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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report: March 11, 2010
(Date of earliest event reported)

ENTEROMEDICS INC.

(Exact name of registrant as specified in its charter)

Commission File Number: 1-33818

Delaware	**48-1293684**
(State or other jurisdiction of incorporation)	**(IRS Employer Identification No.)**

2800 Patton Road, St. Paul, Minnesota 55113
(Address of principal executive offices, including zip code)

(651) 634-3003
(Registrant's telephone number, including area code)

Not Applicable
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01. Entry into a Material Definitive Agreement.

On March 11, 2010, EnteroMedics Inc. (the "Company") entered into Amendment No. 1 (the "Amendment") to the License Agreement by and between Mayo Foundation for Medical Education and Research (the "Mayo Foundation"), Rochester, Minnesota, and the Company, effective as of February 3, 2005 (as amended, the "License Agreement"). The Amendment is effective as of February 3, 2010 (the "Effective Date").

The Amendment extends the Company's collaboration with the Mayo Foundation pursuant to the License Agreement for a period of two years from the Effective Date. Pursuant to the Amendment, the Mayo Foundation granted the Company certain royalty-bearing, worldwide exclusive and non-exclusive licenses and committed to the joint collaboration between the Company and a designated group of physicians and researchers at the Mayo Clinic for the development and testing of products for the treatment of obesity, including devices that use electrical signaling to block the vagal nerve, and for the treatment of other gastrointestinal diseases, solely using devices that use electrical signaling to block the vagal nerve.

Pursuant to the Amendment, the Company will pay the Mayo Foundation an annual retainer of $100,000 in 2010 and 2011. The Company may also be obligated to pay the Mayo Foundation, contingent upon the occurrence of certain future events, earned royalty payments, including a minimum annual royalty as defined in the License Agreement, for the commercial sale of products developed and patented by the Mayo Foundation, jointly patented by the Company and the Mayo Foundation, or a product where the Mayo Foundation provided know-how as defined by the License Agreement. If no products are patented, the minimum royalty is not due.

The Amendment provides that the Mayo Foundation may, at its discretion, early terminate these extended collaboration obligations commencing on February 3, 2011. In the event of such early termination, all applicable licenses shall continue and shall be fully paid-up and royalty-free and all obligations and payments due after the termination date shall expire. The Amendment also provides that the Company may assign its rights under the License Agreement to a third party only in the event of a sale or transfer of assets relating to the portion of the Company's business to which the License Agreement pertains; however, in the event of such an assignment, the Mayo Foundation retains sole discretion with respect to whether it will continue its collaboration obligations pursuant to the License Agreement.

Other than through the License Agreement, the Mayo Foundation does not have any material relationships with the Company or its affiliates.

The description of the Amendment in this Current Report on Form 8-K is qualified in its entirety by reference to the copy of the Amendment attached hereto as Exhibit 10.1 and incorporated herein by reference.

On March 17, 2010, the Company issued a press release announcing the extension of its collaboration with the Mayo Foundation pursuant to the License Agreement. A copy of the press release is filed as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

10.1 Amendment No. 1, effective as of February 3, 2010, to License Agreement between Mayo Foundation for Medical Education and Research and EnteroMedics Inc.

99.1 Press Release dated March 17, 2010.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ENTEROMEDICS INC.

By: /s/ Greg S. Lea
Greg S. Lea
Senior Vice President and
Chief Financial Officer

Date: March 17, 2010

EXHIBIT INDEX

Exhibit Number	Description
10.1	Amendment No. 1, effective as of February 3, 2010, to License Agreement between Mayo Foundation for Medical Education and Research and EnteroMedics Inc.
99.1	Press Release dated March 17, 2010.

AMENDMENT NO. 1
TO
LICENSE AGREEMENT
BETWEEN
MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH
AND
ENTEROMEDICS, INC.

This Amendment No. 1 (the "Amendment No. 1") is entered into as of February 3rd, 2010 (the "Execution Date") by and between Mayo Foundation for Medical Education and Research, a Minnesota charitable corporation, located at 200 First Street SW, Rochester, Minnesota 55905-0001 ("MAYO"), and EnteroMedics, Inc., a private for-profit corporation located at 2800 Patton Road, Roseville, Minnesota 55113 ("COMPANY") and amends that certain License Agreement by and between MAYO and COMPANY with an Effective Date as of February 3, 2005 (the "License Agreement") with the effect of amending, restating and replacing the following provisions in their entirety with the text set forth below:

1.05 "Field": shall mean the treatment of obesity using devices, including devices that use electrical signaling to block the vagal nerve, and the treatment of gastrointestinal disorders other than obesity (for example, pancreatitis, irritable bowel syndrome, and inflammatory bowel disease) solely using devices that use electrical signaling to block the vagal nerve.

1.07 "Future Patents": shall mean all patent applications assigned exclusively to MAYO filed on inventions arising out of Product Development during their commitment to provide Know-How under Section 2.02 by the Obesity Device Group, Vagal Blocking Device Group, and Phase II Mayo Group including any continuation, division, substitution, reissue, or reexamination and any patents issuing from any of the foregoing and any foreign counterpart of any of the foregoing. Future Patents shall not be interpreted to include Jointly Owned Patents.

1.08 "Know–How": shall mean Obesity Device Group Know-How, Vagal Blocking Device Group Know-How and Phase II Mayo Group Know-How.

1.25 "Phase II Mayo Group": The Phase II Mayo Group (2010-050) includes the following members:

Michael Camilleri, M.D.;
William Sandborn, M.D.;
Michael Sarr, M.D.; and
Michael Kendrick, M.D.

1.26 "Phase II Mayo Group Know-How": shall mean information, whether patentable or not, developed for and provided to COMPANY by the Phase II Mayo Group through Product Development or Product Testing during the extended period provided for under this Amendment No. 1.

2.02 MAYO KNOW-HOW COMMITMENT. For a period of five (5) years from the Effective Date for the Obesity Device Group and the Vagal Blocking Device Group and for a period of two (2) years from the Execution Date for the Phase II Mayo Group, unless terminated earlier by either COMPANY or MAYO as provided for in this Agreement, MAYO commits to the following:

(a) Subject to existing obligations to third parties, MAYO policies and for so long as its members are employees of MAYO, the Obesity Device Group shall confer with the COMPANY in the Field as follows: (i) exclusively for Product Development for devices to treat obesity and nonexclusively for Product Testing; and (ii) non-exclusively for Product Development and Product Testing with COMPANY for Vagal Devices to treat gastrointestinal disorders other than obesity (for example, pancreatitis and irritable bowel syndrome) and excluding obesity.

(b) Subject to existing obligations to third parties, MAYO policies and for so long as its members are employees of MAYO, the Vagal Blocking Device Group shall confer exclusively with the COMPANY for Product Development and nonexclusively for Product Testing, all for Vagal Devices.

(c) Subject to existing obligations to third parties, MAYO policies and for so long as its members are employees of MAYO, the Phase II Mayo Group shall confer with the COMPANY in the Field as follows: (i) exclusively for Product Development for devices to treat obesity and nonexclusively for Product Testing; and (ii) non-exclusively for Product Development and Product Testing with COMPANY for Vagal Devices to treat gastrointestinal disorders other than obesity.

(d) Subject to existing obligations to third parties, MAYO hereby grants COMPANY a royalty-bearing, worldwide license to use the Know-How in the Field to develop, make, use and sell COMPANY Products as provided below:

1. With respect to Obesity Device Group Know-How for:

    (a) Product Development, such license shall be exclusive for obesity devices and non-exclusive for Vagal Devices for treating conditions other than obesity; and

    (b) Product Testing, such license shall be non-exclusive.

2. With respect to the Vagal Blocking Device Group Know-How for:

    (a) Product Development, such license shall be exclusive; and

    (b) Product Testing, such license shall be non-exclusive.

3. With respect to the Phase II Mayo Group Know-How for:

(a) Product Development, such license shall be exclusive for devices to treat obesity and nonexclusive for Vagal Devices for treating other conditions other than obesity; and

(b) Product Testing, such license shall be non-exclusive.

COMPANY shall have the right to sublicense such know-how, but not any obligation of MAYO to confer, on the same terms and conditions as set forth above with respect to Licensed Patents.

(e) MAYO represents and warrants that to the best of internal patent counsel's knowledge as of the Effective Date and without a duty to inquire, MAYO is not aware of any existing third party obligations that will materially interfere with the Obesity Device Group, the Vagal Blocking Device Group or the Phase II Mayo Group from conferring with COMPANY under Section 2.02, in accordance the terms and conditions of this Agreement.

Each member of the Obesity Device Group, the Vagal Blocking Device Group and the Phase II Mayo Group shall use reasonable efforts to attend meetings, achieve specific Product Development objectives and milestones, and conduct Product Testing, contributing on average among the individuals of the groups between 3-6 person hours per month as requested by COMPANY. Any time credited under this Section shall not also be subject to compensation under any other agreement including any agreement referenced under Section 3.14 of this Agreement.

3.06 KNOW-HOW RETAINER FEES: The COMPANY shall pay MAYO a minimum annual retainer fee of One Hundred and Seventy-Five Thousand Dollars (US$175,000) for the Obesity Device Group as partial compensation for its Know-How as specified in the payment schedule below. The COMPANY shall also pay MAYO an additional minimum annual retainer fee of Seventy-Five Thousand Dollars (US$75,000) for the Vagal Blocking Device Group as partial compensation for its Know-How as specified in the payment schedule below. Beginning in 2010, the COMPANY shall pay MAYO a minimum annual retainer fee of One Hundred Thousand Dollars (US$100,000) for the Phase II Mayo Group as partial compensation for its Know-How as specified in the payment schedule below. The following payments shall be made within ten (10) days of the dates listed:

Date	**Retainer fee payment due MAYO**
a) The Effective Date	One Hundred Twenty-Five Thousand Dollars (US$125,000);
b) November 1, 2005	One Hundred Twenty-Five Thousand Dollars (US$125,000);
c) January 1, 2006	One Hundred Twenty-Five Thousand Dollars (US$125,000);
d) July 1, 2006	One Hundred Twenty-Five Thousand Dollars (US$125,000);
f) January 1, 2007	Two Hundred Fifty Thousand Dollars (US$250,000);
g) January 1, 2008	Two Hundred Fifty Thousand Dollars (US$250,000);
h) January 1, 2009	Two Hundred Fifty Thousand Dollars (US$250,000);
i) February 15, 2010	One Hundred Thousand Dollars (US$100,000); and
j) January 1, 2011	One Hundred Thousand Dollars (US$100,000).

3.13 DISTRIBUTION OF CONSIDERATION WITHIN MAYO. MAYO may distribute funds received by reason of this Article 3 to individuals within the Obesity Device Group, Vagal Blocking Device Group, or Phase II Mayo Group as MAYO, in its sole discretion, deems advisable and will hold the COMPANY harmless from any claims by any employee member of the Obesity Device Group, Vagal Blocking Device Group, or Phase II Mayo Group that any such distribution or related allocation is inadequate or unreasonable.

3.15 Phase II Mayo GROUP MILESTONE PAYMENT. COMPANY shall pay MAYO Two Hundred and Fifty Thousand Dollars (US$250,000) within twelve months after the first commercial sale of the first Company Product after receipt of FDA approval for such Company Product for providing Phase II Mayo Group Know-How; *provided*, that if MAYO exercises its right to terminate the Phase II Mayo Group's obligations pursuant to Section 6.04(b), such payment shall be reduced to equal the product of (i) the number of months that have elapsed since the Execution Date of this Amendment No. 1 through the effective date of such termination, *divided* by twenty-four (24), multiplied by (ii) $250,000 (in which case, it is agreed that such payment shall not be due until twelve months after the first commercial sale of the first Company Product after receipt of FDA approval for such Company Product). It is a material breach of this agreement if such payment is not received within ninety (90) days of achieving the milestone.

6.04 EARLY TERMINATION OF CONFERENCE RIGHTS.

(a) Starting three (3) years after the Effective Date of this Agreement, MAYO, at its discretion and without a showing of cause, may terminate the Obesity Device Group's and Vagal Device Group's obligations to confer under Sections 2.02(a) and 2.02(b) by giving notice of such election to the COMPANY. If MAYO so terminates, then, upon such notice:

1. all licenses granted to the COMPANY for the Licensed Patents, the Jointly Owned Patents and the Know-How shall be fully paid-up and royalty-free;
2. any Obesity Group Milestone Payment obligations under Section 3.05 that have not accrued shall expire;
3. any Know-How Retainer Fees obligations under Section 3.06 that have not accrued shall expire;
4. any Know-How Milestone Payments obligations under Section 3.07 that have not accrued shall expire; and

5. the grant of licenses from MAYO to the COMPANY shall become non-exclusive.

(b) Starting one (1) year after the Execution Date of this Amendment No. 1, MAYO, at its discretion and without a showing of cause, may terminate the Phase II Mayo Group's obligations to confer under Section 2.02(c) by giving notice of such election to the COMPANY. If MAYO so terminates, then, upon such notice:

1. all licenses granted to the COMPANY for the Phase II Mayo Group's Future Patents and Phase II Mayo Group Know-How arising and/or provided during the extended period provided for under this Amendment No. 1 shall be fully paid-up and royalty-free;
2. any Phase II Mayo Group obligations under Section 3.15 that have not accrued shall expire;
3. any Know-How Retainer Fees obligations under Section 3.06(i) and (j) that have not accrued shall expire; and
4. the grant of Phase II Mayo Groups licenses from MAYO to the COMPANY shall remain in effect.

9.02 NO ASSIGNMENT. Neither party may assign its rights hereunder to any third party without the prior written consent of the other party; provided, that a party may assign its rights without the prior written consent of the other party to any affiliate or other entity that controls, is controlled by or is under common control with such party. Notwithstanding the foregoing, COMPANY is free to transfer or assign this Agreement (or any rights granted under this Agreement) with the sale or transfer of assets of that portion of its business to which this Agreement pertains. Nothing herein shall give COMPANY the right to assign the obligations to confer in Sections 2.02(a), 2.02(b), or 2.02(c). COMPANY will promptly notify MAYO of any such assignment. Any purported assignment in violation of this clause is void. Any assignment shall not in any manner relieve the assignor from liability for the performance of this Agreement by its assignee. Upon the occurrence of an assignment pursuant to this Section 9.02, MAYO may, in its sole discretion, provide notice that it desires to continue to confer per the terms of this Agreement. If MAYO fails to provide such notice within sixty (60) days of notification of assignment in writing by COMPANY, (1) no Know-How Retainer Fees under Section 3.06 shall thereafter accrue and be payable; and (2) no Know-How Milestone Payments under Section 3.15 shall thereafter accrue and be payable.

Except as expressly amended by this Amendment No. 1, all terms and conditions of the License Agreement shall remain in full force and effect.

MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH

By: /s/ Steven P. Van Nurden
Name: Steven P. Van Nurden
Title: Assistant Treasurer

ENTEROMEDICS, INC.

By: /s/ Mark B. Knudson
Name: Mark B. Knudson
Title: President and CEO

Exhibit 99.1

Contact:
EnteroMedics Inc.
Greg S. Lea
(651) 789-2860
ir@enteromedics.com

EnteroMedics Extends Neuroblocking Technology Research and Development Collaboration

ST. PAUL, Minn., March 17, 2010 – EnteroMedics Inc. (NASDAQ: ETRM), the developer of medical devices using neuroblocking technology to treat obesity and other gastrointestinal disorders, announced today that it has extended its 2005 collaboration agreement with the Mayo Clinic for an additional two years. The collaboration will continue to focus on the research and development of vagal-blocking technology for the treatment of obesity and other gastrointestinal disorders. EnteroMedics will retain exclusive rights to obesity-related devices developed through this collaboration. Mayo Clinic has licensed technology to EnteroMedics and holds equity in the Company.

“Mayo Clinic is one of the leading authorities on the treatment of obesity,” stated President and CEO Mark B. Knudson, Ph.D., of EnteroMedics. “We value the long-term relationship that exists between EnteroMedics and Mayo. This extension allows us to continue collaborating with the Mayo Clinic as we look to advance the Maestro RC System into the pivotal phase of development.”

About EnteroMedics Inc.

EnteroMedics is a development stage medical device company focused on the design and development of devices that use neuroblocking technology to treat obesity and other gastrointestinal disorders. EnteroMedics’ proprietary neuroblocking technology, VBLOC® vagal blocking therapy, is designed to intermittently block the vagus nerves using high-frequency, low-energy, electrical impulses. These electrical impulses are delivered by a neuroregulator which is powered either by an external controller (Maestro RF System) or an integrated rechargeable battery (EnteroMedics’ next-generation Maestro RC System). EnteroMedics is currently conducting a feasibility study examining VBLOC Therapy’s effects on blood glucose levels in diabetic patients outside of the United States. For more information, visit www.enteromedics.com.

Forward-Looking Safe Harbor Statement:

This press release contains forward-looking statements about EnteroMedics Inc. Our actual results could differ materially from those discussed due to known and unknown risks, uncertainties and other factors including our limited history of operations; our losses since inception and for the foreseeable future; our lack of regulatory approval for our Maestro® System for the treatment of obesity; our preliminary findings from our EMPOWER™ pivotal trial; our ability to comply with the Nasdaq continued listing requirements; our ability to commercialize our Maestro System; our dependence on third parties to initiate and perform our clinical trials; the need to obtain regulatory approval for any modifications to our Maestro System; physician adoption of our Maestro System and VBLOC® vagal blocking therapy; our ability to obtain third party coding, coverage or payment levels; ongoing regulatory compliance; our dependence on third party manufacturers and suppliers; the successful development of our sales and marketing capabilities; our ability to raise additional capital when needed; our ability to attract and retain management and other personnel and to manage our growth effectively; potential product liability claims; potential healthcare fraud and abuse claims; potential healthcare legislative reform and our ability to obtain and maintain intellectual property protection for our technology and products. These and additional risks and uncertainties are described more fully in the Company's filings with the Securities and Exchange Commission, particularly those factors identified as "risk factors" in the Company's Form 10-K dated March 12, 2009. We are providing this information as of the date of this press release and do not undertake any obligation to update any forward-looking statements contained in this document as a result of new information, future events or otherwise.

Caution-Investigational device. Limited by U.S. Federal law to investigational use.

The implantation procedure and usage of the Maestro ® System carry some risks, such as the risk generally associated with laparoscopic procedures and those related to treatment as described in the EMPOWER clinical trial informed consent.

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