -0-
 - 9 Sole Dispositive Power -0-
- Beneficially Owned by 10 Shared Dispositive Power -0-

Each Reporting Person With

- 11 Aggregate Amount Beneficially Owned by Each Reporting Person -0-
- 12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) o
- 13 Percent of Class Represented by Amount in Row (11) 0%
- 14 Type of Reporting Person (See Instructions)

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CUSIP No. 45685k102

1 Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

Dr. Jeffrey R. Jay, M.D.

- 2 Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) o
 - (b) o
- 3 SEC Use Only
- 4 Source of Funds (See Instructions) AF
- 5 Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e) o
- 6 Citizenship or Place of Organization United States
 - 7 Sole Voting Power -0-
 - Number of Shares 8 Shared Voting Power -0-
 - 9 Sole Dispositive Power -0-
- Beneficially Owned by 10 Shared Dispositive Power -0-

Each Reporting Person With

- 11 Aggregate Amount Beneficially Owned by Each Reporting Person -0-
- 12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) o
- 13 Percent of Class Represented by Amount in Row (11) 0%
- 14 Type of Reporting Person (See Instructions)

IN

CUSIP No. 45685k102

1 Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

Mr. David Kroin

- 2 Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) o
 - (b) o
- 3 SEC Use Only
- 4 Source of Funds (See Instructions) AF
- Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e) o
- 6 Citizenship or Place of Organization United States
 - 7 Sole Voting Power -0-
 - Number of Shares 8 Shared Voting Power -0-
 - 9 Sole Dispositive Power -0-

Beneficially Owned by 10 Shared Dispositive Power -0-

Each Reporting Person With

- 11 Aggregate Amount Beneficially Owned by Each Reporting Person -0-
- 12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) o
- Percent of Class Represented by Amount in Row (11) 0%
- 14 Type of Reporting Person (See Instructions)

IN

CUSIP No. 45685k102

1 Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

Biomedical Value Fund, L.P.

- 2 Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) o
 - (b) o
- 3 SEC Use Only
- 4 Source of Funds (See Instructions) PF
- 5 Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e) o
- 6 Citizenship or Place of Organization Delaware
 - 7 Sole Voting Power -0-
 - Number of Shares 8 Shared Voting Power -0-
 - 9 Sole Dispositive Power -0-
- Beneficially Owned by 10 Shared Dispositive Power -0-

Each Reporting Person With

- 11 Aggregate Amount Beneficially Owned by Each Reporting Person -0-
- 12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) o
- Percent of Class Represented by Amount in Row (11) 0%
- 14 Type of Reporting Person (See Instructions)

PN

CUSIP No. 45685k102

1 Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

Biomedical Offshore Value Fund, Ltd.

- 2 Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) o
 - (b) o
- 3 SEC Use Only
- 4 Source of Funds (See Instructions) PF
- 5 Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e) o
- 6 Citizenship or Place of Organization Cayman Islands
 - 7 Sole Voting Power -0-
 - Number of Shares 8 Shared Voting Power -0-
 - 9 Sole Dispositive Power -0-

Beneficially Owned by 10 Shared Dispositive Power -0-

Each Reporting Person With

- 11 Aggregate Amount Beneficially Owned by Each Reporting Person -0-
- 12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) o
- 13 Percent of Class Represented by Amount in Row (11) 0%
- 14 Type of Reporting Person (See Instructions)

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CUSIP No. 45685k102

1 Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

Biomedical Insitutional Value Fund, L.P.

- 2 Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) o
 - (b) o
- 3 SEC Use Only
- 4 Source of Funds (See Instructions) PF
- 5 Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e) o
- 6 Citizenship or Place of Organization Delaware
 - 7 Sole Voting Power -0-
 - Number of Shares 8 Shared Voting Power -0-
 - 9 Sole Dispositive Power -0-
- Beneficially Owned by 10 Shared Dispositive Power -0-

Each Reporting Person With

- 11 Aggregate Amount Beneficially Owned by Each Reporting Person -0-
- 12 Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) o
- Percent of Class Represented by Amount in Row (11) 0%
- 14 Type of Reporting Person (See Instructions)

PN

This Amendment No. 2 to Schedule 13D (this Amendment) is filed by the undersigned to amend the Amendment No. 1 to Statement on Schedule 13D, filed by the undersigned on December 5, 2007 (Amendment No. 1), which amended Statement on Schedule 13D, filed by the undersigned on October 25, 2007 (the Original Filing), and to report that the Reporting Persons no longer beneficially own any shares of the Issuer's Common Stock. Unless otherwise indicated, all capitalized terms shall have the same meaning as provided in the Original Filing. Any reference to this Schedule 13D in the Original Filing or in this Amendment shall refer to the Original Filing as amended by Amendment No. 1 and this Amendment.

Item 1. Security and Issuer

Item 1 is hereby amended and restaed in its entirety as follows:

The title and class of equity securities to which this statement relates is Common Stock, par value \$.0001 per share.

The name and address of the principal executive offices of the issuer is

Infusystems Holdings, Inc. 31700 Research Park Drive Madison Heights, Michigan 48071

Item 2. Identity and Background

Item 2 is hereby amended and restated in its entirety as follows:

The identify and background of the persons filing this statement is as follows:

Biomedical Value Fund, L.P. (BMVF) is a Delaware limited partnership with its principal offices at 165 Mason Street, 3rd Floor, Greenwich, CT 06830.

Biomedical Institutional Value Fund, L.P. (BMIVF) is a Delaware limited partnership with its principal offices at 165 Mason Street, 3rd Floor, Greenwich, CT 06830.

Biomedical Offshore Value Fund, Ltd. (BOVF) is an exempted company incorporated under the provisions of the Companies Law of the Cayman Islands with its principal office at P.O. Box 1748 GT, Cayman Corporate Centre, 27 Hospital Road, Georgetown, Grand Cayman, Cayman Islands CJ08.

Great Point Partners LLC (Great Point) is a Delaware limited liability company, with its principal offices at 165 Mason Street, 3rd Floor, Greenwich, CT 06830.

Dr. Jeffrey R. Jay (Dr. Jay) is an individual with a business address at 165 Mason Street, 3rd Floor, Greenwich, CT 06830. Dr. Jay is a citizen of the United States and senior managing member of Great Point.

Mr. David Kroin (Mr. Kroin) is an individual with a business address at 165 Mason Street, 3rd Floor, Greenwich, CT 06830. Mr. Kroin is a citizen of the United States and special managing member of Great Point.

None of the Reporting Persons was during the last five years, convicted of a criminal proceeding (excluding traffic violations or similar misdemeanors).

None of the Reporting Persons was during the last five years, a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 5. Interest in Securities of the Issuer

Item 5 is hereby amended and restated in its entirety as follows:

BMVF, BMIVF and BOVF no longer own any shares of Common Stock of the Issuer.

Great Point is the investment manager of each of BMVF, BMIVF and BOVF and by virtue of such status may have been deemed to be the beneficial owner of the shares of Common Stock previously held by BMVF, BMIVF and BOVF. Each of Dr. Jay, as senior managing member of Great Point, and Mr. Kroin, and special managing member of Great Point, has shared voting and investment power with respect to the shares of Common Stock held by BMVF, BMIVF and BOVF and may have been deemed to be the beneficial owner of such shares. Great Point, Dr. Jay and Mr. Kroin disclaim beneficial ownership of the shares of Common Stock previously held by BMVF, BMIVF and BOVF, except to the extent of any pecuniary interest, and this statement shall not be deemed to be an admission that they are the beneficial owners of such securities.

(c) Each of BMVF, BMIVF and BOVF sold the following number of shares of Common Stock in open market transactions:

Name	Number of Shares Sold	Date of Sale	Price Per Share
BMVF	110,252	February 8, 2011	\$2.75
BMVF	1,874,290	February 10, 2011	\$2.2269
BMIVF	24,748	February 8, 2011	\$2.75
BMIVF	420,710	February 10, 2011	\$2.2269
BOVF	115,000	February 8, 2011	\$2.75
BMVF	1,955,000	February 10, 2011	\$2.2269

(e) The Reporting Persons ceased to be the beneficial owners of more than 5% of the Issuer s Common Stock on February 10, 2011.

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 10, 2011

Biomedical Value Fund, L.P.

By: Great Point GP, LLC, its general partner

By: /s/ Dr. Jeffrey R. Jay Name: Dr. Jeffrey R. Jay Title: Senior Managing Member

Biomedical Offshore Value Fund, Ltd.

By: Great Point GP, LLC, its investment manager

By: /s/ Dr. Jeffrey R. Jay Name: Dr. Jeffrey R. Jay Title: Senior Managing Member

Biomedical Insitutional Value Fund, L.P.

By: Great Point GP, LLC, its investment manager

By: /s/ Dr. Jeffrey R. Jay Name: Dr. Jeffrey R. Jay Title: Senior Managing Member

Great Point Partners, LLC

By: /s/ Dr. Jeffrey R. Jay Name: Dr. Jeffrey R. Jay Title: Senior Managing Member

> /s/ Dr. Jeffrey R. Jay Dr. Jeffrey R. Jay, individually

/s/ Mr. David Kroin Mr. David Kroin, individually

AGREEMENT REGARDING THE JOINT FILING OF SCHEDULE 13D

The undersigned hereby agree as follows:

- (i) Each of them is individually eligible to use the Schedule 13D to which this Exhibit is attached, and such Schedule 13D is filed on behalf of each of them; and
- (ii) Each of them is responsible for the timely filing of such Schedule 13D and any amendments thereto, and for the completeness and accuracy of the information concerning such person contained therein; but none of them is responsible for the completeness or accuracy of the information concerning the other persons making the filing, unless such person knows or has reason to believe that such information is inaccurate.

Date: February 10, 2011

Biomedical Value Fund, L.P.

By: Great Point GP, LLC, its general partner

By: /s/ Dr. Jeffrey R. Jay Name: Dr. Jeffrey R. Jay Title: Senior Managing Member

Biomedical Offshore Value Fund, Ltd.

By: Great Point GP, LLC, its investment manager

By: /s/ Dr. Jeffrey R. Jay Name: Dr. Jeffrey R. Jay Title: Senior Managing Member

Biomedical Insitutional Value Fund, L.P.

By: Great Point GP, LLC, its investment manager

By: /s/ Dr. Jeffrey R. Jay Name: Dr. Jeffrey R. Jay Title: Senior Managing Member

Great Point Partners, LLC

By: /s/ Dr. Jeffrey R. Jay Name: Dr. Jeffrey R. Jay Title: Senior Managing Member

> /s/ Dr. Jeffrey R. Jay Dr. Jeffrey R. Jay, individually

/s/ Mr. David Kroin Mr. David Kroin, individually