FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

OMB Number: 3235-0287

Check this box if no longer subject to

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| | 16. Form 4 or F ons may continu on 1(b). | | | File | | | | | | | ies Exchang mpany Act o | | | 4 | | - 11 | per resp | erage burde ponse: | n 0.5 | |
|---|---|--|--|---------|----------------------------|--|--|------------------------|--|-------|--|---------------|--------------|--|---|---|-----------------------|---|--|--|
| | | | | | | Issuer Name and Ticker or Trading Symbol nteroMedics Inc [ETRM] | | | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner | | | | | | |
| (Last) (First) (Middle) C/O MPM ASSET MANAGEMENT 200 CLARENDON ST., 54TH FLOOR | | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 12/14/2010 | | | | | | | | Officer (give title X Other (specify below) Former 10% Owner | | | | | | |
| (Street) BOSTON MA 02116 | | | | | 4. | | | | | | | | Line) | Individual or Joint/Group Filing (Check Applicable Line) Form filed by One Reporting Person X Form filed by More than One Reporting Person | | | | | | |
| (City) | (5) | ate) | (Zip) | . Doris | /ativ | vo S | 00111 | ities Aco | uired | Die | nosed of | | Pone | ficially | Owned | | | | | |
| Table I - Non-Derivative 9 1. Title of Security (Instr. 3) 2. Transaction Date (Month/Day/Year) | | | | | | n | 2A. D Execu | eemed ution Date, | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) of Disposed Of (D) (Instr. 3, 4 | | | A) or | 5. Amount Securities Beneficially Owned Foll | , | Form: | Direct Indirect tr. 4) | 7. Nature of Indirect Beneficial Ownership | |
| | | | | | | | | | Code | v | Amount (A) or (D) | | Price | Reported Transaction(s) (Instr. 3 and 4) | | | | (Instr. 4) | | |
| Common Stock 1 | | | | 12/14 | 1/2010 | | С | | 704,607 ⁽¹⁾ A | | (2) | 1,669, | 69,753 | | | See footnote ⁽³⁾ | | | | |
| | | | Table II - | | | | | • | | • | osed of, convertib | | | - | wned | | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Da if any (Month/Day/Y | | ransaction Code (Instr. | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exercisable Expiration Date (Month/Day/Year) | | ite | of Securities | | s Security | 8. Price of Derivative Security (Instr. 5) | 9. Numb derivativ Securitie Benefici Owned Followin Reporte | ve Ores Fores Display | 10. Ownershi Form: Direct (D) or Indirec (I) (Instr. 4 | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | Co | ode | v | (A) | (D) | Date Exercis | sable | Expiration Date | Title | | Amount or Number of Shares | | Transaction(s (Instr. 4) | | (S) | | |
| Series A Non-Voting Convertible Preferred Stock | (2) | 12/14/2010 | | | С | | | 704,607 ⁽¹⁾ | (2) | | (2) | | mmon tock | 704,607 | \$0 | 0 | | I | See footnote ⁽⁴⁾ | |
| | d Address of | Reporting Person* BERT | | | | | | | | | | | | | | | | | | |
| | | (First) MANAGEMENT ST., 54TH FLOO | | 2) | | | | | | | | | | | | | | | | |
| (Street) | | | | | | | | | | | | | | | | | | | | |

| | | | | Coue | ٧ | Ľ | | | | |
|--|-----------|------------|-------|-------|---|---|--|--|--|--|
| Series A Non-Voting Convertible Preferred Stock | (2) | 12/14/2010 | | С | | | | | | |
| 1. Name and Address of Reporting Person* GADICKE ANSBERT | | | | | | | | | | |
| (Last) C/O MPN 200 CLA | | | | | | | | | | |
| (Street) | I | MA | 02116 | | | | | | | |
| (City) | | (State) | (Zip) | (Zip) | | | | | | |
| 1. Name and Address of Reporting Person* GALAKATOS NICHOLAS | | | | | | | | | | |
| | A ASSET M | | | | | | | | | |
| (Street) | I | MA | 02116 | | | | | | | |
| (City) | | (State) | (Zip) | (Zip) | | | | | | |
| 1. Name and Address of Reporting Person* HENNER DENNIS | | | | | | | | | | |
| (Last) (First) (Middle) C/O MPM ASSET MANAGEMENT | | | | | | | | | | |

| 200 CLARENDON ST., 54TH FLOOR | | | | | | | | |
|-------------------------------|---------------------------------------|----------|--|--|--|--|--|--|
| (Street) BOSTON | MA | 02116 | | | | | | |
| (City) | (State) | (Zip) | | | | | | |
| | ess of Reporting Person* | | | | | | | |
| (Last) | (First) | (Middle) | | | | | | |
| C/O MPM ASS | SET MANAGEMENT | | | | | | | |
| 200 CLARENDON ST., 54TH FLOOR | | | | | | | | |
| (Street) | | | | | | | | |
| BOSTON | MA | 02116 | | | | | | |
| (City) | (State) | (Zip) | | | | | | |
| | ess of Reporting Person* | | | | | | | |
| (Last) | (First) | (Middle) | | | | | | |
| | SET MANAGEMENT OON ST., 54TH FLOOR | | | | | | | |
| (Street) | | | | | | | | |
| BOSTON | MA | 02116 | | | | | | |
| (City) | (State) | (Zip) | | | | | | |
| 1. Name and Addr | ess of Reporting Person* <u>KURT</u> | | | | | | | |
| (Last) | (First) | (Middle) | | | | | | |
| C/O MPM ASSET MANAGEMENT | | | | | | | | |
| 200 CLARENI | OON ST., 54TH FLOOR | | | | | | | |
| (Street) | | | | | | | | |
| BOSTON | MA | 02116 | | | | | | |
| (City) | (State) | (Zip) | | | | | | |

Explanation of Responses:

- 1. The shares were converted as follows: 586,338 by MPM BioVentures III QP, L.P. ("BV III QP"), 39,423 by MPM BioVentures III, L.P. ("BV III"), 11,584 by MPM Asset Management Investors 2002 BVIII LLC ("AM 2002"), 17,714 by MPM BioVentures III Parallel Fund, L.P. ("BV Parallel") and 49,548 by MPM BioVentures III GmbH & Co. Beteiligungs KG ("BV KG"). MPM BioVentures III GP, L.P. ("MPM III GP") and MPM BioVentures III LLC ("MPM III LLC") are the direct and indirect general partners of BV III QP, BV III, BV Parallel and BV KG. Luke Evnin, Ansbert Gadicke, Nicholas Galakatos, Dennis Henner, Nicholas Simon III, Michael Steinmetz and Kurt Wheeler are the Series A members of MPM III LLC and the managers of AM 2002. Each Reporting Person disclaims beneficial ownership of the securities except to the extent of his or its respective pecuniary interest therein. Mr. Evnin is a director of the Issuer and files Section 16 reports separately.
- 2. The Series A Non-Voting Convertible Preferred Stock converted into the Issuer's Corporation common stock on a 1-for-1 basis and had no expiration date.
- 3. The shares are held as follows: 1,389,482 by BV III QP, 93,424 by BV AM 2002, 41,978 by BV Parallel and 117,417 by BV KG. Each Reporting Person disclaims beneficial ownership of the securities except to the extent of his or its respective pecuniary interest therein.
- 4. No securities owned

Remarks:

See Form 4 for MPM BioVentures III-QP L.P for additional members of this joint filing.

| /s/ Ansbert Gadicke | <u>12/15/2010</u> |
|----------------------------------|-------------------|
| /s/ Nicholas Galakatos | 12/15/2010 |
| <u>/s/ Dennis Henner</u> | 12/15/2010 |
| /s/ Michael Steinmetz | 12/15/2010 |
| /s/ Nicholas Simon III | 12/15/2010 |
| /s/ Kurt Wheeler | 12/15/2010 |
| ** Signature of Reporting Person | Date |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.